BOARD OF REGENTS

STUDENT SUCCESS, TEACHING & RESEARCH COMMITTEE

March 30, 2023
1:00 PM

UNM Campus
Scholes Hall, Roberts Room

UNIVERSITY OF NEW MEXICO BOARD OF REGENTS'
STUDENT SUCCESS, TEACHING, and RESEARCH COMMITTEE MEETING
March 30, 2023– 1:00 p.m.
Hybrid: Scholes Hall, Roberts Room and Zoom

AGENDA

I. Call to Order –
a. Confirmation of a Quorum
b. Adoption of the Agenda

II. Approval of Summarized Meeting Minutes from February 2, 2023 **TAB A**

III. Public Comment

IV. Reports/Comments:
Provost's Administrative Report
James P. Holloway, Provost & EVP for Academic Affairs
- Member Comments
- Advisor Comments

V. Action Items:

A. Form C: Certificate in Practical Nursing (GA) **TAB B**
Matthew D. Mingus, Associate Professor of History, UNM Gallup

B. Request Approval to delete the Bachelor of Integrative Studies and Innovation program. **TAB C**
David Weiss, Ph.D., Associate Dean of University College

C. Request approval for a proposed revision to Faculty handbook Policy C150 "Political Activities of UNM Faculty"
Request deletion of Faculty Handbook Policy C240 "Leave of Absence Incident to Political Activity" **TAB D**
Matias Fontenla, Professor and Chair for Committee on Governance

D. Request approval to appoint Yolanda Sanchez, PhD to the Maurice and Marguerite Liberman Distinguished Chair in Cancer Research **TAB E**
Bill Uher, VP HSC Development UNM Foundation

E. Request approval to create an endowed professorship 'The Donna M. Tomky and Robert W. Geer Professorship in Ovarian Cancer Research' **TAB F**
Bill Uher, VP HSC Development UNM Foundation

F. Request approval to appoint Dr. Sarah Adams, as the inaugural holder of the 'The Donna M. Tomky and Robert W. Geer Professorship in Ovarian Cancer Research' **TAB G**
Bill Uher, VP HSC Development UNM Foundation

G. Recommendations for Consent Agenda Items on Full Board of Regents' Agenda
Randy Ko, Student Regent and Chair, Regents' SSTAR Committee

UNIVERSITY OF NEW MEXICO BOARD OF REGENTS'
STUDENT SUCCESS, TEACHING, and RESEARCH COMMITTEE MEETING
March 30, 2023– 1:00 p.m.
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VI. Information Items:

A. Annual Course Fee Review **TAB H**
Pamela Cheek, Ph.D., Associate Provost for Student Success
Nicole Dopson, Assistant Vice President for Academic Resource Management

B. Recognition of Research and Creative Works Leaders 2022 **TAB I**
Bill Stanley, Associate Provost for Faculty Success

C. Faculty Senate Resolution **TAB J**
Finnie Coleman, Ph.D., Faculty Senate President

VII. Adjournment

UNIVERSITY OF NEW MEXICO BOARD OF REGENTS'
STUDENT SUCCESS, TEACHING AND RESEARCH COMMITTEE MEETING

February 2, 2023 – 1:00 p.m.
Meeting Summary

Committee members present: *Regent and Chair Kim Sanchez Rael, Regent Doug Brown, Regent Robert Schwartz, Student Regent Randy Ko, James Holloway, Provost & Executive Vice President for Academic Affairs, Aimee Ortiz, Staff Council President, Finnie Coleman, President, Faculty Senate*

Committee members Absent: *NA*

Advisors present: *Ian May, ASUNM President, Shaikh Ahmad, GPSA President*

Staff: *Pam B. Kirchner, Mallory Reviere*

I. Call to Order (1:02 PM) – Confirmation of a Quorum
Adoption of the Agenda
Motion to Approve agenda: Student Regent Ko
Second: Regent Brown
All members voted
Motion: Approved

II. Approval of Summarized Minutes from December 1, 2022, Meeting **TAB A**
Motion to Approve: Provost Holloway
Second: Regent Brown
All members voted
Motion: Approved
Note: *Regent and Chair Kim Sanchez Rael: Per the Attorney General, under the Open Meetings Act for public meetings, we are required to have a roll call vote on any action items.*

III. Reports/Comments:
Provost Administrative Report
James Holloway, Provost & Executive Vice President for Academic Affairs

Academic Leadership Updates

- Search is underway for Dean of Arts and Sciences
- Forming a Search Committee for the Dean of the Anderson School

- New Leaders:
  - Sabrina Ezzell, Chancellor UNM Gallup, she served as Interim Chancellor from July-December. At the conclusion of the search for a Chancellor, she was appointed.
  - New Dean of Engineering, Donna Riley will start April 1st, 2023. In the interim months, January-March, Chuck Fleddermann will serve as Interim Dean, School of Engineering.
  - Interim Dean Education and Human Sciences is Kris Goodrich. He is a faculty member in Family Counseling and has served as Associate Dean and Department Chair in the college.
  - Jesse Aleman, who has been acting Dean for Graduate student has taken on the role of Interim Dean. Julie Coonrod who is acting Dean for the Anderson School of Management, will not be returning to the graduate studies role.

Meeting update from SSTAR December 1, 2022, meeting

- Question about Tao online mental health resource
  - $25k per year currently 935 students and 25 faculty are using it.

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- Question on Scoping telehealth providers.
    - Scoping supplemental online provider resource (e.g. TimelyMD, BetterMynd, Betterhelp, My College Doctor, Virtual Care Group, etc.) as a joint RFP with NMSU – expected issue by end of February
- Faculty compensation – "How is size of university calculated."
    - For each comparison university we have the average salary of faculty
    - by rank and CIP code (a measure of discipline), and faculty count in each category.
    - From these we can compute R1 averages for each rank and CIP code
    - From this we can estimate an expected salary spend for UNM units

Research

Ellen Fisher provided some information on number of awards we've been receiving, and the question was, what was number of submissions.

- 2200 proposal submissions a year; about 1600 awards. Total value in dollars is about $1.3B. We are seeing approximately $400M in awards.
- Computing a ratio of submissions and awards is difficult. A proposal may be submitted in 2020 and awarded in 2022. They don't always line up year to year.

What are we doing to promote the submission of proposals and the growth of external research funding?

- Research Development office started a new *Lunch and Learn* series for early career faculty. This is to help build skills of faculty pursuing research funding.
- They are also working with URAD (Undergraduate Research Arts and Design) network which supports undergraduate research, often in proposal development, granting agencies want you to have some kind of broader impact piece. URAD has developed a plug-and-play way to do that.

We've mentioned these programs before, but they are important in trying to increase the numbers of proposals we submit. I would like to flag the FRESSH program.

- Summer Research Faculty Support (SuRF)
    - 134 Faculty Supported in FY21-FY23 ($481K)
- Faculty Scholarship Time (FaST)
    - 61 Faculty Supported in FY22-FY23 ($323K)
- Program to Enhance Research Capacity (PERC)
    - 21 Projects Supported FY22-FY23 ($1.15M)
- Fostering Research Expansion in the Social Sciences & Humanities (FRESSH)
    - 20 Faculty Supported in FY23
    - $60K (joint w/College of Arts & Sciences)
    - 8 proposals submitted (thus far) as new PIs. These are faculty that have never submitted a proposal before. 1 HEH Award Received; 1 NSF award likely

Tuition Simplification

We have worked on this for a couple of years at the request of the Regents. We brought some simplifications forward last year and moving forward on additional processes now.

- ASM Professional Masters programs: moving from 3 tuition rates to 1.

  - We will block Anderson tuition at 12 credit hours. We will have a common graduate tuition structure (and ASM students taking more than 12 hours do not pay additional for those hours)
  - Change curricular fee structure to per credit hour (rather than per course)
- Other changes to be proposed via BLT for consideration. Examples:
  - Make block structure for UG non-res same as UG res (block at 15 hours)
  - Working with HSC to see where we can align HSC base rates
  - Simplify SAAP curricular fee structure
  - We are planning to block accelerated online programs at 15 credits

Spring Enrollment

- Spring headcount is up overall by 3.4%, up about 70% at the branches.
  - Down in graduate enrollments. We saw this coming from last Spring and seeing this trend continue. We are urging graduate programs to make decisions early and act on the implications.
- Student Credit Hours. The largest growth in student credit hours is in the College of Fine Arts and Architecture and Planning.
  - College of Fine Arts is growing at about 16% year over year; mostly driven by film and digital media.

We are seeing a downturn in some of the health sciences schools and engineering, both of which are areas of concern. These are two important areas for New Mexico to really see growth.

- Fall 2022 we admitted 3,509 students. This was largest entering cohort since 2013. This is good news, but many of the students coming in are less prepared than they might have been in the past. This leads to the need to increase support, addressing retention and graduation rates.

Retention

Question at the December meeting: we were asked, regarding the first-year cohort data from Fall 21-22, what retention looked like as a function of ethnicity. We have an online tool that can be filtered by cohort, year, college, full or part-time, gender, ethnicity, etc.

- Pulling data for the Fall 21 cohort: 71% retention rate overall from Fall 21 to Fall 22, but it can vary greatly by ethnic group, from a high of 89% for our Asian, Asian-American students, 86%-70% for international students, down to 53% for Native American students and black students.
  There is also a huge difference in retention between full-time and part-time students, 72% and 38% respectively.

Graduation

- Approximately 35% of our students graduate in 8 terms from an incoming freshman cohort. About 54% of our students graduate in 12 terms: six-year graduation rate.
- For comparison nationally, I looked at schools that have populations of students that have similar challenges to ours. Wayne State University in Detroit has a 55-56% graduation rate. Georgia State University at 56%. Very few schools with student populations similar to ours see anything much higher.
  - Another way to look at the data is to say, in the Fall 2021 cohort, 29% of the students are gone. 42% of the 2020 entering cohort are gone, and 44% of the 2019 entering cohort are no longer at UNM (~6% graduated; 38% gone)
    This leads to our retention measures.

UNIVERSITY OF NEW MEXICO BOARD OF REGENTS' STUDENT SUCCESS, TEACHING AND RESEARCH COMMITTEE MEETING

February 2, 2023 – 1:00 p.m.
Meeting Summary

- Retention measures
  - Academic interventions: Student experience project, undergraduate research, Arts and Design Network, Curriculum restructure (e.g. 120 hours to graduate) Predictive modeling started this year. Approximately 20 data points are used to identify first year students at risk
  - Social Interventions: Student cohort centers, call outs & contacts to students who have not registered,
  - Structural and financial interventions: Improving course scheduling; making course modality decision carefully. We provide grants of various kinds to assist students.
  - Currently in development is the 60 by 30. The idea is to have a 60% five-year graduation rate. As first year students in 2025, five-year graduation in 2030; 60 by 30. We can identify systemic barriers and try to address them to improve graduation outcomes.

Note: We are just starting to also look at graduate student success in the same systematic way that we follow undergraduate students

Status of Student Mental Health Efforts-Acute Plan moving to Comprehensive

- Created a UNM Comprehensive Mental Health Advisory Committee (CMHAC). The group has been meeting regularly since last summer and continues to do so. Includes members from many of the direct service units; the units that actually provide mental health support to our students. Covers a large swath of the university.
- Identified clinical load index CDI) an important metric we wanted to track. Gather data for all of the direct service units. This will allow us to get a comprehensive look at the clinical loads for the entire student mental health support system.

Ongoing work:

- We are putting together an RFP for telehealth or tele-mental health provider. This is a joint effort with NMSU. Expect to have it out by February.
- SHAC-HSC collaboration team, led by COO Jill Klar. They will provide us proposals for how to best coordinate the SHAC and the UNMH. We should see those in February.
- There has been a long developing collaboration with the Department of Psychiatry; they were critical last Fall in dealing with mental health emergencies.
- We are working on modifications to the SHAC fee.
  - Structural change: to charge the fee in fall, winter, and Spring, but not in summer.
  - A change in the fee to $151.00. ASUNM has been supportive of this proposal. This will move through the budget process in the coming months as we go to the regents with tuition fee recommendations in March.
  - We have a special appropriation request from the state for $3M, a one-time funding request, that will impart help support new counselors in SHAC and piloting a housing program for student experiencing housing insecurity.
  - There is a separate request for student mental health supports that's been submitted by CUP.

UNIVERSITY OF NEW MEXICO BOARD OF REGENTS'
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SHAC Hiring plan

- We have 2 social worker/counselors starting February 27, 2023, one will be the embedded counselor for law. We have another starting on February, 20th. This will be the embed for housing. We have two others starting in mid-March. We expect the counselors to be credentialed when they start. After a week of orientation, they should be seeing clients in SHAC.
- We also onboarded the new operations director at SHAC. In the fall we brought in the training and development specialists, social worker, hired the administrative assistants, and brought in the Associate Director of Counseling, who is also a counselor. This is 10.1 FTE that have started or will start in February.
  It has taken longer to do this that expected. Hiring is difficult. Hiring in healthcare is extremely difficult. It took some restructuring of positions to make this happen. SHAC will continuously be hiring but will be replacements and not new FTEs.
- New mental health training & development specialist published spring calendar: monthly QPR training (question, persuade, refer) suicide prevention and workshop series focused on coping with stress
- Health promotions (HP) podcast launched: first podcast released fall 2022 on preparing for finals

UNM Residence Life and Housing

- Working to continue to strengthen relationship with UNMPD (a primary resource after hours)
- Embedded clinician in housing is point of contact for UNMPD and after-hours crisis line to address issues that arise for students in housing

Women's Resource Center (WRC)

- First semester counseling in Spanish, partnership with El Centro

Spring 2023 Priorities

- SHAC Acute Plan: on-board remaining counselors in February/March
- Train Direct Services Units (DSUs) and other units that do mental health support to collect data for clinical load index (CLI)

Into the Future: Broad Philosophical Shifts

- We need to recognize, that only addressing mental health in the crisis stage on in the acute stage will never meet the need. We also have to develop a much more comprehensive system of wellness and recognize that the ways in which students are engaged with their communities has a huge influence on the mental health of individuals. Strengthening student engagement, mentorship, and addressing basic needs are critical preventives in addressing mental health challenges.
- Continuing to build capacity for a culturally responsive student experience can increase the sense of belonging and affirmation of students within our campus community leading to enhanced retention outcomes as well as mental health.

Comments:
Regent & Chair Rael: Thank you Provost Holloway for this rich and comprehensive report. I would open for questions/comments from the committee.
Regent Brown: For timely MD or what service provider with NM State we land upon, is there a request into the legislature this year to fund that?
Provost Holloway: The request that CUP submitted includes that as one of the uses. That is not getting a lot of traction so far. I think there is still work to do there. The $3M request we put in has been, so far has been supported at the $1M level. It is likely to fall short for the needs to cover that. Again, these are

one-time requests. This is something we continue to work on. The reasons we wanted to go with NMSU on this is, one is it will bring the cost down and secondly we actually talked about a state-wide system because the needs at other universities are even greater than ours simply because of their setting or resources.
Regent Brown: Are we able to employ some graduate students in the fields of psychiatry and psychology to do some practicums and clinical work to help expand the capacity under the proper supervision?
Provost Holloway: We can do that, and we do do that. The psychology clinic primarily exists for that purpose to provide those training opportunities. Some, not all, of the counseling service at the Womens Resource center is through psychology interns.
Regent Brown: When someone like Kris Goodrich is plucked out of his normal day and made the interim head of this huge college, is there any kind of Dean orientation to help him assimilate to his new role?
Provost Holloway: The most important source he gets is with me. When we have multiple deans starting we will hold group events. In this case, Kris will meet with me, he will meet with Nicole Dopson to talk about budgets. He will have individual meetings with Provost leadership.
Regent Ko: The slide bringing on 10 FTE, are we still wanting more of those positions and could we have a better understanding of the timeline of that exploration of a telehealth service?
Provost Holloway: I can't say too much more about the timeline for telehealth beyond what I did say. I know we will have an RFP out by the end of February. I don't know what the timeline will be then for the providers to respond. We can find that out. Adding additional FTEs in SHAC, I haven't been in conversations about that. I think Stephanie McIver is thinking about that. I think we want to see what impact this has on our service levels on clinical load index, time to appointment etc. I don't know what the timeline is for her in thinking about the next step. We can check on that and get back to you.
Regent Ko: I think it might be good to have a follow up on what the clinical load index once we are able to draw upon that data next time since we are using that as a metric.
In regard to tuition simplification could I have a better understanding or maybe we could have a follow up. I wanted to know, are we giving discounts? Are we rewinding some of those effects?
Provost Holloway: We will certainly have more conversation about some of those things at the March Regents meeting when the BLT recommendation comes forward. We had a fairly steep discount in the block about 3 years ago. There is no discount on the block over the last year or two. Once you reach the block, you aren't paying for additional credits. One of the important changes is when we made some of those adjustments starting two years ago, we left the non-resident block starting at a different credit hour level. We are now ready to move to a place where non-residents get the block from 12 to 15. Also, we will add the block to AOPs, which is a kind of discount because if you take those additional credits you aren't paying for them. It is important to do this because you want students to be able to understand what the tuition structure is. We had so many special cases layered on special cases, making it very hard to understand. Making tuition more transparent there's an administrative efficiency in doing that as well.
Terry Babbit: I think I can help on the timeline. Working with NMSU, I think we can finish up the scope of work in about a week, no longer than two-weeks. We have already worked with purchasing and the recommendation is a 30 day posting of the RFP because there are major companies that provide mental telehealth and other medical services. The RFP would be out for 30 days by the middle of February. The review process would be experts from SHAC and around campus. We believe the first part of April is an actual contractual possibility to bring on a provider. They have various implementation periods from almost immediate to 30 days.
Ian May ASUNM President: I wanted to follow up on the proposal, specifically the student mental health and wellness request at the State. It isn't funded as it wasn't recommended in full by exec or by LFC. If it isn't funded, is the plan of the university to receive funding from another source? Would that affect the timeline for the RFP?
Provost Holloway: We are already committed to these employees so we would find another source of funds.

Ian May ASUNM President: I would like to say anecdotally, that I've heard a lot of really good things and I' really happy you are exploring this.
Terry Babbit: On the student mental health issue, there are other funding vehicles and we do have a plan for a junior bill and just received those guidelines today. There will be a student mental health as a priority on that approved by the President that will be distributed to legislators. This is another mechanism to collect a lot of substantial resources that aren't on the regular legislative funding avenues.
Regent & Chair Rael: On retention, we looked at the spring to spring and fall year over year. How did we do from last fall to this spring enrollment? Do you have that data?
Provost Holloway: We won't know official numbers until after tomorrow, which is the census date, but the data we have as of today is 87% retention from fall to spring. That is up several percentage points from last year.
Regent & Chair Rael: Do you have any early data on which one of the interventions are more effective on retention or is it too soon to tell?
Provost Holloway: we know some of the most effective things were going to 120 credit hours, recognizing that some of the significant structural changes had a big impact. For some of the others it is hard to disentangle one intervention from another. Different students respond very differently to different interventions. For some students the student support centers are critical. For some the texts call-outs are really effective. There is not one that I would say move resources from this to that.
Dan Garcia, Vice President for Enrollment Management: I agree with Provost Holloway. It really does vary. There is a lot of great work being done across campus.
Regent Schwartz: I really appreciate the work that Provost Holloway is doing. I appreciate the Provost's focus on data. Data is useful and is becoming the foundation of academic decision making, which is really useful. After one comes to SHAC, what is the wait time in a non-emergency case before one is engaged in regular weekly counseling sessions with a mental health counselor?
Provost Holloway: I don't know that, but I can follow up and get that answer for you.
Regent Schwartz: I think that would be really important to know and if that changes with the new positions that have been hired. I think this would be a good measure. How many of the 10.1 positions are actually working now?
Provost Holloway: a little over half are working now. 4.5 will start end of February. All 10.1 positions are full offers. Of the 10.1 FTEs, six of them are counselors, one is a license social worker.
Regent Schwartz: Will those seven be providing full-time counseling at SHAC?
Provost Holloway: Of those, the work for one of them is not counseling but is case management; serving as the interface between faculty departments and students. One of those is the Associate Director of Counseling so there will be some administrative duties. One of the hires is a 0.6 FTE, someone that doesn't want to work full-time.

IV. Student Wellness Planning **TAB B**
Eric Scott, Ph.D. Vice President for Student Affairs
(presentation attached page 197)

Comments:
Regent & Chair Rael: If we are sitting here a year from now saying we were successful in our student wellness initiative, what would the metrics be? How will we know that we achieve them in the next 12 months? That would be my ask of you Eric as you bring these resources to their next level of effectiveness or new ones. We can put a goal for a year from now looking at, did we really achieve success?
Regent Ko: I fully agree with you Vice President Scott as a board member that there are many facets to wellness. Enrollment targets are important what might be even more important for us as a board is what happened after student matriculate into our programs spanning across the university. Investing resources

in student support services against student homelessness, food insecurity, and other necessities could be beneficial in this effort. As a board I think we need to have more discussion on each topic. How can we elevate advising, get rid of the decentralization as students get varying levels of advising. I hope we can continue working on this. It will take a lot of our help to get where we want to be.
Regent Brown: We really need to have robust involvement with the students as we craft our programs. What are the detractors, what are the things that they have been shown to be successful in promoting wellness and a sense of engagement. I also think that crime is a morale factor that affects student wellness and wellbeing. To the extent we can, we need to continue to do things that promote safety and a feeling of security.
Ian May ASUNM President: Being conscious of when and where we are siloing things and when and where we are collaborating. I think there are a lot of repeat services on this campus.
Regent & Chair Rael: We can ask Teresa to discuss integrating with broader affordable housing initiatives in the city and state at a future meeting.
Teresa Constantinidis, EVP Finance & Administration: I would be happy to take that to a future meeting.
Finnie Coleman, Faculty Senate President: I want to echo Regent Ko's comments about food insecurity and housing insecurity. I think those should be at the forefront of any plan that talks about wellness for our students.

V. Action Items:

A. Form C: AAS in Fire Science (GA) — TAB C

Matthew D. Mingus, Associate Professor of History, UNM Gallup
Motion to Approve: Provost Holloway
Second: Regent Ko
All members voted
Motion: Approved

B. Form C: AA Chicana/o Studies (VAL) — TAB D

Laura Musselwhite, Dean of Instruction, UNM Valencia
Motion to Approve: Provost Holloway
Second: Regent Ko
All members voted
Motion: Approved

C. Form C: AA English (Val) — TAB E

Laura Musselwhite, Dean of Instruction, UNM Valencia
Motion to Approve: Provost Holloway
Second: Regent Ko
All members voted
Motion: Approved

D. Form C: New Graduate Certificate Maternal Child Health — TAB F

Tammy Thomas, Assistant Professor, College of Population Health
Pam Sedillo, Student Success Manager, College of Population Health
Motion to Approve: Regent Ko
Second: Regent Brown
All members voted
Motion: Approved

UNIVERSITY OF NEW MEXICO BOARD OF REGENTS'
STUDENT SUCCESS, TEACHING AND RESEARCH COMMITTEE MEETING

February 2, 2023 – 1:00 p.m.
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E. Form C: New Graduate Certificate in Secondary Education with 7-12 Licensure **TAB G**
Professor Marjorie Krebs, College of Education and Human Sciences
Motion to Approve: Provost Holloway
Second: Regent Ko
All members voted
Motion: Approved

F. Request approval to appoint Hengemeh Raissy to replace Richard Larson on New Mexico Consortium Board of Directors. **TAB H**
Ellen Fisher, Ph.D., Vice President for Research & Economic Development
Greg Trejo, Associate Director of Finance & Administration, Office of The Vice President for Research
Motion to Approve: Provost Holloway
Second: Regent Ko
All members voted
Motion: Approved

G. Recommendations for Consent Agenda Items on Full Board of Regents' Agenda
Kim Sanchez Rael, Chair, Regents' SSTAR Committee

Action Items for Full Board Consent Agenda: All Action items A-F

Information Item for Full Board Agenda: Mental Health presentation

I. **Information Items:**

A. Overview Continuing Education **TAB I**
Audrey Arnold, Executive Director, UNM Continuing Education
(Presentation attached)

B. Faculty Senate Resolution (item deferred) **TAB J**
Finnie Coleman, Ph.D., Faculty Senate President

VI. Public Comment No comments

VII. Adjournment
Motion to Adjourn: Regent Brown
Second: Regent Ko
All members voted
Motion: Approved

Adjournment: 3:43 PM

CERTIFICATE IN PRACTICAL NURSING

@ UNM-Gallup

CERTIFICATE/PRACTICAL NURSING (38 Credits)

Student Advisement and Graduation Checklist – 20**-20** Catalog

Student_____ **UNM ID #**_____ **Date admitted**_____
Address_____
_____ **Academic Advisor** _____
Phone #_____ **Office #** _____ **Phone #** _____

PRACTICAL NURSING CORE: (10)

		Credits	Grade	Semester/Institution
BIOL 1310	Intro Anatomy & Physiology (non-majors)	3	____	_____
BIOL 1310L	Intro A&P (non-majors) Lab	1	____	_____
NUTR 2110	Human Nutrition	3	____	_____
NURS 1110	Intro to Practical Nursing Concepts	3	____	_____
NURS 1120	Principles of Practical Nursing Practice	4	____	_____
NURS 1130	LPN Health and Illness Concepts	4	____	_____
NURS 1140	LPN Health Care Participant	3	____	_____
NURS 1150	LPN Nursing Pharmacology	3	____	_____
NURS 1160	LPN Assessment and Health Promotion	4	____	_____
NURS 1170	LPN Health and Illness Concepts II	5	____	_____
NURS 205	Professional Issues in Practical Nursing	2	____	_____
NURS 2999	LPN Capstone	3	____	_____

RATIONALE

- In concert with Gallup-McKinley County Schools (GMCS), UNM-Gallup would like to offer a Practical Nursing Certificate that would produce high-school graduates eligible to become certified Licensed Practical Nurses (LPNs)
  - High school requirements and postsecondary requirements would be completed in tandem with one another
  - This would provide employment opportunities for students and early exposure to careers in the healthcare industry
  - This would also produce more LPNs in an area with poor healthcare outcomes, and which desperately needs more nurses

POTENTIAL STUDENTS / WORKFORCE OUTCOMES

- This program will be marketed to middle and high school students who are interested in, or already enrolled in, the GMCS "Health Science" career pathway
- LPN jobs are expected to grow by 6% over the next ten years
  - Jobs often filled by LPNs are expected to grow annually in northern New Mexico by 35% (Home Health and Personal Care Aids) and 17% (Medical Assistants)
  - Health Care and Social Services is the largest industry within the local economy of the Gallup-McKinley County area

FACULTY/RESOURCE NEEDS

- **Expenses** will include one full-time hire and two adjunct hires
  - Potential maximum cost of **$95,100**/year
- We hope to initially enroll 16 postsecondary students in each cohort
- 16 students, enrolled in 38 credits @ $80.50/credit, plus fees, over five semesters =
  - **$50,056/cohort in potential revenue**
  - GMCS will cover textbook costs, tuition, and all fees
- The remaining **$45,044** of expenses will initially be covered by a Center for Career and Technical Education grant (60%) and nursing expansion funding (40%)

OFFICE OF ACADEMIC AFFAIRS

To: Dr. Matthew Mingus,
Dean Dan Primozic, UNM-Gallup
From: Dr. Pamela Cheek, Associate Provost for Student Success

Re: Certificate in Practical Nursing
Date: September 9, 2022

The proposed Certificate in Practical Nursing has the potential to address health and workforce needs in the state of New Mexico and in the greater Gallup and McKinley County communities. The strength of collaborations between UNM-Gallup and local health care facilities is an important part of this proposal. It is also evident in the proposal that the relationship with the Gallup-McKinley School District will support a flow of concurrently enrolled students into the proposed certificate program and will defray costs.

On behalf of the UNM Office of the Provost and EVP for Academic Affairs, I support this proposed certificate moving forward.

The UNM-Gallup Faculty Assembly President, Dr. Matthew Mingus, has requested that the process for curriculum review and approval for branch campus programs be re-examined in 2022-23. I will make sure that this re-examination occurs this academic year. Please be advised that the re-examination could impact new certificate or program approval timelines.

Certificate in Practical Nurse
Executive Summary
University of New Mexico-Gallup

Program Description

Goals. This proposed Certificate degree in Practical Nursing is intended to prepare high school students for employment opportunities in the health sciences field as Licensed Practical Nurses (LPNs). LPNs work alongside physicians, nurses, physical therapists, pharmacists, and others to care for patients under the direction of registered professional nurses. Students who complete this program will have the skills and knowledge necessary to give safe and effective nursing care. The proposed LPN Certificate will help to meet the needs of New Mexico, where we experience some of the worst health indicators, outcomes, and disparities in the nation. It will also offer a rigorous postsecondary program for high school students, in a high-demand sector of the economy, that can be completed in tandem with their secondary school coursework.

Branch mission alignment. A key component of UNM-Gallup's vision/mission is to support students in pursuing "community focused, regionally specific, and culturally vibrant education." By preparing students for employment opportunities in the local health sector, and by potentially bolstering our local pool of qualified nursing staff, this proposed Certificate program supports that mission.

UNM mission & strategic plan alignment. The fourth goal of UNM's most recent strategic plan is, in part, to work "with community partners" to "ensure that all populations in New Mexico have access to the highest quality health care." The creation of this Certificate program would help to increase our pool of frontline healthcare workers in and around Gallup, New Mexico – a community that is chronically underserved and understaffed by healthcare professionals.

Other branch campuses. No UNM branch campus currently has an LPN program or credential similar to what UNM-Gallup is proposing here.

Employer involvement. This Certificate will be supervised, in part, by an advisory board comprised of representatives from local employers. The current Nursing degree programs at UNM-Gallup have similar advisory boards, with representatives from organizations like Rehoboth McKinley Christian Hospital, Red Rock Clinic, College Clinic, the Gallup Indian Medical Center, the Little Sisters of the Poor, US Renal, Ramah Care, and several nursing home/hospice care providers. These same representatives would provide advice on curriculum and instruction from the perspective of potential employers.

Timeline. Assuming approval, we would like to see the program begin with a cohort of students during the fall 2024 semester.

Evidence of Need

Demand. The health industry is the fastest-growing sector of the U.S. economy. LPN jobs are expected to grow 6% ("as fast as average") over the next ten years (see **Appendix A**). Health Care and Social Services, as a sector of Gallup's economy, is the largest local industry. Two of the top-five employers in Gallup are in the medical field.

Recruitment. Targeted recruitment efforts will include outreach and engagement with students who have expressed an interest in health careers during their middle school and early high school careers. These students will be identified in cooperation with Gallup-McKinley County Schools.

Similar offerings in NM. Santa Fe Community College and Albuquerque Public Schools's Career Enrichment Center are the only entities in the state that offer an LPN program for high school students. Dona Ana Community College, New Mexico Junior College, Clovis Community College, and NMSU-Carlsbad all have postsecondary LPN programs. See **Appendix C** for more information.

Formal Needs Assessment. McKinley County has been designated an area of "health professional shortage" by the federal government. It is surrounded by counties with the same designation. McKinley is the poorest county in NM (which is one of the poorest states in the nation). Its healthcare outcomes are abysmal, and its rates of suicide, diabetes, and alcohol-related deaths are some of the worst in the country. According to New Mexico Workforce Connections, "Healthcare and Social Assistance" will continue to be the area of our statewide economy with the most demand for workers for at least the next decade. Across the state, and in the northern area of the state, "Home Health and Personal Care Aids" – a job that can be done by LPNs – is projected to grow at a rate of over 35% annually. Similarly, "Medical Assistants" – another job undertaken, often, by LPNs, is projected to grow an annual rate greater than 17% (see **Appendix B**).

Program Content and Quality

Curriculum Standards. The curriculum for this Certificate program would be largely based on the curriculum already used at Santa Fe Community College. It is a curriculum that prepares students to sit for the NCLEX-PN exam, which – when passed – affords the student a New Mexico state LPN license. The Certificate would require 38 credit-hours in the areas of nursing, biology, and nutrition. Those courses include:

BIOL 1310: Introductory Anatomy & Physiology (non majors) (3cr). The course introduces the anatomy (structure) and physiology (function) of the human body, which includes the study of basic chemistry, molecules, cells, tissues, organs, organ systems, and terminology related to these concepts.

BIOL 1310L: Introductory Anatomy & Physiology Laboratory (non majors) (1cr). This course introduces laboratory exercises in regards to human anatomy and physiology of the human body. This includes histological study, biochemical processes, mammal organ dissections, and the use of models to illustrate anatomical arrangement.

NURS 1110: Introduction to Practical Nursing Concepts (3cr). Introduction to the concepts of nursing practice and conceptual learning. Students define personal values, beliefs, and attitudes about health and wellness. Provides opportunities for students to describe the importance of identifying patient safety issues, the roles and values of the practical nurse and members of the health care team, and specific standards/regulations that apply to practical nursing practice.

NURS 1120: Principles of Practical Nursing Practice (4cr). This course introduces the nursing student to the application of concepts through clinical skills in seminar, large and small group activities, laboratory, and/or clinical settings. Principles of communication, assessment, safety, and interventions, including accurate calculations, measurement, and administration of medications will be included.

NURS 1130: LPN Health and Illness Concepts I (4cr). Covers health and illness concepts across the lifespan, as they relate to the practical nurse's caregiver and discipline-specific roles, with the focus on wellness and common variations. Concepts covered are related to homeostasis/regulation, sexuality/reproductive, protection/movement, and emotional processes.

NURS 1140: LPN Health Care Participant (3cr). This course introduces the attributes of the health care participant as an individual, a family, or a community as they relate to the practical nurse's caregiver and discipline-specific roles.

NURS 1150: LPN Nursing Pharmacology (3cr). An introduction to pharmacological nursing practices across the lifespan utilizing a conceptual approach. The student identifies the nurse's professional role related to pharmacotherapeutics in diverse populations. Safety issues and minimization of risk potential associated with pharmacotherapeutics, complementary, and alternative medicines are discussed. Evidence-based pharmacological and pathophysiological concepts are integrated to guide medication therapeutics. Common drug classes and the pharmacotherapeutics, pharmacodynamics, and pharmacokinetics associated with each are included in this course.

NURS 1160: LPN Assessment and Health Promotion (4cr). This course introduces the nursing student to the assessment of and the health promotion for the health care participant as an individual, a family, or a community as it relates to the practical nurse's caregiver and discipline-specific roles. This course uses seminar, laboratory, and/or clinical settings.

NURS 1170: LPN Health and Illness Concepts II (5cr). This course will cover health and illness concepts across the lifespan, as they relate to the practical nurse's caregiver and discipline-specific roles. Concepts covered are related to oxygenation and hemostasis and regulation, protection and movement, and cognitive and behavioral processes.

NURS 205: Professional Issues in Practical Nursing (2cr). An overview of professional issues related to the role of the practical nurse (PN) or licensed practical nurse (LPN). Students learn about the LPN role according to the New Mexico Nurse Practice Act. Scope of practice and legal accountability and review. Other topics include ethical and legal responsibilities of the LPN role, delegation of duties, and the role of the LPN as part of a health care team. On successful completion of this course, students are eligible to take the National Council Licensure Examination-Practical Nurse (NCLEX-PN).

NURS 2999: LPN Capstone (3cr). The focus of this course is applying practical nursing skills in clinical settings that include schools, clinics, hospitals, and long-term care facilities. This course gives the practical nurse student an opportunity to work with individuals and families across the lifespan with chronic, acute, and complex medical conditions.

NUTR 2110: Human Nutrition (3cr). This course provides an overview of nutrients, including requirements, digestion, absorption, transport, function in the body and food sources. Dietary guidelines intended to promote long-term health are stressed.

Student Learning Outcomes. Upon completion of this Certificate program, students will be able to:

- Describe the use of data to monitor the outcome of care processes and collaborate to improve care to minimize the risk of harm to patients and providers
- Provide holistic and compassionate care that ensures the patient's innate rights to respect, dignity, autonomy, and self-determination.

- Recognize effective health care within nursing and multidisciplinary teams fostering open communication, mutual respect, and shared decision making to achieve quality patient care.
- Apply clinical decision-making skills based on the best evidence to deliver safe and effective care.
- Use information technology to make inquiries and obtain, communicate, and manage data to support and deliver safe nursing practice.
- Demonstrate professional behaviors according to legal and ethical nursing practice standards.

Instructional Models. As a program focused on concurrently-enrolled high-school students, non-nursing coursework will be offered online while all nursing courses will require in-person instruction at the UNM-Gallup campus. Instruction will generally include a combination of lectures, discussion, case studies, and clinicals.

Accreditation. We would seek accreditation for this program through the Accreditation Commission for Education in Nursing – the same accrediting body that is currently affiliated with the UNM-Gallup AAS program in Nursing.

Evaluation and Assessment

Measuring SLOs. Assessments would include learner self-assessments, peer assessments, and assessments by instructors, including quizzes, case studies, reflective writing and other assignments, portfolios, and performance-based assessments using standardized rubrics that crosscut, integrate, and apply the core competencies into real-world scenarios and client encounters.

Program Effectiveness and Plan to Assess Learning Outcomes. Students will complete a comprehensive, qualitative course evaluation, along with the standard UNM student evaluations. Periodic consultations with local employers and working LPNs will also provide feedback to inform curricular refinement. A systematic plan of evaluation will be required by the accrediting body to assess program outcomes.

Required Resources

This program will require a single full-time hire ($62-67k/year), and two adjunct hires (around $4k/course). Initially, a grant from our Center for Career and Technical Education will cover 60% of these costs, while remaining costs will be covered by New Mexico nursing program expansion funds. The BIOL courses will be provided by current UNM-Gallup Biology professors. All other instructors will be approved by the UNM-Gallup EHHS Division, will hold (at minimum) a master's degree, and will have experience as fulltime professionals in the field of healthcare and/or nursing. Classroom and simulation training will be supported by the UNM-Gallup Health Careers and Nursing facilities. Advisement and "wrap around services" will primarily be provided by Gallup-McKinley County Schools, as this LPN Certificate will serve as a "pathway" in its College and Career Readiness program, but UNM-Gallup will also make its Library, IT help desk, and Center for Academic Learning available to LPN students (as we would with any students enrolled in courses on our campus).

Gallup-McKinley County Schools will also pay for the various fees required by this program. Those fees (to complete the entire program) include $1500 for textbooks, $70 in Biology lab fees, $76 in liability insurance, $146.66 for a NMDOH Background Check, $16 for needle stick insurance, $1,180 in ATI testing fees, $95 for a physical exam, a maximum cost of $120 for uniforms, $50 for shoes, $5 for a student nurse ID, $24 for a nursing program patch, $6.25 for bandage scissors, $25 for a stethoscope, and $6.25 for a penlight. Outside of the tuition costs, Gallup-McKinley County Schools would pay **a total of $3,320.16 in fees** for each student to complete this program.

Projected Enrollment & Costs

In partnership with Gallup-McKinley County Schools, enrollment will be capped at 16 students and admissions will be competitive.

Detailed Table of Enrollment Projections:

Fall 2024	Spring 2025	Fall 2025	Spring 2026	Fall 2026	Spring 2027
16 concurrently-enrolled students	16 concurrently-enrolled students	16 concurrently-enrolled students	16 concurrently-enrolled students	16 concurrently-enrolled students	16 concurrently-enrolled students
16 students	**16 students**	**16 students**	**16 students**	**16 students**	**16 students**

Detailed Program Budget:

Revenue

The entire LPN program is projected to cost Gallup-McKinley County Schools **$3,128.50** in tuition and lab fees, per student.

16 students, enrolled in 38 credit hours over five semesters (tuition and lab fees) =

Total potential revenue of $50,056 per cohort of 16

Expenses

One full-time faculty member salary + benefits

Salary @ $62,000-$67,000/year

Estimated benefits @ $18,600-$20,100/year

Potential maximum = **$87,100/year**

Two adjunct faculty salaries

Salary @ $4000/year multiplied by two

Potential maximum = **$8000/year**

Total program expenses = $95,100

Of the program costs, tuition will not cover **$45,044** each year. Our Center for Career and Technical Education will cover 60% of the full-time faculty member's costs, while New Mexico nursing expansion funding will cover the remaining 40%. That expansion funding will also completely cover the costs of adjunct faculty.

UNM GALLUP

Curriculum Committee

ROUTING SLIP FOR CURRICULAR CHANGES

☐ ORGINAL
☐ COPY

Certificate in Practical Nursing | Matt Mingus | 9 Sept. 2022

Program name and/or Course Number | Initiator's Name | Date

1. Chairperson/Instructor **(ALL FORMS MUST BE GRAMMATICALLY CORRECT AND TYPED)**

☐ **Form A:** (existing course minor change)	☐ **Form B:** (new course request)	☒ **Form C:** (degree/program changes)
__Justification	__Syllabus/Course outline	✓ Program outline new & old
__Transferable	__ Justification	✓ Justification
	__Main Campus Support(If Type II *see back)	✓ Needs Analysis
	__Transferable	✓ Articulation Letter
	__Articulation Letter	

2. Department Chair: Laura Stanfield
   - Corrections of Syllabus/ Course Outline format ☑ Yes ☐ No
   - All required forms attached ☑ Yes ☐ No

3. Dean of Instruction: Dean
   - Budget Implication ☑ Yes ☐ No
   - Review for appropriateness ☑ Yes ☐ No

4. Zollinger Library Faculty Representative: ☑ Yes ☐ No [signature]

5. Reviews by the Manager of Computing Services: ☑ Yes ☐ No Eric Castillo

6. Registrar ***(Two Weeks Before the Curricular Committee)***:
   - Duplication of course/program ☐ Yes ☒ No
   - Duplication of Main Campus course/program ☐ Yes ☐ No
   - Appropriate number of course ☐ Yes ☐ No
   - All required forms submitted ☑ Yes ☐ No

[signature]
Signature

9/14/22
Date

7. Dean's Assistant for distribution to Curricular Committee members 20 September 2022
Date

8. Curricular Committee Action: ☐ Approval with revisions ☐ Tabled ☒ Approved as Submitted
☐ Rejected: Reason _____

[signature]
Chair Signature

21 Oct 2022
Date

9. Faculty Senate Approval ☒ Yes ☐ No: Reason _____

Matthew Mingus
President Signature

21 October 2022
Date

10. Dean's Assistant notified department to press "Submit to Dept. Chair" button on Curriculum Workflow:

31 October 2022
Date

Certificate in Practical Nurse
Executive Summary
University of New Mexico-Gallup

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Detailed Program Budget:

Revenue

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Total program expenses = $95,100

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APPENDIX A

Licensed Practical and Licensed Vocational Nurses

PRINTER-FRIENDLY

Summary | What They Do | Work Environment | How to Become One | Pay | Job Outlook | State & Area Data | Similar Occupations | More Info

Summary

Quick Facts: Licensed Practical and Licensed Vocational Nurses	
2021 Median Pay	$48,070 per year $23.11 per hour
Typical Entry-Level Education	Postsecondary nondegree award
Work Experience in a Related Occupation	None

On-the-job Training	None
Number of Jobs, 2021	657,200
Job Outlook, 2021-31	6% (As fast as average)
Employment Change, 2021-31	41,300

What Licensed Practical and Licensed Vocational Nurses Do

Licensed practical nurses (LPNs) and licensed vocational nurses (LVNs) provide basic nursing care.

Work Environment

Licensed practical and licensed vocational nurses work in many settings, including nursing homes and extended care facilities, hospitals, physicians' offices, and private homes. Most work full time.

How to Become a Licensed Practical or Licensed Vocational Nurse

Licensed practical and licensed vocational nurses must complete a state-approved educational program, which typically takes about 1 year to complete. They must be licensed.

Pay

The median annual wage for licensed practical and licensed vocational nurses was $48,070 in May 2021.

Job Outlook

Employment of licensed practical and licensed vocational nurses is projected to grow 6 percent from 2021 to 2031, about as fast as the average for all occupations.

About 58,800 openings for licensed practical and licensed vocational nurses are projected each year, on average, over the decade. Many of those openings are expected to result from the need to replace workers who transfer to different occupations or exit the labor force, such as to retire.

State & Area Data

Explore resources for employment and wages by state and area for licensed practical and licensed vocational nurses.

Similar Occupations

Compare the job duties, education, job growth, and pay of licensed practical and licensed vocational nurses with similar occupations.

More Information, Including Links to O*NET

Learn more about licensed practical and licensed vocational nurses by visiting additional resources, including O*NET, a source on key characteristics of workers and occupations.

What They Do ->

Last Modified Date: Thursday, September 8, 2022

Home

Subjects

Data Tools

Publications

Economic Releases

Classroom

Beta

U.S. BUREAU OF LABOR STATISTICS Office of Occupational Statistics and Employment Projections
PSB Suite 2135 2 Massachusetts Avenue NE
Washington, DC 20212-0001
Telephone: 1-202-691-5700
www.bls.gov/ooh Contact OOH

RESOURCES

This page displays detailed data on Industry Projections (Long-term).
Use the Filter options to change the selections displayed in the table and data visualizations.

APPENDIX B

Pin to Dashboard

For help click the information icon.

Filter

Refine Results

Find:

Type to search table...

More Info	Area	Time Period	Industry	Industry Code	Estimated Employment	Projected Employment	Total Employment Change	Annual Percent Change	Total Percent Change	Annual Change	Annual Transfers	Annual Exits	Annual Openings
	New Mexico	2018-2028	Accommodation and Food Services	72	92,499	101,065	8,566	0.89%	9.26%	N/A	N/A	N/A	N/A
	New Mexico	2018-2028	Administrative and Support and Waste Management and Remediation Services	56	43,953	46,187	2,234	0.50%	5.08%	N/A	N/A	N/A	N/A
	New Mexico	2018-2028	Agriculture, Forestry, Fishing and Hunting	11	11,251	11,623	372	0.33%	3.31%	N/A	N/A	N/A	N/A
	New Mexico	2018-2028	Arts, Entertainment, and Recreation	71	12,755	13,620	865	0.66%	6.78%	N/A	N/A	N/A	N/A
	New Mexico	2018-2028	Construction	23	47,225	52,583	5,358	1.08%	11.35%	N/A	N/A	N/A	N/A
	New Mexico	2018-2028	Educational Services	61	74,320	77,256	2,936	0.39%	3.95%	N/A	N/A	N/A	N/A
	New Mexico	2018-2028	Federal Government	91	23,070	22,418	-652	-0.29%	-2.83%	N/A	N/A	N/A	N/A
	New Mexico	2018-2028	Finance and Insurance	52	22,697	23,245	548	0.24%	2.41%	N/A	N/A	N/A	N/A
	New Mexico	2018-2028	Government	9	88,738	89,063	325	0.04%	0.37%	N/A	N/A	N/A	N/A
	New Mexico	2018-2028	Health Care and Social Assistance	62	135,011	158,082	23,071	1.59%	17.09%	N/A	N/A	N/A	N/A
	New Mexico	2018-2028	Information	51	12,015	11,237	-778	-0.67%	-6.48%	N/A	N/A	N/A	N/A

☐	New Mexico	2018-2028	Local, Excluding Education and Hospitals	93	44,093	45,439	1,346	0.30%	3.05%	N/A	N/A	N/A	N/A
☐	New Mexico	2018-2028	Management of Companies and Enterprises	55	5,644	5,906	262	0.45%	4.64%	N/A	N/A	N/A	N/A
☐	New Mexico	2018-2028	Manufacturing	31-33	27,146	25,801	-1,345	-0.51%	-4.95%	N/A	N/A	N/A	N/A
☐	New Mexico	2018-2028	Mining, Quarrying, and Oil and Gas Extraction	21	24,571	27,072	2,501	0.97%	10.18%	N/A	N/A	N/A	N/A
☐	New Mexico	2018-2028	Other Services (except Public Administration)	81	20,963	21,569	606	0.29%	2.89%	N/A	N/A	N/A	N/A
☐	New Mexico	2018-2028	Professional, Scientific, and Technical Services	54	57,228	63,902	6,674	1.11%	11.66%	N/A	N/A	N/A	N/A
☐	New Mexico	2018-2028	Public Administration	92	21,575	21,206	-369	-0.17%	-1.71%	N/A	N/A	N/A	N/A
☐	New Mexico	2018-2028	Real Estate and Rental and Leasing	53	10,259	10,752	493	0.47%	4.81%	N/A	N/A	N/A	N/A
☐	New Mexico	2018-2028	Retail Trade	44-45	91,362	90,344	-1,018	-0.11%	-1.11%	N/A	N/A	N/A	N/A
☐	New Mexico	2018-2028	Transportation and Warehousing	48-49	21,048	21,903	855	0.40%	4.06%	N/A	N/A	N/A	N/A
☐	New Mexico	2018-2028	Utilities	22	4,313	4,178	-135	-0.32%	-3.13%	N/A	N/A	N/A	N/A
☐	New Mexico	2018-2028	Wholesale Trade	42	21,016	20,590	-426	-0.20%	-2.03%	N/A	N/A	N/A	N/A

Show:
100

Showing 1 to 23 of 23 entries

Previous

1

Next

Created with Highcharts 9.0.1Chart context menuTotal 2018-2028 Employment ChangeSource: NMDWS, Employment Projections programAccommodation and Food Services● New Mexico: 8,566Accommodation and Food Services● New Mexico: 8,566Health Care and Social Assistance● New Mexico: 23,071Health Care and Social Assistance● New Mexico: 23,071Professional, Scientific, and Technical Services● New Mexico: 6,674Professional, Scientific, and Technical Services● New Mexico: 6,674New MexicoAccommodation and Food ServicesAdministrative and Support and Waste Management and Remediation ServicesAgriculture, Forestry, Fishing and HuntingArts, Entertainment, and RecreationConstructionEducational ServicesFederal GovernmentFinance and InsuranceGovernmentHealth Care and Social AssistanceInformationLocal, Excluding Education and HospitalsManagement of Companies and EnterprisesManufacturingMining, Quarrying, and Oil and Gas ExtractionOther Services (except Public Administration)Professional, Scientific, and Technical ServicesPublic AdministrationReal Estate and Rental and LeasingRetail TradeTransportation and WarehousingUtilitiesWholesale Trade-3,000-2,000-1,00001,0002,0003,0004,0005,0006,0007,0008,0009,00010,00011,00012,00013,00014,00015,00016,00017,00018,00019,00020,00021,00022,00023,00024,00025,00025...

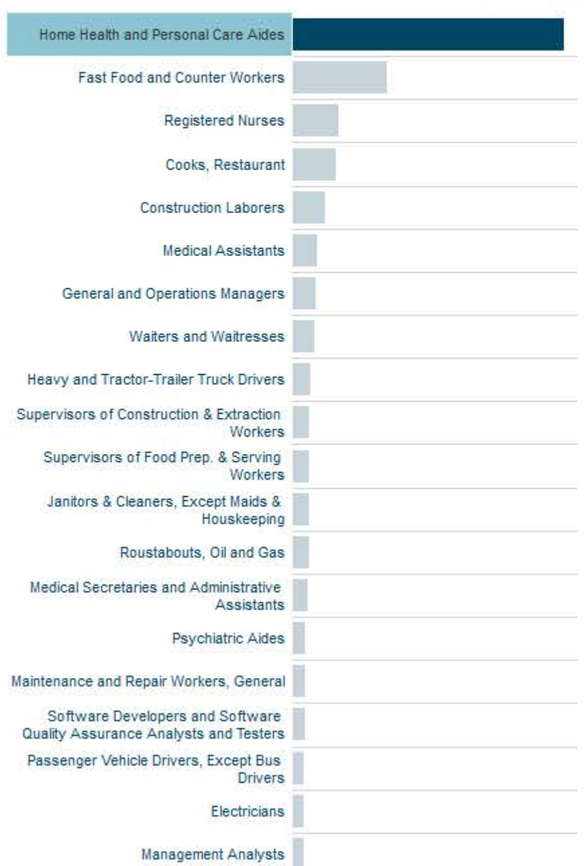
Top Occupations

SELECT a Geography

- (•) New Mexico
- ( ) Albuquerque MSA
- ( ) Farmington MSA
- ( ) Las Cruces MSA
- ( ) Santa Fe MSA
- ( ) Central Region
- ( ) Eastern Region
- ( ) Northern Region
- ( ) Southwestern Region

SELECT an occupation *below* to see details.

Most New Jobs
New Mexico



SELECT to see occupations with the:

- (•) Most New Jobs
- ( ) Most Job Openings
- ( ) Fastest Growth
- ( ) Highest Pay

Occupation DETAILS

Home Health and Personal Care Aides

Projected Percentage Growth
35.8%

Projected Annual Job Openings
6,632

Typical Minimum Education	*Job Zone (1-5)*
HS	2

STEM Occupation?	*Star Level*
No	No

Average Annual Wage
$22,720

-- Data are not available. Percentage growth and job openings represent growth between 2018 and 2028. Average annual wage as of 2019.

Top Occupations

SELECT a Geography

- (•) New Mexico
- ( ) Albuquerque MSA
- ( ) Farmington MSA
- ( ) Las Cruces MSA
- ( ) Santa Fe MSA
- ( ) Central Region
- ( ) Eastern Region
- ( ) Northern Region
- ( ) Southwestern Region

SELECT an occupation *below* to see details.

Most New Jobs
New Mexico

SELECT to see occupations with the:

- (•) Most New Jobs
- ( ) Most Job Openings
- ( ) Fastest Growth
- ( ) Highest Pay

Occupation DETAILS

Medical Assistants

Projected Percentage Growth
17.7%

Projected Annual Job Openings
884

Typical Minimum Education	*Job Zone (1-5)*
PSC	3

STEM Occupation?	*Star Level*
No	No

Average Annual Wage
$31,570

-- Data are not available. Percentage growth and job openings represent growth between 2018 and 2028. Average annual wage as of 2019.

APPENDIX C

Certificate in Practical Nursing (Dual Credit) – Similar Programs

Albuquerque Public Schools' Career Enrichment Center

Santa Fe Community College (38 credits)

Certificate in Practical Nursing (postsecondary) – Similar Programs

Dona Ana Community College (54 credits)

Clovis Community College

New Mexico Junior College (59 credits)

Southeast New Mexico College (41 credits)

[ARCHIVED CATALOG]

Practical Nursing Certificate

CIP: 51.3901
School of Sciences, Health, Engineering and Math, 505-428-1323

Students can earn a Practical Nursing Certificate through two pathways: the Associate Degree in Nursing (ADN) Pathway or the Dual Credit Pathway.

Students can follow the Program Map listed below to complete this certificate:

- Practical Nursing Certificate - Program Map

Program Learning Outcomes

Upon completion of this program, students will be able to:

- Engage in professional practice in the role of a practical nurse that is patient-centered and culturally appropriate for individuals, families, and communities
- Deliver evidence-based, age-appropriate nursing care in the role of a practical nurse.
- Engage in effective and appropriate inter-professional collaboration in the delivery of health care for quality patient outcomes in the role of a practical nurse.
- Demonstrate conscience through the application of professional practical nursing

Enrollment in Courses
Financial Aid
Graduation
Tuition and Fees
Resources and Services
Special Options for Study at SFCC
Transfer of Credit
Student Records
Employee Directory
Glossary
Videolink
My Portfolio

standards as well as ethical and legal decision-making.

- Use technologies for the management of information and in the delivery of patient care.

Associate Degree in Nursing (ADN) Pathway

This three-semester sequence within the Nursing Program prepares students to be eligible to take the National Council Licensure Examination for Practical Nursing (NCLEX-PN) and become a Practical Nurse (PN) or a Licensed Practical Nurse (LPN). LPN certification can open doors to work in many different industries and settings, including hospitals, medical and dental clinics, community centers, nursing homes, rehabilitation centers, schools, and armed forces. Admission into the Nursing Program is required.

Program Requirements: (29 Credits)

- NMNC 1110 - Introduction to Nursing Concepts **Credits:** 3
- NMNC 1135 - Principles of Nursing Practice **Credits:** 4
- NMNC 1210 - Health and Illness Concepts I **Credits:** 3
- NMNC 1220 - Health Care Participant **Credits:** 3
- NMNC 1230 - Nursing Pharmacology **Credits:** 3
- NMNC 1235 - Assessment and Health Promotion **Credits:** 4
- NMNC 2310 - Health and Illness Concepts II **Credits:** 3
- NMNC 2335 - Care of Patients with Chronic Conditions **Credits:** 4
- NURS 205 - Professional Issues in Practical Nursing **Credits:** 2

Total 29 Credits

Dual Credit Pathway

This five-semester sequence prepares students to be eligible to take the National Council Licensure Examination for Practical Nursing (NCLEX-PN) and become a Practical Nurse (PN) or a Licensed Practical Nurse (LPN). LPN certification can open doors to work in many different industries and settings, including hospitals, medical and dental clinics, community centers, nursing homes, rehabilitation centers, schools, and armed forces. Admission into the Practical Nursing program is required.

General Education Requirements (4 Credits)

- BIOL 1130 - Introductory Anatomy and Physiology **Credits:** 3
- BIOL 1130L - Introductory Anatomy and Physiology Lab **Credits:** 1

Program Requirements (34 Credits)

- NURS 205 - Professional Issues in Practical Nursing **Credits:** 2
- NURS 1110 - Introduction to Practical Nursing Concepts **Credits:** 3
- NURS 1120 - Principles of Practical Nursing Practice **Credits:** 4
- NURS 1130 - LPN Health and Illness Concepts I **Credits:** 4
- NURS 1140 - LPN Health Care Participant **Credits:** 3
- NURS 1150 - LPN Nursing Pharmacology **Credits:** 3
- NURS 1160 - LPN Assessment and Health Promotion **Credits:** 4
- NURS 1170 - LPN Health and Illness Concepts II **Credits:** 5
- NURS 2999 - LPN Capstone **Credits:** 3
- NUTR 2110 - Human Nutrition **Credits:** 3

Total 38 Credits

Note

See First-Year Student Success Course Requirement.

2022-2023 Edition

General Information

General Education & Transfer Options

Common Course Numbering Crosswalk

Academic and Career Programs

Aerospace Technology
Allied Healthcare Assistant
Associate in General Studies
Associate of Arts
Associate of Science
Automation and Manufacturing Technology
Automotive Technology
Building Construction Technology
Business Management
Computer and Information Technology
Creative Media Technology
Criminal Justice and Law Enforcement
Culinary Arts
Dental Assistant
Dental Hygiene
Diagnostic Medical Sonography
Drafting and Design Technologies
Early Childhood Education
Education
Electrical Programs

Licensed Practical Nurse - Certificate of Completion

Requirements | Road Map

Doña Ana Community College

2022-2023 Catalog

(54 credits)

This certificate program provides an option for those desiring to begin working as licensed practical nurses before finishing the Associate Degree Nursing Program (ADN) program. The certificate curriculum consists of the first two semesters of the ADN program and **NURS 224** Maternal Child Nursing. Students must pass a PN exit exam selected by the faculty to qualify for the LPN certificate.

NOTE: Students must earn a final grade of C+ or better in all required courses/Technical Requirements and achieve a cumulative grade-point average of at least 2.0. A grade of C- or better is required in **ENGL 1110G** Composition I and designated Mathematics courses.

Students must complete all University certificate requirements, which include: General Education requirements and elective credits to total at least 54 credits. Developmental coursework will not count towards the degree requirements and/or elective credits, but may be needed in order to take the necessary English and Mathematics coursework.

Prefix	Title	Credits
Core Requirements		
ENGL 1110G	Composition I [1]	4
PSYC 1110G	Introduction to Psychology [1]	3
Related Requirements		
MATH 1220G	College Algebra	3
CEPY 1120G	Human Growth and Behavior [1]	3
BIOL 2210 & BIOL 2225	Human Anatomy and Physiology I for the Health Sciences and Human Anatomy and Physiology II [1]	8
CHEM 1120G	Introduction to Chemistry Lecture and Laboratory (non majors) [1]	4
Common Technical Requirements		
NURS 130	Foundations of Pharmacology	3
NURS 134	Foundation of Nursing Skills and Assessment	3

Electronics Technology
Emergency Medical Services
Environmental and Energy Technologies
Fire Science Technology
General Engineering
Health Information Technology
Heating, Ventilation, Air Conditioning and Refrigeration
Hospitality and Tourism
Hospitality Services Management
Nursing
Nursing - Associate in Nursing
Licensed Practical Nurse - Certificate
Office Administration Technology
Pre-Business
Public Health
Radiologic Technology
Respiratory Therapy
Water Technology
Welding Technology
Noncredit Programs
Course Descriptions
Student Handbook
Governance and Personnel
Application for Admission
Policy Statement on Discrimination and Affirmative Action

NURS 136	Foundations of Nursing Practice	6
NURS 137	Care of Geriatric Patient	3
NURS 147	Adult Health I	6
NURS 149	Mental Health Nursing	3
NURS 224	Maternal Child Nursing	5
Total Credits		**54**

[1] Courses are identical to those offered at New Mexico State University Las Cruces (main) Campus.

(54 credits)

A Suggested Plan of Study

The contents of this roadmap may vary depending on initial student placement in mathematics and English. This is only a suggested plan of study for students, and is not intended as a contract. Individual student academic plans may vary. Please contact your academic advisor to create a plan that works for you. Course availability may vary from fall to spring semester and may be subject to modification or change.

NOTE: Students must earn a final grade of C+ or better in all required courses/Technical Requirements and achieve a cumulative grade-point average of at least 2.0. A grade of C- or better is required in **ENGL 1110G** Composition I and designated Mathematics courses.

Students must complete all University certificate requirements, which include: General Education requirements and elective credits to total at least 54 credits. Developmental coursework will not count towards the degree requirements and/or elective credits, but may be needed in order to take the necessary English and Mathematics coursework.

SEMESTER 1		CREDITS
Area I: Communications - English Composition Level 1		4
ENGL 1110G	Composition I	
Area II: Mathematics		3
MATH 1220G	College Algebra	
Area III: Laboratory Sciences		4
CHEM 1120G	Introduction to Chemistry Lecture and Laboratory (non majors)	
Area IV: Social/Behavioral Sciences		3
CEPY 1120G	Human Growth and Behavior	
BIOL 2210	Human Anatomy and Physiology I for the Health Sciences	4
	Credits	**18**
SEMESTER 2		
LEVEL ONE		
Area IV: Social/Behavioral Sciences		3
PSYC 1110G	Introduction to Psychology	
BIOL 2225	Human Anatomy and Physiology II	4
NURS 134	Foundation of Nursing Skills and Assessment	3
NURS 136	Foundations of Nursing Practice	6
	Credits	**16**

SEMESTER 3		
LEVEL TWO		
NURS 130	Foundations of Pharmacology	3
NURS 137	Care of Geriatric Patient	3
NURS 147	Adult Health I	6
NURS 149	Mental Health Nursing	3
	Credits	**15**
SEMESTER 4		
LEVEL THREE		
NURS 224	Maternal Child Nursing	5
LPN Exit HESI Exam		
	Credits	**5**
	Total Credits	**54**

Clovis Community College

Undergraduate certificate in Licensed Practical/Vocational Nurse Training

Program Length: 1 year

Students graduating on time

67% of Title IV students complete the program within 1 year

Program Costs*

$2,136 for in-state tuition and fees
$3,704 for out-of-state tuition and fees
$1,250 for books and supplies
Other Costs
Visit website for more program cost information
*The amounts shown above include costs for the entire program, assuming normal time to completion.
Note that this information is subject to change.

Students Borrowing Money

The typical graduate leaves with

$4,206 in debt

The typical monthly loan payment

$43 per month in student loans with an interest rate of **4.45%**.

Graduates who got jobs

N/A* of program graduates got jobs
*We are not currently required to calculate a job placement rate for program completers.

Program graduates are employed in the following fields:

Licensed Practical and Licensed Vocational Nurses

Licensure Requirements

The following do not have licensure requirements for this profession:

New Mexico

Additional Information

Date Created 4/11/2018

These disclosures are required by the U.S. Department of Education

NEW MEXICO JUNIOR COLLEGE
Degree Plan—Practical Nursing Certificate

Student Name _____ A#_____
Expected Completion _____ Advisor _____

Prerequisite and Non-Nursing General Education Courses (27 credits)

	Course/Credits	Sem/Yr	Grade
	Basic Science (4)		
	Biology **or** Chemistry (one of the following courses)		
	Biology (BI): 114, 124, 134, 144, 224, or 224B		
	Chemistry (CH): 114, 114A, 124A, 214, or 224		
	Course taken:_____	_____	_____
BI 214A	Human Anatomy and Physiology I (4)	_____	_____
BI 224A	Human Anatomy and Physiology II (4)	_____	_____
NU 103	Pathophysiology I (3)	_____	_____
NU 103A*	Pathophysiology II (3)	_____	_____
EN 113	Composition and Rhetoric (3)	_____	_____
PS 113	Introduction to Psychology (3)	_____	_____
PS 223B	Human Growth and Development (3)	_____	_____

*This course may be taken as a prerequisite or with Level 1 nursing courses.

Nursing Core Course Requirements (32 credits)

	Course/Credits	Sem/Yr	Grade
Level I			
NU 113A/NMNC 1110	Introduction to Nursing Concepts (3)	_____	_____
NU 114/NMNC 1135	Principles of Nursing Practice (4)	_____	_____
Level II			
NU 123/NMNC 1210	Health and Illness Concepts I (3)	_____	_____
NU 123A/NMNC 1220	Health Care Participant (3)	_____	_____
NU 123B/NMNC 1230	Nursing Pharmacology (3)	_____	_____
NU 124A/NMNC1235	Assessment and Health Promotion (4)	_____	_____
Level III			
NU 203/NMNC 2310	Health and Illness Concepts II (3)	_____	_____
NU 213/NMNC 2320	Professional Nursing Concepts I (3)	_____	_____
NU 214A/NMNC 2335	Care of Patients with Chronic Conditions (4)	_____	_____
NU 212	Professional Issues in PN Practice (2)	_____	_____

T= Transfer Credit

Total Credit Hours (59 required) _____ _____
Graduation Year | GPA

Date of Certificate in Practical Nursing Completion _____Date to Registrar _____

Director of Nursing Signature _____Date _____

2022-2023 Edition

Welcome

Administration

History of NMSU Carlsbad

Essential Information for Students

The NMSU System Academic Regulations

Academic Support Services, Costs, Campus Resources, Student Activities

Fields of Study

Common Course Numbering Crosswalk

Associate Degree and Certificate Programs

Accounting and Banking

Agriculture

Associate of Arts and General Studies

Auto Body Collision and Repair

Automotive Technology

Building Technology

Business Management

Business Office Technology

Computer and Information Technology

Criminal Justice

Digital Media Technology

Drafting and Graphics Technology

Licensed Practical Nursing - Certificate of Completion

Requirements | Road Map

Prefix	Title	Credits
Core Curriculum Requirements		
BIOL 2210	Human Anatomy and Physiology I for the Health Sciences	4
BIOL 2225	Human Anatomy and Physiology II	4
CEPY 1120G	Human Growth and Behavior	3
ENGL 1110G	Composition I	4
PSYC 1110G	Introduction to Psychology	3
Nursing Program Requirements		
NURS 146	Common Health Deviations	6
NURS 153	Medication and Dosage Calculation	1
NURS 154	Physical Assessment	2
NURS 156	Basic Nursing Theory and Practice	6
NURS 157	Maternal/Child Health Deviations	8
Total Credits		**41**

A Suggested Plan of Study

Additional classes may be needed based on placement test results and course prerequisites. Visit with an advisor for help with creating a customized plan.

Note: **BIOL 2210** Human Anatomy and Physiology I for the Health Sciences and **NA 101** Nursing Assistant Theory and Lab must be completed prior to entering the nursing program.

First Year

FALL		CREDITS
NURS 153	Medication and Dosage Calculation	1
NURS 154	Physical Assessment	2
NURS 156	Basic Nursing Theory and Practice	6

Early Childhood Education
Education
Emergency Medical Technician
Engineering
Geographical Information Systems
Health Information Technology
Heritage Interpretation
Hospitality and Tourism
Industrial Maintenance Technology
Intrumentation and Control Technology - Certificate of Completion
Manufacturing Technology
Natural Gas Compression Technology - Associate of Applied Science
Natural Gas Compression Technology - Certificate of Completion
Nursing
Licensed Practical Nursing - Certificate of Completion
Nursing - Associate in Nursing
Paralegal Studies
Phlebotomist Technician - Certificate of Achievement
Pre-Business
Science
Social Work
Surgical Technology
Welding Technology
Course Descriptions
Personnel

PSYC 1110G	Introduction to Psychology	3
BIOL 2210	Human Anatomy and Physiology I for the Health Sciences	4
	Credits	**16**
SPRING		
NURS 157	Maternal/Child Health Deviations	8
CEPY 1120G	Human Growth and Behavior	3
ENGL 1110G	Composition I	4
BIOL 2225	Human Anatomy and Physiology II	4
	Credits	**19**
SUMMER		
NURS 146	Common Health Deviations	6
	Credits	**6**
	Total Credits	**41**

APPENDIX D

Incomplete List of Potential Employers in McKinley County, NM

Amazing GRACE Personal Care Services, Inc.

Basin Coordinated Health Care

BeeHive Homes of Gallup

Crownpoint Health Care Facility

Gallup-McKinley County Schools

Gallup Indian Medical Center (multiple clinics)

Grey's In-Home Care

Hogan Hozhoni Christian Children's Home

Home Care Options

Kindred Home Care

Manuelito Navajo Children's Home

McKinley Center Nursing Home

New Mexico Care Center

Nizhoni In Home Care Services

Quality Home Care

Radiant Home Health Care

Ramah Care Services

Red Rocks Care Center Nursing Home

Rehoboth McKinley Christian Health Care Services (multiple clinics)

Share Your Care

Soaring Eagles Home Care

Tohatchi Area of Opportunity Services (TAOS)

Tohatchi Health Care Center

UNM Health Gallup Specialty Care Clinic

Zuni Indian Hospital

GALLUP-McKINLEY COUNTY SCHOOLS

EMPOWERING OUR FUTURE

Wade Bell,
Asst. Superintendent
wbell@gmcs.org

DATE: April 20, 2022
TO: Dr. Sabrina Ezzell
Associate Professor
UNMG Division Chair- Education, Health, and Human Services
705 Gurley Drive
Gallup, NM 87301
505-863-7570
FR: Wade Bell, Assistant Superintendent of Curriculum, Instruction, and Assessment
RE: Letter of Collaboration - Licensed Practical Nurse (LPN) dual-credit, Postsecondary Program

Dear Dr. Sabrina Ezzell,

This letter confirms the participation of Gallup-McKinley County Schools (GMCS) with the University of New Mexico-Gallup as a collaborative partner in the pursuit of the Licensed Practical Nurse (LPN) dual-credit, Postsecondary Program.

UNM-G is expanding its educational offerings in the healthcare field and exploring a Licensed Practical Nurse (LPN) dual-credit, postsecondary program modeled on a similar program at Santa Fe Community College. In this program, students could complete their high school graduation requirements and, upon graduation, immediately begin work as a Licensed Practical Nurse. The college coursework undertaken during this program will also seamlessly transfer into the school's associate degree in Nursing if the student chooses to continue.

By participating in this partnership, Gallup-McKinley County Schools will be continuing to enhance the district's Strategic Plan and Goals for Excellence under Elevate 2022. Two major goals are to create career pathways by connecting students to their career goals and to strengthen partnerships with our community to extend and enhance student learning. GMCS has expanded its Department of College and Career Readiness and has a clear vision for keeping the focus on career exploration and career pathways. This includes expanding the partnerships and program opportunities with our local universities.

GMCS views this effort as a critical step to offering new opportunities for our students in our community and to support the urgent need for health care workers in our local health care facilities.

We look forward to partnering on this initiative with University of New Mexico- Gallup. If additional information is needed, please feel free to contact Kyndee Keeler at (505) 721-1006 or kkeeler@gmcs.org, who coordinates GMCS's College, Career, and Civil Readiness initiatives.

Sincerely,

Wade E. Bell

Wade E. Bell, Asst. Superintendent

OFFICE OF ACADEMIC AFFAIRS

To: Dr. Matthew Mingus,
Dean Dan Primozic, UNM-Gallup
From: Dr. Pamela Cheek, Associate Provost for Student Success

Re: Certificate in Practical Nursing
Date: September 9, 2022

The proposed Certificate in Practical Nursing has the potential to address health and workforce needs in the state of New Mexico and in the greater Gallup and McKinley County communities. The strength of collaborations between UNM-Gallup and local health care facilities is an important part of this proposal. It is also evident in the proposal that the relationship with the Gallup-McKinley School District will support a flow of concurrently enrolled students into the proposed certificate program and will defray costs.

On behalf of the UNM Office of the Provost and EVP for Academic Affairs, I support this proposed certificate moving forward.

The UNM-Gallup Faculty Assembly President, Dr. Matthew Mingus, has requested that the process for curriculum review and approval for branch campus programs be re-examined in 2022-23. I will make sure that this re-examination occurs this academic year. Please be advised that the re-examination could impact new certificate or program approval timelines.

Dr. Finnie Coleman
President, Faculty Senate
University of New Mexico

18 February 2022

President Coleman,

On 24 November 2020, the UNM Faculty Senate approved the creation of a Career, Technical Education (CTE) Branch Curriculum Advisory Board. This Board, composed of the four branch-campus Deans of Instruction, was tasked with adding an "additional level of approval . . . between branch submission [of CTE curriculum changes] and the Associate Provost."[1] The resolution approved by the Senate was presented by Dr. Laura Musselwhite, who claimed that the proposal had been "approved by each of the faculty governance bodies at the four branch campuses."[2] This claim was not accurate, and we ask that this new advisory group be removed from the curriculum review/approval process until the Faculty Assemblies at UNM-Gallup, UNM-Los Alamos, UNM-Taos, and UNM-Valencia have each had a chance to review, comment on, and approve this proposal.

Thank you for your time and consideration.

Respectfully,
Operations Committee
Faculty Assembly
University of New Mexico-Gallup

[1] See the UNM Faculty Senate "Meeting Minutes: November 24, 2020", pages 4-5. Available online: https://facgov.unm.edu/senate/meetings/frfs/6wov/

[2] See the attached letter, drafted by the office of Dr. Laura Musselwhite and signed by all of the branch-campus Deans of Instruction, addressed to Drs. James Holloway and Finnie Coleman.

Dean of Instruction
280 La Entrada Road
Los Lunas, NM 87031

Office: 505-925-8601
Fax: 505-925-8697
Email: lmusselwhite@unm.edu

James Holloway
Provost and Executive Vice President for Academic Affairs
University of New Mexico

Finnie Coleman
President, Faculty Senate
University of New Mexico

Dear Drs. Holloway and Coleman,

We, the branch Deans of Instruction, are writing to invite you to consider a proposal to add an advisory level to the current curriculum review process for career, technical education (CTE) programs only. At this time, when a branch campus submits a proposal for course or program addition/change to a CTE program, that submission moves directly to the level of the Associate Provost for Student Success.

Some time ago, Associate Provost Pamela Cheek asked the branch Deans of Instruction to consider forming an advisory group to provide her with additional information related to CTE courses and programs. This review level would come between the submission and the Associate Provost's approval. The branch Deans formulated a proposal, which was approved by each of the faculty governance bodies at the four branch campuses. We now submit the proposal to the Provost and the Faculty Senate President for consideration.

Sincerely,

Randi Archuleta Sharon Hurley Laura Musselwhite Dan Primozic

Randi Archuleta	Sharon Hurley	Laura Musselwhite	Daniel Primozic
UNM-Taos	UNM-Los Alamos	UNM-Valencia	UNM-Gallup

OFFICE OF THE UNIVERSITY SECRETARY

March 28, 2023

TO: Board of Regents Student Success, Teaching, and Research Committee

FROM: Nancy D. Middlebrook, University Secretary

SUBJECT: Curricula Approvals from the Faculty Senate

The Faculty Senate approved the proposed new Graduate Certificate in Public Policy; and the deletion of the Bachelor of Integrative Science and Innovation degree program, at the Tuesday, March 28, 2023, meeting.

Please place these items on the next Board of Regents Student Success, Teaching, and Research Committee meeting agenda for consideration.

Thank you.

Attachments

The University of New Mexico · MSC05 3340 · 1 University of New Mexico · Albuquerque, NM 87131-0001 · Phone 505.277.4664 · Fax 505.277.4665 · **sec**cretary.unm.edu
Office of the Secretary · Scholes Hall Room 103

UNIVERSITY COLLEGE

UNIVERSITY COLLEGE CURRICULUM PROPOSAL(S) FOR FALL 2023

PRESENTATION TO SSTAR COMMITTEE

MARCH 30, 2023

DAVID WEISS, PH.D.

DIRECTOR OF LIBERAL ARTS & INTEGRATED STUDIES

PROBLEM (CURRENT SITUATION):

2 NEARLY IDENTICAL BACHELOR'S PROGRAMS

- Bachelor of Arts in Liberal Arts (BALA)
  - "Build your own adventure": design a degree program combining 3 or more concentrations into a common theme
    - Optional: shared-credit UG + grad degrees program (BALA + MPA)
  - Required courses: LAIS 150, 311, 499
  - Must submit plan of study, statement of purpose, and qualified-signature form
  - Must submit graduation essay or capstone paper (can use LAIS 311 or 409 for this)
- Bachelor of Integrative Studies & Innovation (BISI)
  - "Build your own adventure": design a degree program combining 3 or more concentrations into a common theme
    - Optional: Military Studies concentration
    - Optional: Global & National Security conc.
  - Required courses: LAIS 150, 311, 499
  - Must submit plan of study, statement of purpose
  - Must submit capstone paper (LAIS 409)

PROBLEM (CTD):

WHAT ***USED TO*** FURTHER DIFFERENTIATE THE 2 PROGRAMS IS GONE

- BISI program (but not BALA) gave students the option to take the following business/industry-oriented courses:
  - LAIS 341: Innovation Academy
  - LAIS 342: Disney College Program Internship
  - LAIS 343: Create Sell Bank
  - LAIS 344: Student Athlete Identity
- But when their creator—a former UC interim dean deeply involved with Innovation Academy—moved to a different UNM college, he took those courses with him.
- Students can still take them—at Anderson—but not as BISI/UC courses

RESULT

- Two nearly identical bachelor's programs
  - Not the original intention, but that's where we are now
- Student confusion
  - *How do the degrees differ?*
  - *What are their relative pros and cons?*
  - *I know—and employers and grad schools know--what a Bachelor of Arts (BA) is. But what the heck is a Bachelor of Integrative Studies and Innovation? Will a BISI help me find a job?*
  - *And why aren't there any "innovation" classes, anyway?*
- Currently (spring '23) we have 447 BALA majors – but only 29 BISI majors
- Bottom line: no practical reason to offer both programs

PROPOSED SOLUTION

Part 1

Offer only one bachelor's Program:

BA-LAIS: Bachelor of Arts in Liberal Arts & Integrative Studies

(more on this in a moment)

Part 2

Demise BISI

WHAT THE BA-LAIS (BACHELOR OF ARTS IN LIBERAL ARTS & INTEGRATIVE STUDIES) PROGRAM WILL BE

- Includes foundational elements common to BALA and BISI
  - Build your own adventure
  - Design a degree program combining 3+ concentrations into a common theme
  - Graduation essay or capstone paper
- Also includes transcribed-concentration options that students can choose from, if they want to:
  - 2 that are current options in BISI program: **Military Studies**; **Global & National Security Studies**
  - 2 new options: **law enforcement** (developed in consultation with Dept. of Sociology & Criminology; **pre-law**, developed in consultation with UNM School of Law
  - additional transcribed-concentration options to be developed in future years
- Bottom line: BA-LAIS is, basically, an enhanced version of BALA

GOOD NEWS

- Part 1 of the solution – the BA-LAIS degree program -- has already been approved at all levels
- Only part 2 – demising BISI – requires approval, hence this presentation

QUESTIONS AND DISCUSSION

BISI Innov Stdy
Bachelor of Integrative Studies and Innovation

Under Review | Fall 2023

Proposal Information

Status

Changes

~~Active~~**Inactive**

Workflow Status

In Progress

Faculty Senate Approval, Faculty Senate expand

Waiting for Approval | Faculty Senate Approval

Rick Holmes

Nancy Middlebrook

Changes

- Proposed Effective Term and Year
- Catalog Activation Date
- Sponsoring faculty member
- Faculty email
- Program Justification

Show All

Proposal Information

Proposed
Sponsoring faculty member
David Weiss

Proposed
Faculty email
davidweiss@unm.edu

Existing
Sponsoring faculty member

Existing
Faculty email

College	Department	Campus
University College	University College Departments	Main Campus

Effective Term and Year

Proposed
Proposed Effective Term and Year
Fall 2023

Existing
Proposed Effective Term and Year
Fall 2006

Justification

Proposed
Program Justification
Being inactivated as a result of the update to BALA.

Existing
Program Justification

Associated Forms

Select any associated course forms that exist

Select any associated program forms that exist

Program Category and Level

Program Category
Program

Program Level
Undergraduate

Degree, Minor, or Certificate Name
Bachelor of Integrative Studies and Innovation

Proposed
New Graduate Program
No

Dual Degree
No

Proposed
New Undergrad Degree/Certificate
No

Existing
New Graduate Program
--

Existing
New Undergrad Degree/Certificate
--

Catalog Information

Program Description

The faculty of The University of New Mexico offers the degree of Bachelor of Integrative Studies (B.I.S.). This program, approved in 2013, is administered through University College. The focused nature of the B.I.S. degree specifically engages students who would benefit from closer collaboration with a faculty mentor(s) through experiential research and/or participation with faculty-led problem solving teams. Students are encouraged to design an individualized program that will prepare them for unique or advanced learning experiences ‰ÛÒ including international, cooperative or professional schools. It may be used as part of a dual degree or as a second degree, and an existing departmental minor is required. Strict compliance with B.I.S. requirements is mandatory for admission to and continuation in the program. Changes to approved Plans of Study may be made only in consultation with an advisor. Students in the Integrative Studies program must meet the general academic regulations of the University for admission, academic standing, and graduation foundin the University Catalog.

Admissions Requirements

Graduation Requirements

Program Information

Degree Type

Bachelor of Integrative Studies and Innovation

Degree/Certificate Type	CIP Code	CIP Title
Undergraduate		

Professional Credential/Licensure Program Information

Proposed

Licensure Information

Neither

Existing

Licensure Information

--

File Uploads

Proposal File Upload	Executive Summary Upload	Associate Provost Memo

Degree Information

Proposed
Degree Hours
120

Minimum Major Hours

Existing
Degree Hours

Professional Accrediting Bodies

Degree Requirements

Requirements

- Complete all of the following
  Core Courses
  - Complete all of the following
    - Complete the following:
      - LAIS150 - Foundations of Integrative Thought (3)
      - LAIS311 - Experiential Learning and Research (3)
      - LAIS499 - Senior Seminar (3)
    - Earn at least 36 credits from the following types of courses:
      Courses chosen to fulfill Discipline I Courses chosen to fulfill Discipline II Courses chosen to fulfill Discipline III
  - Earn at least 35 credits from the following types of courses:
    academic work earned while enrolled in the B.I.S.I. program (department residency requirement). These may not include: credit by exam, transfer credit and/or concurrent enrollment, nonprofessional-physical education and/or music ensemble, or independent study/problems courses unless specifically approved by a program advisor.) They must include the final 36 credit hours of enrollment prior to graduation from the program.
  - Complete the following:
    - LAIS499 - Senior Seminar (3)
  - Earn at least 37 credits from the following types of courses:
    In addition to the program-specific requirements outlined here, all undergraduate students are required to fulfill UNM's General Education Program requirements. In some instances, courses included in an undergraduate degree program's requirement may also fulfill a General Education requirement. Please review the General Education Program in this Catalog for General Education information.

Grand Total Credits: 120

Concentrations

Program Concentrations

Code	Title
CON Glob Natl Secty	Global & National Security
Con Milt Stds	Concentration in Military Studies

Concentration Required
Yes

Emphases

Emphasis required
N/A

Emphasis Hours

Emphasis Rules

No Rules

Sample Degree Plan

Sample Degree Plan Upload

Program Learning Outcomes

Proposed
Learning Outcomes
N/A, request is to inactivate.

Existing
Learning Outcomes

OFFICE OF THE UNIVERSITY SECRETARY

March 28, 2023

TO: Board of Regents Student Success, Teaching, and Research Committee

FROM: Nancy D. Middlebrook, University Secretary

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Office of the Secretary · Scholes Hall Room 103

COMMITTEE ON GOVERNANCE

DATE: February 22, 2023

TO: UNM Board of Regents Student Success, Teaching, and Research (SSTAR) Committee

FROM: Dr. Matias Fontenla, Chair, Committee on Governance and Professor of Economics

RE: Request Approval for Proposed Revisions to Faculty Handbook Political Activity Policies C150 and C240

UNM Faculty Handbook Polices C150 "Political Activities of UNM Faculty" and C240 "Leave of Absence Incident to Political Activity" have not been revised since the 1970's. Changes to these policies require approval from the voting faculty and the Regents. In Spring 2022, the Faculty Senate Policy Committee reviewed Policies C150 and C240 to address concerns raised by the Committee on Governance taskforce in 2016, make any changes needed to bring the policy up to date, and place it in the new policy format. In working on the policy draft, the Policy Committee did incorporate the recommendations received from Office of University Counsel (OUC) to ensure compliance with New Mexico state law. In reviewing Policies C150 and C240, the Policy Committee also determined that all the text in C240 is also included in C150 and, therefore, recommended that it should be deleted/removed from the Faculty Handbook.

The main changes being proposed to Policy C150 are to add specific information pertaining to:

- explanation of the right to academic freedom as it pertains to political activity;
- election to the New Mexico Legislature to ensure compliance with NM state law that prohibits dual compensation; and
- other appointments or commitments requiring significant effort to guide the faculty member to consider any conflict of commitment, which if extensive may require leave without pay or resignation.

The proposed changes were sent to the campus for a 30-day review and comment period. Comments received from that period were incorporated into the revised policy, where appropriate, and then forwarded to the Committee on Governance who approved that the proposed policy revisions be sent out for a faculty vote.

The proposed changes were then approved by the voting faculty (the voting period started before the end of the Spring semester and completed in June 2022). In late Fall 2022, an additional review of C150 was requested from OUC, to ensure there were no other legal concerns or issues with the proposed changes. The feedback received was incorporated into a final draft that is now being forwarded to you for your review and approval, along with the approval to delete/remove C240 from the Faculty Handbook.

cc: Dr. Finnie Coleman, Faculty Senate President and Associate Professor, English
Dr. Karen Patterson, Faculty Senate Policy Committee Chair and Associate Professor, Management
Dr. Nancy Middlebrook, University Secretary

Faculty Handbook	**C150: Political Activities of UNM Faculty**
Approved By: Faculty and Board of Regents	
Effective Date: **Draft 2/21/23**	
Responsible Faculty Committee: Policy Committee	
Office Responsible for Administration: Office of the Provost and Executive Vice President for Health Sciences	

Legend:. Red text is proposed new wording, ~~strikeouts~~ show proposed deletions, Language that is shown in black (not underlined) reflects language that is in the current C150 policy and not proposed to change. Green -notes where this language is located in current policy. This Policy contains all the information that is in C240, so there is a proposal to delete C240. **Purple text notes changes made to address concerns raised by OUC.**

Revisions to the Policy Rationale, Policy Statement, and Applicability sections of this document must be approved by the full Faculty and Board of Regents

POLICY RATIONALE

The University of New Mexico (UNM) recognizes the right of free speech and expression of opinion on any subject by any member of the UNM community, whether the subject relates to on- or off-campus issues. (C150, 1.) UNM faculty members are citizens and ~~like other citizens~~ are ~~should be~~ free to engage in political activities ~~so far as they are able to do so~~ consistent with their obligations as teachers and scholars subject to appropriate time, manner, and place restrictions~~,~~ ~~and~~ in accordance with applicable policies and laws. This Policy document provides policies and procedures pertaining to the political activity of UNM faculty.

POLICY STATEMENT

This Policy pertains to extramural political activities of faculty and is not intended to place any restrictions on the academic freedom of faculty members. Academic freedom is defined in Section B. of the *Faculty Handbook*, including Appendices I "1940 Statement of Principles on Academic Freedom and Tenure with 1970 Interpretive Comments" and VII "Committee A Statement on Extramural Utterances, "which are documents from the American Association of University Professors (AAUP). Below are excerpts from these appendices designed to provide guidance to faculty; however, the faculty should read the full documents to ensure a thorough understanding of the issues addressed and their rights and responsibilities.

Appendix I excerpt: "~~Faculty~~ (a) Teachers are entitled to full freedom in research and in publication of the results subject to the adequate performance of their other academic duties; but research for pecuniary return should be based upon an understanding with the authorities of the institution." (b) "Faculty are entitled to freedom in the classroom in discussing their subject, but they should be ~~mindful when introducing~~ careful not to introduce into their teaching controversial matter unless it is in relation to their subject."

Appendix VII excerpt: "The 1940 Statement of Principles asserts the right of faculty members to speak or write as citizens, free from institutional censorship or discipline. At the same time it calls attention to the special obligations of faculty members arising from their position in the community: to be accurate, to exercise appropriate restraint, to show respect for the opinions of others, and to make every effort to indicate that they are not speaking for the institution."

(C150, 7) An advisory opinion may be requested from the Academic Freedom and Tenure Committee about the meaning or application of this Policy.

1. Extramural Political Activity

(C150, 6. 1st & 2nd sentences) All ~~such~~ extramural political activity, except that clearly of a consultative nature or under contract through UNM and which is directly in the field or fields of one's professional competencies, should be entirely disassociated from one's UNM relationship. By this is meant that the faculty member should not create the impression that ~~he/she is~~ they are acting either for, in behalf of, or with the approval of UNM rather than as an individual citizen.

(C150, 2.) Many kinds of extramural political activity (e.g., holding part-time office in a political party, seeking election to any office under circumstances that do not require extensive campaigning, or serving by appointment or election in a part-time political office) are consistent with effective service as members of a faculty. Other kinds of political activity (e. g., intensive campaigning for elective office, serving in a state legislature, or serving a limited term in a full-time position) may require that the ~~professor~~ faculty member seek a leave of absence from UNM. ~~the University~~.

(C150, 3.)~~1.~~ In recognition of the legitimacy and social importance of political activity by faculty members, UNM should provide institutional arrangements to permit it, similar to those applicable to other public or private extramural service. Such arrangements may include the reduction of the faculty member's workload or a leave of absence for the duration of an election campaign ~~or a term of office,~~ accompanied by equitable adjustment of compensation when necessary.

1.1 Leave of Absence Without Pay

(C150, 4. 3rd sentence) A leave of absence should be sought by anyone who becomes or anticipates becoming overly committed to either a major political campaign, an appointive post in an agency of government, an elective position in public office, or to any political activity which results in interference with UNM function. (C150, 4. last sentence) Such leave ~~should not be~~ is not automatic and should be governed by the priority needs and considerations of the department, school, college, or division concerned. (C150, 5. 1st sentence) A leave of absence incident to political activity should come under the University's normal rules and regulations for leaves of absence subject to the provisions of Faculty Handbook Policy **C280** "Leave Without Pay."

(C150, 4, 1st & 2nd sentences) Faculty members seeking leave without pay should recognize that they have a primary obligation to UNM and to growth as educators and scholars, and they should be mindful of the problem which leaves of absence can create for administration, colleagues, and students. If adjustments in their favor are made, such as a reduction of workload, they should expect them to be limited to a reasonable period. (C150, 5, 2nd & 3rd sentences) Such a leave should not affect unfavorably the tenure status of a faculty member, except that time spent on such leave

from academic duties need not count as probationary service. The terms of a leave and its effect on the professor's status should be set forth in writing.

1.1.1 Election to the New Mexico Legislature

Should a faculty member be elected to the New Mexico Legislature, they are prohibited by New Mexico state law from receiving dual compensation; therefore, the faculty member would need to either resign their position or be placed on leave of absence without pay for the entire period they are receiving compensation for the elected office.

1.1.2 Other Appointments or Commitments Requiring Significant Effort

A faculty member accepting a temporary appointment or commitment that requires significant effort outside of their faculty duties that exceeds time allowed by Faculty Handbook Policy **C130** "Outside Employment" shall notify their supervisor who may require the faculty member to apply for a leave of absence without pay. Granting of such leave is (C150, 4. last sentence) not automatic and is subject to the provisions of Faculty Handbook Policy **C280** "Leave Without Pay." If leave is not granted, the faculty member would be required to resign their position if they wish to pursue the appointment or commitment.

APPLICABILITY

All UNM academic faculty and administrators.

DEFINITIONS

Revisions to the remaining sections of this document may be amended with the approval of the Faculty Senate Policy and Operations Committee in consultation with the responsible Faculty Senate Committee listed in Policy Heading.

WHO SHOULD READ THIS POLICY

- Faculty
- Department Chairs, academic deans and other academic administrators and executives

RELATED DOCUMENTS

UNM Regents' Policy Manual
Policy 2.1 "Free Expression and Advocacy**"**
Policy 6.5 "Political Activity by Employees"
Faculty Handbook
Section B "Academic Freedom and Tenure"
Policy C130 "Outside Employment"
Policy C200 "Sabbatical Leave"
Policy C280 "Leave Without Pay
University Administrative Policies

Policy 2060 "Political Activity"
Policy 2220 "Freedom of Expression and Dissent"
Policy 3740 "Media Response"

CONTACTS

Direct any questions about this policy to the Office of the Provost.

PROCEDURES

Political Activity Guidelines

(C150, Guidelines 1st sentence) The following guidelines apply to all UNM employees who are candidates or who campaign for candidates for political office:

(C150, Guidelines 1.) 1. Campaigning during work hours at the University is prohibited.

(C150, Guidelines 2.) 2. (C150, 6, last sentence) ~~Also, care should be taken not to use~~ UNM supplies, equipment, postage, or clerical time for ~~such~~ political activities, including campaign purposes, may not be used.

(C150, Guidelines 3.) 3. Personal political views or views of any candidate may not be represented as being those of UNM.

(C150, Guidelines 4.) 4. Employee mailing labels (either home or office addresses) will not be produced by UNM for distributing campaign materials. (A candidate may obtain addresses from the UNM student, faculty, staff directory or other published address lists.)

(C150, Guidelines 5.) 5. Campaign material will not be distributed through Campus Mail unless it has been received from a federal post office and is properly postmarked. Campus Mail may not be used internally to distribute campaign literature.

DRAFT HISTORY

February 21, 2023 –Revised draft to reflect changes made to address concerns raised by OUC.
February 2, 2022 – Revised draft to reflect Policy Committee changes.

HISTORY

September 1970—Approved by Regents
April 1970—Approved by Faculty

Faculty Handbook	**C240:Leave of Absence Incident to Political Activity**
Approved By: Faculty and Board of Regents	
Effective Date: **4/8/22**	
Responsible Faculty Committee: Policy Committee	
Office Responsible for Administration: Office of the Provost	

Propose Deleting/ Removing this policy from the Faculty Handbook because this entire policy is repeated in C150 "Political Activities of Faculty" and is therefore redundant.

A leave of absence incident to political activity should come under the University's normal rules and regulations for leaves of absence. Such a leave should not affect unfavorably the tenure status of a faculty member, except that time spent on such leave from academic duties need not count as probationary service. The terms of a leave and its effect on the professor's status should be set forth in writing.

MEMO

To: Cinnamon Blair
Chair, UNM Naming Committee

From: Dr. Douglas Ziedonis
Executive Vice President & UNM Health System CEO

Date: March 3, 2023

Re: **Appointment of Dr. Yolanda Sanchez, PhD to the Maurice and Marguerite Liberman Distinguished Chair in Cancer Research**

Dear Ms. Blair and members of the naming committee,

On behalf of the UNM Health and Health Sciences, UNM Comprehensive Cancer Center (UNMCCC), and the UNM School of Medicine Department of Internal Medicine, and, as prescribed by Faculty Handbook Policy C170 "Endowed Chairs and Name Professorships" and in consultation with Health and Health Sciences leadership, we seek approval to appoint Dr. Yolanda Sanchez to the Maurice and Marguerite Liberman Distinguished Chair in Cancer Research. We are requesting a change of the holder of this Chair which was previously held by Dr. Cheryl Willman. As per the Endowment Gift Agreement, section 6, the Director of the UNM Comprehensive Cancer Center shall be entitled to use the title and use of income from the endowment during the time she holds the position.

Maurice and Marguerite Liberman met and married in France in the 1930s. They left in 1941 for the United States, where they saw opportunity and a good environment. Soon after they settled in New Mexico, two of Maurice's brothers, Jack and Joseph Grevey, joined them. "Albuquerque back then was more than a railroad town," says the Liberman's son, Marc. "It was a town that accepted everyone and that was important to them." Maurice and his brothers milled lumber for the Transit Remanufacturing Company, which they later purchased. They also formed Duke City Lumber and ultimately merged the two companies. Marguerite was an accomplished translator and chef who loved art and painting. She served on the board of the New Mexico Symphony Orchestra and Maurice served on the boards of Presbyterian Hospital and Albuquerque Academy. Together, they raised Marc and his older sister, Michele.

The Liberman's had been married for over 30 years when Maurice was diagnosed with pancreatic cancer. With no cancer center in Albuquerque, Jack accompanied Maurice to the Mayo Clinic. Tragically, nothing could be done. Maurice died in January, 1969. Bravely, Marguerite remained active in the community. Says Marc, "she was very determined—always.

That was a wonderful quality of hers." When she died in 1990, she left a generous gift to support cancer research. Marc says, "Her gift reflects her strong feelings about the meaning of community. She hoped that there would be a way to combat this disease and was seeking to involve community advocates in the process."

Dr. Sanchez started as the UNM Comprehensive Cancer Center Director and CEO on February 6, 2023. She joins us from the Dartmouth Cancer Center, the only NCI- Designated comprehensive cancer center in a three-state area with most of their populations in New Hampshire and Vermont. The institution oversees all cancer-related academic, education, training, and clinical activities at Dartmouth College, including the Geisel School of Medicine and the Dartmouth Health System. There, she held leadership roles to bridge basic, translational, and clinical research with the clinical programs; as a co-director of SYNERGY's office of research education, training and career development; and as a co-investigator of Dartmouth's Program for Oncology Workforce Education and Research Experience. As a co-investigator, she helped develop innovative training and recruitment platforms to help women and under-represented minorities pursue careers in oncology.

A pioneer in cancer research, her research leadership roles have included integrating initiatives across basic science, population science and clinical research to ensure high-quality collaborative activities across research programs. Her work on the Early Phase Trials Program steering committee was critical in ensuring that opportunities for clinical and translational research are explored and supported by pilot funding, and that clinical collaborations for translational research are nurtured effectively.

In addition to her research leadership, Dr. Sanchez is an accomplished independent research investigator. Her laboratory studies the mechanisms that maintain genomic integrity and the role of genomic instability in embryonic and cancer development, in particular the interplay between oncogenes and checkpoint pathways in the early stages of cancer development.

Dr. Sanchez's outstanding research helped identify the CHK1 enzyme as a potential oncology target for cancer treatment, which has led to current Phase 1, Phase 2 and other clinical trials for certain tumor types, including those that have mutations in the BRCA 1-2 pathway.

She has translated her research findings in genomic integrity and cancer drug discovery into numerous patents for economic development, as well as to further the field, develop research teams and mentor trainees and junior faculty to develop their own successful research careers.

Dr. Sanchez completed her undergraduate and graduate degrees in the University of Texas system and completed her PhD research at the MD Anderson Cancer Center. She joined the University of Cincinnati College of Medicine faculty in 1998 and was granted tenure in 2004. She was recruited to Dartmouth Medical School (now known as the Geisel School of Medicine) in 2006.

For your consideration, I have included Dr. Sanchez's CV for your review. Thank you for your time and consideration of this request.

CURRICULUM VITAE

Yolanda Sanchez, Ph.D.

Professor, Department of Internal Medicine
Director & CEO, University of New Mexico Comprehensive Cancer Center
1 University of New Mexico, MSC 07-4025
1201 Camino de Salud N.E.
Albuquerque, NM 87131-0001
505-272-5622 Office
513-218-0035 Cell

YolaSanchez@salud.unm.edu

Updated February 17th, 2023

I. EDUCATION

DATE	INSTITUTION	DEGREE
1987	University of Texas at El Paso, El Paso, TX	B.S., Biology
1993	The University of Texas, Graduate School of Biomedical Sciences, Houston, TX	Ph.D., Biology

II. POSTDOCTORAL TRAINING

DATE	INSTITUTION	SPECIALTY
1993-94	The University of Texas M. D. Anderson Cancer Center, Houston, TX	Cancer Genetics
1994-98	Baylor College of Medicine, Houston, TX	Biochemistry

III. PROFESSIONAL DEVELOPMENT ACTIVITIES

2016 Annual Mentoring Conference at the University of New Mexico Mentoring Institute. Sponsor: Dartmouth Provost's office

IV. ACADEMIC APPOINTMENTS

DATE	ACADEMIC TITLE	INSTITUTION
1998-2004	Assistant Professor	University of Cincinnati

2004-2006	Associate Professor with Tenure	University of Cincinnati
2006-2020	Associate Professor	Dartmouth Medical School and Geisel School of Medicine at Dartmouth
2020-2023	Professor	Geisel School of Medicine at Dartmouth
2023-present	Professor	University of New Mexico

V. INSTITUTIONAL LEADERSHIP ROLES

DATE	TITLE	INSTITUTION
2008-2015	Director	Molecular Biology and Shared Instrumentation Resources Norris Cotton Cancer Center and Geisel School of Medicine at Dartmouth
2008-2020	Co-Director, SYNERGY Pilot Program	SYNERGY: Dartmouth's CTSA
2011-2023	Associate Director Basic Sciences	Norris Cotton Cancer Center
2015-2020	Co-Director Education Training and Career Development	SYNERGY: Dartmouth's CTSA
2015-2020	Steering committee member, Office of Research Mentoring	SYNERGY: Dartmouth's CTSA and Geisel School of Medicine
2015-2023	Co-Director and Faculty Advisor	Genomics and Molecular Biology Shared Resource, Norris Cotton Cancer Center and Geisel School of Medicine at Dartmouth
2023-present	Director and CEO	University of New Mexico Comprehensive Cancer Center

VI. LICENSURE AND CERTIFICATION

VII. HOSPITAL OR HEALTH SYSTEM APPOINTMENTS

VIII. OTHER PROFESSIONAL POSITIONS

IX. TEACHING ACTIVITIES

A. Undergraduate Teaching

National (Invited Guest Lectures)

DATE	COURSE
2001	Cancer Biology (Miami University, Oxford OH) Topic: What sunburned yeast can tell us about cancer Guest Lecturer
2002	Cancer Biology (Miami University, Oxford OH) Topic: Stopped for Repairs: Signal transduction pathways that regulate mitotic progression in response to stress Guest Lecturer

B. Undergraduate Medical Education (UME) Classroom teaching

University of Cincinnati

DATE	COURSE
2000-2001	Molecular Genetics Laboratory (summers) Instructor

Geisel School of Medicine at Dartmouth

DATE	COURSE
2008-2015	Medical Pharmacology Instructor (4 lectures, leader of Modules I and II—B)

2015	Patients and Populations: Improving Health and Health Care (Applied Leadership, and Experiential Approach to Personal and Professional Development and Performance, 1st year medical students) Small Group Leader (5 2-hour small group sessions)

C. Undergraduate Medical Education (UME) Clerkship or other Clinical teaching

D. Graduate Medical Education (GME) teaching: Inclusive of instruction of residents and fellows during clinical practice

E. Other clinical education programs

F. Graduate teaching (post-college students enrolled in advance degree-granting programs)

University of Cincinnati

DATE	COURSE
1999-2001	Introduction to Molecular Genetics Instructor (16 lectures total)
2000-2001	Biology of Cancer Instructor (4 lectures total)
2000-2005	Genetic Mechanisms in Cell Growth and Development Instructor (25 lectures total)
2003-2005	Molecular Pathogenic Mycology Instructor (3 lectures total)

Geisel School of Medicine at Dartmouth

DATE	COURSE
2006	Pharmacology 129: Principles of Receptor Action Instructor (Winter, 1 lecture)
2006	PEMM 101 Instructor (5 lectures)
2007-2019	PEMM 101 Instructor (2 lectures)

2008, 2010	Graduate Toxicology Instructor (1 and 2 lectures, respectively)
2012	SYNERGY Certificate Program (1-week course) Mentor grant proposal development to 5 faculty
2013-present	QBS 110: Program in Quantitative Biomedical Sciences Instructor (1 lecture)

National – Invited Guest Lectures

DATE	COURSE
1993	Special Topics in Cytogenetics The University of Texas M. D. Anderson Cancer Center Topic: A Tumor Suppressor Locus with 3p14-p12 Involved in Renal Cell Carcinoma Guest Lecturer
1993	Molecular Genetics The University of Houston Topic: The Cell Cycle and Tumor Suppression Genes Guest Lecturer
1993-94	Molecular and Cellular Approaches to Human Genetics The University of Texas M. D. Anderson Cancer Center Topic: The Cell Cycle Guest Lecturer
2006, 2007	BMB585: Cancer Biology Wistar Institute, University of Pennsylvania Topic: Oncogenes and Genomic Instability: Lessons from Model Organisms Guest Lecturer

G. Other professional/academic programs

X. RESEARCH ADVISING

A. Undergraduate Students (45)

Kaila Schollaert (March 1999-August 2002)	University of Cincinnati
Teabra Dixon. M. D. (Summer 1999)	University of Cincinnati
Julie Poisson (Summer 2000)	University of Cincinnati
Jennifer Schwanekamp (2003-2004)	University of Cincinnati
Jaime McKinney (August 2003-June 2005)	University of Cincinnati
Julie Anne Schroeder (Summer 2005)	Miami University, Ohio
*Katherine C. Michelis (April 2006-2008)	Dartmouth Presidential scholar
Johanna Jasinsky (Summer 2006)	Visiting Summer Student, Dartmouth
Laura A. Felder (April 2006-present)	Dartmouth
Stephanie Kim (Fall 2006)	Dartmouth, Presidential scholar
Louisa C. Thompson (Fall 2007)	Dartmouth
*Rachael N. Labitt (Fall 2007)	Dartmouth Presidential scholar
John E. Nolan (Summer 2008)	Dartmouth, Presidential scholar
Tafaoul M. Abdelmagid (Fall 2008)	Dartmouth (HHMI)
Amanda Marinoff (Winter 2008)	Dartmouth WISP
*Alice Shu Pang (Spring 2009-2013)	Dartmouth WISP and HHMI and Barbara Crute Memorial Intern for 2009-10, Presidential Scholar
*Saryha Azmat	Dartmouth Presidential scholar Dartmouth HHMI and Presidential scholar
Anna Morenz	Dartmouth WISP and HHMI
Jaya Batra	Dartmouth HHMI
Lidia J. Valdes	Dartmouth WISP
Chloe N. L. Lee	Dartmouth WISP, HHMI and Presidential Scholar
Norman Tyler Melancon (Summer 2011)	Norris Cotton Cancer Center Fellow
John K. Kim (2012)	Dartmouth HHMI and Presidential Scholar, off term research grants
John G. Hong (2012)	Dartmouth HHMI and Presidential Scholar
Janet Hong (2012)	Dartmouth
Jennifer Bai (2012-2014)	Dartmouth Presidential Scholar
Helen Hou (2012-13)	Dartmouth HHMI and off term research grant
*Jungbin (Tony) Choi	Dartmouth, Presidential Scholar
Christopher Park	Dartmouth Sophomore and Presidential Scholar
*Gautham V. Upadrasta	Dartmouth Sophomore and Presidential Scholar
Peter L. Xiong	Dartmouth
*Joshua T. Lange	Dartmouth Sophomore and Presidential Scholar
Brandon G. Apoo	Dartmouth Sophomore Scholar and leave term research grant
Paula X. Chen	Dartmouth Sophomore and Presidential Scholar
Aniksha Balamurugan	Dartmouth Presidential Scholar
Devika S. Dholakia	Dartmouth
Yun Chao-Chen	Dartmouth Sophomore and Presidential

	Scholar
India Burdon Dasbach	Dartmouth
Aidan Pierce	Dartmouth Junior Scholar
Diana Ge	Dartmouth Sophomore Scholar
Peter Vo	Dartmouth
Jewelia Durant	Plymouth State, NCCC DOOR student
Albert Wang	Dartmouth Presidential scholar, Leave term grant Winter, 2020
*Franklin E. Corea-Dilbert	Leave term grant Summer 2019
Cindy Takigawa	Dartmouth Leave term grant, Winter 2019

* = Honors Thesis

B. Graduate Students (10)

University of Cincinnati

Christopher Conn	1998-2000	Ph.D. Co-Advisor, Cancer and Cell Biology
Benjamin Wilkins	1999	Ph.D. Advisor, Molecular Genetics, Biochemistry and Microbiology
Jennifer Searle	1999-2005	Ph.D. Advisor, Molecular Genetics, Biochemistry and Microbiology
Beatriz Russell	2001-2004	M.A. Advisor Molecular Genetics, Biochemistry and Microbiology
Julie Poisson	2002-2007	Ph.D. Advisor, Molecular Genetics, Biochemistry and Microbiology
Tiffany Powers	2004	M.S. Advisor, Molecular Genetics, Biochemistry and Microbiology

Geisel School of Medicine at Dartmouth

Matthew Wood	2006-2010	Ph.D. Advisor, PEMM
Robert Allaway	2011-2016	Ph.D. Advisor, PEMM
Xianpei Jia	2013-2014	Advisor, PEMM
Stephanie Joy Bouley	2014-2019	Ph.D. Advisor, PEMM

C. Medical Students (1)

Jennifer A. Wylie, Summer 2019, NCCC TOPS Student

D. Residents/Fellows (7)

Postdoctoral Fellows (7)	Current /Most recent positions

Yinhuai Chen, Ph.D.2001-2006	Director, Vector Services, Gene Targeting and Transgenic Mouse Models, University of Cincinnati College of Medicine
Elizabeth Pereira, Ph.D., 2002-2013	Associate Scientist, Biology, Dartmouth
Kiran Sree Nadella, Ph.D., 2003	Scientist, Otsuka Pharmaceutical Companies (MD, USA)
Willy Solis, Ph.D., 2003-2006	Senior Director, Safety Assessment, Sutro Biopharma, Inc.
Yi-Feng Chen, Ph.D., 2006-2007	Professor, Jiangsu Academy of Agricultural Sciences, Nanjing, PRC and Visiting Scientist, Rutgers.
Erika L. Artinger, J.D., Ph.D., 2012-2013	Senior Staff Attorney at Board of Regents for the Oklahoma Agricultural and Mechanical Colleges.
Anastasia Zlatanou, Ph.D., 2018-2020	

E. Others (Define)

Visiting Scientists (2)

Laura Carrassa (Jan 2004-June 2005)	Mario Negri Institute, Milan, Italy
Robert Baker (Aug 2006-July 2007)	University of Bath, United Kingdom

XI. ADVISING/MENTORING (NOT RESEARCH)

A. Undergraduate Students

B. Graduate Students

Graduate Student Advisory Committees (served on 40)

University of Cincinnati College of Medicine, 1998-2006

Chris Conn
John Panepinto
Melanie Stegman
Manuel Ascano
Fatima Rangwala
Jim Nash
Matthew Strobeck
Liza Suber
Manu DeRicker
David Myer
Ying Fang
Yukari Tokuyama
Melissa Maxwell

Shengqin Liu
Jarrod Fortwendel
Ruchi Bhabhra
Elizabeth Loreaux
Emily Bosco
Willis Clark Bacon
Beatriz Russell
Tiffany Joffrion
Elisia Tichy

Geisel School of Medicine at Dartmouth, 2006-present

Kristen Garner
Shohreh F. Farzan
Athena P. Nomikos
Amy Piispanen
Li Chang
Sierra Kent
Ofelia Tacchelly
Fadzai Chinyengetere
Mandeep Kaur
Andrew Decastro
David Tobin
Asaf Wyszynski
Nicholas Warren
Jennifer Ditano
Dillon Popovich
Brooke Bauer
Laura Price
Brian Galaviz-Sarmiento

Graduate Student Candidacy Examination and other Committees (served on 35)
University of Cincinnati College of Medicine, 1998-2006

Julie Piechan
John Panepinto
Melanie Stegman
Kate Lillard
Levi Beverly
Shengqin Liu
Jarrod Fortwendel
Michael Hambleton
Ruchi Bhabhra
Seetha Srinivasan
Jeremy Hilty
Ning Guo
Willis Clark Bacon

Sarah Taft
Elisia Tichy
Tiffany Joffrion

Geisel School of Medicine at Dartmouth, 2006-present

Kristen Garner
Katrina Bogan
Dennis Fei
Sierra Kent (chair)
Brendan Faherty
Scott Turner
Haoxu Ouyang
Fadzai Chinyengetere (chair)
Amanda Balboni (chair)
Shanhu Hu
Christina Yim (chair)
Alec Crowell
Lisa Maria Mustachio
Sarah Hosford (chair)
Heidi Chapman
Sally A. Demirdjian
David Chen
Dillon Popovich (chair)
Brooke Bauer
Laura Price
Brian Galaviz-Sarmiento

C. Medical (1)

Jennifer Wylie	2019	Geisel, NCCC Translational Oncology Program for Scholars (TOPS)

D. Resident/Fellows

E. Non-degree Program Students (1)

Jewelia Durant	2017, 2018	Plymouth State, NCCC Dartmouth Opportunities in Oncology Research (DOOR)

F. Faculty (26)

Faculty Mentoring Committees

University of Cincinnati College of Medicine

NAME	DATE	DISCIPLINE

Rhett Kovall, Ph.D.	2005	Molecular Genetics, Biochemistry and Microbiology
Tom Thompson, Ph.D.	2005	Molecular Genetics, Biochemistry and Microbiology
Andrew Herr, Ph.D.	2004-5	Molecular Genetics, Biochemistry and Microbiology (current position, Cincinnati Children's Hospital program of Immunology)

Geisel School of Medicine at Dartmouth and Dartmouth-Hitchcock
*= Faculty mentoring committees currently serving on.

NAME	DATE	DISCIPLINE
Todd Miller, Ph.D.	2012-*	Molecular and Systems Biology, Geisel School of Medicine
Manabu Kurokawa, Ph.D.	2012-17	Molecular and Systems Biology, Geisel School of Medicine
Diwakar R. Pattabiraman, Ph.D.	2018-22	Molecular and Systems Biology, Geisel School of Medicine
Michael Ragusa, Ph.D.	2017-*	Chemistry, Dartmouth, BioMT COBRE Mentor
Arminja Kettenbach, Ph.D.	2018-19	Biochemistry and Cell Biology, Geisel, BioMT COBRE Mentor
Bonnie Lau, M.D. Ph.D.	2019-*	Pediatrics, Geisel and Dartmouth-Hitchcock
Amanda Amodeo, Ph.D.	2020-*	Department of Biological Sciences, BioMT COBRE Mentor
Pamela Rosato, Ph.D.	2020-*	Department of Microbiology and Immunology, Geisel, BioMT COBRE Mentor
Diona Kasper, Ph.D.	2021-*	Molecular and Systems Biology, Geisel

Team Mentoring of Faculty through SYNERGY mechanisms

1. Mentored Career Development Program (2015-2019)
   Modeled on the NIH KL2 Scholars Program. This opportunity combines didactic training, mentoring, exposure to multidisciplinary research, and ongoing evaluation to prepare junior investigators for careers in Clinical and Translational Research.

Christina V. Angeles, M.D.	Surgery (ACS Career Development Award)
Rodwell Mabaera, M.D., Ph.D.	Medicine (Pilot from the NNE Clinical Oncology Society; NCC 3-year Merit Award)
Wilder Doucette, M.D., Ph.D.	Psychiatry (K08 MH117347, 2019)

Joshua Aronson, M.D.	Surgery
Sara Akerman, Ph.D.	Psychiatry (industry position with Alkermes; Co-I on NIAAA HHSN27500003-1061, 2015)
Chao Cheng, Ph.D.	Biomedical Data Science (CA Prev. Institute of Texas Rising Star Award (CPRIT, 2018); Co-I on 16 grants, Baylor College of Medicine)

2. SYNERGY Clinical Research Fellowship (2016-2019)

Protects 0.20 Effort for research, with intensive mentoring and clear milestones.

Christina V. Angeles, M.D.	Surgery (ACS Career Development Award)
Robert E. Brady, Ph.D.	Psychiatry (NIH K23)
Victoria H. Lawson, M.D.	Neurology (NIH R21 scored)
Philip E. Schaner, M.D., Ph.D.	Radiation Oncology (3 publications)
Lauren K. Tormey, M.D.	Medicine (2 Foundation Grants under review)
Ivy Wilkinson-Ryan, M.D.	Obstetrics & Gynecology (D-H Cancer Faculty Fellow)
Audrey Calderwood, M.D.	Medicine (NIH R21, D-H Cancer Faculty Fellow, PCORI)
Ida Leah Gitajn M.D.	Orthopaedics (NIH R01, DOD)
Tyler Hartman, M.D.	Pediatrics
Alexander Iribarne, M.D.	Surgery (NIH M01)
Louis Vaickus, M.D., Ph.D.	Pathology (NIH R03 under review; D-H Cancer Faculty Fellow)

G. Others (define)

XII. ENGAGEMENT, COMMUNITY SERVICE/EDUCATION

1998-2005, University of Cincinnati Medical Center, Introduction to Basic Sciences and Technologies (Grades 8-12), Host Instructor, 8 hours/year

2000-2002, University of Cincinnati College of Medicine, University of Cincinnati, Science Day at the College of Medicine: Yeast Fest (Grades K-8), Host Instructor, 8 hours/year

2004, University of Cincinnati College of Medicine, Hands-On Laboratory Experience (Grades 6-8), Host Instructor, 10 hours/year

2015-2019, Rivendell Academy, The Role of Research in Improving Cancer Care (Grades 7-12), Invited speaker, 2 hours/year

2019, Thetford Academy. Targeting the Achilles Heel of Cancer and Gene Therapy in Cancer (Grades 8-10), Invited speaker, 3 lectures 1.5 hours each.

Exposing individuals to science at a young age has the potential to increase the pool of promising college students interested in science, as well as the pool of educated adults who will one day make decisions regarding science policy. To this end, I hosted middle and high school students from 1998-2005 at the University of Cincinnati Medical Center. The visits were meant to expose young students to basic science and to some of the latest technologies (i.e., genomics). I emphasized how basic science along with latest technologies play critical roles in the discoveries that impact public health. Currently, I visit the Rivendell Academy, Thetford Academy and Lebanon High School (grades 7th through high school), where I talk about the role of research in improving cancer care.

XIII. RESEARCH ACTIVITIES

A. Sponsored Activity (grants and contracts)

34. R25 CA250956 (Fiering, PI) 09/01/2020 - 08/31/2025 0.48 calendar
NIH,NCI $855,382 total
Title: *Program for Oncology Workforce Education and Research Experience at Dartmouth*
Goal: The goal is to expose underrepresented minority students from NH-INBRE colleges to oncology research in order to build the diversity of the oncology research workforce.
Role: Co-Investigator

33. P20-GM113132 08/01/21-07/31/26 1.2-1.8 CM
NIGMS/NIH
$1,500,000
The Institute for Biomolecular Targeting
(COBRE)
Role: Co-I and Mentor
PI: Dean Madden, Ph.D.

The goal of this project is to establish a new Center of Biomedical Research Excellence (COBRE) in Biomolecular Targeting at Dartmouth (iTarget). The aims are to support the research projects of four junior faculty PI's, to provide strong mentoring, to enhance the scientific infrastructure, and to leverage institutional support, in order to accelerate research, increase the ability of faculty to compete for extramural funding, and ensure the long-term sustainability and scientific impact of the Institute. I serve as Co-I (including proposal writing) and mentor (Dr. Ragusa) and served as mentor (Dr. Kettenbach).

32. P30 CA023108 12/01/19-11/30/24 0.60 CM
NIH/NCI $1,828,696
National Cancer Institute Center Support (CORE)

Role: Co-Director and Faculty Advisor of the Genomics and Molecular Biology Core
PI: Steven D. Leach

The major goal of this project is to provide funding for the Norris Cotton Cancer Center (NCCC), Dartmouth's NCI-designated Comprehensive Cancer Center. The NCCC has a multidisciplinary focus for cancer-related research, education, and patient care. The NCCC supports research in epidemiology, immunology, molecular therapeutics, cancer prevention and chemoprevention, radiobiology and imaging, and cancer mechanisms.

31. P30 CA023108 12/01/19-11/30/24 2.40 CM
NIH/NCI $1,828,696
National Cancer Institute Center Support (CORE)
Role: Associate Director for Basic Sciences
PI: Steven D. Leach

The major goal of this project is to provide funding for the Norris Cotton Cancer Center (NCCC), Dartmouth's NCI-designated Comprehensive Cancer Center. This Cancer Center is a multidisciplinary focus for cancer-related research, education, and patient care. The NCCC supports research in epidemiology, immunology, molecular therapeutics, cancer prevention and chemoprevention, radiobiology and imaging and cancer mechanisms.

30. 1 R01 NS095411 9/30/15-7/31/21 NCE 2.4 CM
NINDS $385,147
Targeting tumors with NF1 loss (direct costs first year)
Role: Lead Principal Investigator
MPI(s): Nancy Ratner, Ph.D. and P. Jack Hoopes, DVM, Ph.D.
We combined human and yeast models in a novel and powerful approach for high-throughput chemical screens to identify and validate potential drug targets for cancer cells. In this approach, NF1 loss drives tumor formation. Numerous types of malignant tumors are now known to have mutations in the NF1 gene, including glioblastoma (GBM), neuroblastoma, thyroid tumors, ovarian and lung cancers. Thus, many sporadic tumors, including gliomas may also respond to agents targeting NF1 loss. We identified small molecules that kill or slow down the growth of yeast and human malignant peripheral nerve-sheath tumor (MPNST) and glioblastoma multiforme (GBM) cells carrying a mutation in NF1 or the yeast homolog IRA2, but do not affect the growth of wild-type cells. Our approach is focused on aggressive neurological cancers driven by NF1 mutations or disruptions in NF1 levels, including neurofibromas, malignant peripheral nerve sheath tumors, glioblastomas, and neuroblastomas. We will test compounds on a genetically engineered model of neurofibroma. For sporadic tumors we will construct a classifier capable of identifying downstream transcriptomic or proteomic effects that indicate NF1 inactivation using machine learning. In collaboration with the JAX Patient Derived Xenograft (PDX) program, we will apply this classifier to PDX to identify patients with inactivating mutations of NF1 or molecular signatures of NF1 loss, and examine their response to our lead compounds. Our preliminary results indicate that both the screening platforms and genomic analyses are poised for success.

29. Young Investigator Award 08/01/16-07/31/18
Children's Tumor Foundation $64,000
Role: Mentor
PI: Stephanie J. Bouley

This was a predoctoral fellowship for a graduate student in the laboratory, with the goal of determining the mechanism of action of compounds that target tumor cells with NF1 loss.

28. 1UL1TR001086 09/26/13-04/30/20 3.6 CM
NCATS/NIH
SYNERGY: The Dartmouth Center for Clinical and Translational Science
Role: Associate Director of the KL2 Program and Co-Director of the Pilot Programs for SYNERGY. Roles included writing the proposal.
PI: Alan I. Green

This grant establishes a new translational research center at Dartmouth and provides essential services and educational programs.

27. Nancy P. Shea Trust 12/01/11-11/30/18 0.6 CM
Identification of drugs and drug targets for pancreatic cancer $150,000.00
Role: Principal Investigator Total Direct Costs $450,000

We identified compounds that kill or slow down the growth of cells carrying a cancer-predisposing mutation that deregulates the Ras pathway, but do not affect the growth of cells without such mutations. Ras deregulation is implicated as a driver in many of the most aggressive types of cancer, including tumors of neuronal origin, and lung, pancreatic and brain tumors. The Sanchez laboratory and their collaborators have found that a subset of these compounds stop the growth of pancreatic tumor cells that arose due to a defect in the Ras pathway. The goal of this project is to carry out studies on the structure activity relationship (SAR) of our top three lead compounds to identify increasingly selective and potent inhibitors for testing in vivo. We will obtain toxicology data for a pancreatic cancer tumor model.

26. Young Investigator Award 08/01/14-07/31/16
Children's Tumor Foundation $64,000
Role: Mentor
PI: Robert Allaway

This was a predoctoral fellowship for a graduate student in the laboratory with the goal of determining the mechanism of action of tool compounds that target tumor cells with NF1 loss.

25. Prouty Pilot Grant 09/01/12-08/30/13 No salary support
NCCC $50,000

Patient-derived Xenografts as tools for drug discovery and individualized therapy for Pancreatic Cancer.
Role: Co-PI
Co-PI: Kerrington D. Smith, M.D.

Hypothesis: Molecular characterization of the primary material, Xenograft tumor cells and Xenografts-derived from metastases will inform us of the dys-regulated signaling pathways in the tumor that can be targeted by drugs currently in the clinic, in pharma pipelines, and those being developed in Dr. Sanchez's (Drug Discovery) laboratory.

24. Collaborative Grant 10/01/11-09/30/13 No Salary Support
NCCC/UMass/UVM $40,000
Coordinated Cycling and Differentiation in Erythropoiesis: The Roles of Chk1 and MLL1
Role: Co-PI
MPI: Sanchez, Ernst, Socolovsky
We hypothesized that rapid DNA synthesis in cells undergoing erythroid commitment makes them especially sensitive to defects in the S phase checkpoint. This hypothesis was strengthened by our findings of abnormal erythropoiesis in mouse models deficient in the Chk1 kinase (Sanchez), a principal regulator of the S phase checkpoint and sensor of DNA damage and replication stalling, and Mixed Lineage Leukemia (MLL1) (Ernst), a histone methyltransferase recently implicated in the S-phase checkpoint. Using MLL1 and Chk1-mutant mice we tested the hypothesis that these proteins ensure the integrity of the S phase-dependent erythroid commitment step, a target in leukemogenesis.

23. P20 RR030360 09/01/10-06/30/13 0.60 CM
NIH/NCRR/INBRE $15,642,147
Role: Mentor
PI: Ronald K. Taylor

The major goal of this project was to promote the development, coordination, and sharing of resources and expertise to expand research opportunities for college students and increase the number of competitive research investigators in New Hampshire.

22. The Samuel Waxman Cancer Research Foundation 07/01/11-06/30/13 0.60 CM
Overcoming Oncogene Addiction by Targeting Genomic Stability $130,000
Role: Co-PI
MPI(s): Ethan Dmitrovsky, M.D. and Duane Compton, Ph.D.

The goals of this project were to: (1) To determine the molecular mechanism by which modulation of genomic and chromosome stability by pharmacological inhibition of Chk1 or Cdk2 and their targets prevents tumors that arise due to cyclin E dysregulation or KRAS mutation, two clinically relevant oncogenic events involved in lung carcinogenesis. We will use syngeneic models established by our group to tease out these mechanisms. (2) To determine whether targeting pathways involved in

chromosome instability (CIN) Cdk2, Kif2B and MCAK impact tumor formation using in vivo models of lung tumors driven by expression of the proto-oncogene cyclin E and the oncogenic mutated KRAS.

21. 1R21NS060940 04/01/09-03/30/11
NINDS/NIH
No cost extension 04/01/11-03/30/12
Identification of Drug Targets for NF1 in Yeast
Role: Principal Investigator
NF1 is a GTPase-activating (GAP) protein for Ras proteins and loss of Nf1 results in increased levels of Ras-GTP. Ira1/2 proteins are the yeast orthologues of Nf1. Our hypothesis is that the components that genetically interact with IRA1 and/or IRA2 in yeast and are conserved in mammals will represent targets for intervention to treat NF1.We propose to 1) use genetic approaches and a chemical library screen to identify components that when downregulated cause lethality only in cells lacking the yeast orthologue of NF1, 2) screen the hits from the chemical library in (1) for compounds that affect growth of NF1-/- MPNST cells in vivo.

20. The Samuel Waxman Cancer Research Foundation 06/01/10-05/31/11
Overcoming Oncogene Addiction by Targeting Genomic Stability $120,000
Role: Co-PI
MPI(s): Ethan Dmitrovsky, M.D. and Duane Compton, Ph.D.

19. 3R01CA084463-09S1 08/01/09- 04/30/10
NCI/NIGMS $151,496
Supplement
Dissection of the DNA Damage Checkpoint Pathways
Role: Principal Investigator

18. RO1 RO1 CA84463 02/01/00-06/30/10

NCI/NIGMS 2005 year direct costs $202,500
Dissection of the DNA Damage Checkpoint Pathways Total direct costs $810,000
Role: Principal Investigator

The central hypothesis of this proposal was that phosphorylation and interactions between chromatin-associated proteins with Chk1 play a role in DNA repair and/or chromosome stability. The research was designed to test this hypothesis using biochemical and expression assays to inactivate interactions between different players of the response to DNA damage.

17. Prouty Pilot Grant 1/01/09-12/31/10
Norris Cotton Cancer Center $25,000
Role: Principal Investigator
Co-PI: Murray Korc, M.D.

The goal of this project was to determine whether the checkpoint kinase 1 is a good therapeutic target for pancreatic cancer.

16. Young Investigator Award 08/01/07-07/31/09
Children's Tumor Foundation $50,000
Role: Mentor
PI: Matthew Wood

This was a predoctoral fellowship for a graduate student in the laboratory with the goal of using the budding yeast *Saccharomyces cerevisiae* as a model organism to model NF1 in order to investigate the relationships between Ras signaling, genome stability, and the oxidative stress response.

15. The Samuel Waxman Cancer Research Foundation
Role: Co-PI Subcontract $60,000
MPI(s): Ethan Dmitrovsky, M.D. and Reuben Lotan, Ph.D.

The role of checkpoint pathways in the early stages of cancer development in mice lacking Gprc5.

14. Prouty Pilot Grant 07/01/07-06/30/08
Norris Cotton Cancer Center $17,500
Role: Principal Investigator

The goal of this project was to set up a system for high throughput chemical screens using the budding yeast. We also carried out a pilot screen with a limited number of compounds for the identification of drug targets for NF1.

13. Environmental Genetics 2004-2005
Pilot Project grant $25,000
Role: Principal Investigator

The goals of this pilot project proposal were to use genetic, biochemical and global gene expression analyses to determine the regulation of the yeast transcription factor Sfp1 following DNA damage, to elucidate the circuitry of this pathway, and to determine the role that yeast checkpoint signaling plays in the regulation of the transcriptional response to oxidative and radiation-induced DNA damage.

12. Pew Charitable Trust 1998-002469-000 07/01/01-06/30/05 1.2 CM
No cost extension 07/01/05-06/30/06
Scholars Program Direct Costs $60,000
Cell Cycle Checkpoints Total Direct Costs $240,000
Role: Principal Investigator

11. NIEHS/U01 ES11038 4/01/01-3/31/06 2.4 CM
Comparative Mouse Genomics Centers Consortium $700,000
Role: Component Leader
PI: Peter J. Stambrook, Ph.D.
Chk1 and cell cycle arrest in response to DNA damage $143,592

Total direct costs $695,000

The goal of this program project was to generate animal models to study genetic variants of cell cycle and cell cycle checkpoint genes. The application proposed the development of models with low penetrance and attenuated alleles of genes that encode proteins that coordinate cell cycle progression with the response to genotoxic stress. The study of these models allowed us to determine whether 1) individuals carrying these types of mutations have a higher risk factor to exposure to genotoxic agents and 2) whether individuals carrying these types of mutations have a higher predisposition to cancer.

10. Ohio Cancer Research Associates 01/01/04-12/31/05 0.6 CM
Pilot Project grant $50,000
Role: Principal Investigator

The goals of this pilot project proposal were to use genetic, biochemical and global gene expression analyses to determine the phosphorylation of the yeast transcription factor Sfp1 following DNA damage, and to determine the role that yeast checkpoint signaling and phosphorylation play in the regulation of the transcriptional response to oxidative and radiation-induced DNA damage.

9. Career Development Award 3/01/01-7/29/04
BCRP/Department of Defense DAMD 17-01-1-020
Checkpoint pathways as therapeutic targets for breast cancer $90,268
Role: Principal Investigator Total direct costs $176,997

The long-term goals of these studies were 1) to use the mammalian culture system to determine whether inactivation of the Chk1 pathway is a feasible approach to breast cancer therapy; and 2) to determine whether the same genetic factors that make Chk1 essential to survive oxidative stress also affect individual susceptibility to low dose radiation. This application used a two-pronged approach by carrying out experiments in two model systems: mammalian and yeast cells. These results allowed us to evaluate and understand both the therapeutic effects and individual risk of exposure to radiation, which could maximize the efficacy of therapeutic approaches to cancer.

8. 5 P30 ES 06096 4/01/01-03/31/04
Environmental Genetics $17,179
Genetic Toxicology Research Core
Role: Consultant

7. 3 RO1 CA084463-04S2 08/01/04-03/31/05
Supplement $88,636
Dissection of DNA Damage Checkpoint Pathways
Role: Principal Investigator

6. Minority Supplement, 5 RO1 CA84463 12/01/01-01/31/04
Role: Principal Investigator $64,163

Supplement to support a predoctoral student from an underrepresented group

5. RO1 5 RO1 CA84463-02S1 02/01/01-01/31/02
Non-competitive supplement to raise antibodies against Chk1-interacting Proteins $10,000
Dissection of DNA Damage Checkpoint Pathways
Role: Principal Investigator

4. Seed Money Grant 7/01/99-06/30/01

Ohio Cancer Research Associates $50,000
Role: Principal Investigator

Identification of novel components of the DNA damage checkpoint pathways.

3. Ruth Lyons/Research Challenge Fund 11/01/00
Role: Principal Investigator $15,000

2. Seed Funding 02/18/00
OBR Research Challenge Program $25,000
Role: Principal Investigator

These moneys were provided as seed funds toward the purchase of a source of ionizing radiation for the College of Medicine.

1. Ohio Supported Research Grant 7/01/99-06/30/00
American Cancer Society, Ohio Division, Inc. $20,000
Role: Principal Investigator

Identification of novel components of the DNA damage response.

B. Pending submissions

1 R01 NS130012-01 12/01/2022-11/31/27 2.4 CM
NINDS/NCI $321,835
Identification of Targets for Tumors Driven by NF1 loss (direct costs first year)
Role: Principal Investigator

We implemented novel cross-organismal, chemical, genomic, proteomic and bioinformatics strategies to identify potential therapeutic targets and lead molecules that inhibit tumor-initiating and -promoting activities caused by NF1 loss. Our hypothesis is that these targets can be developed into new precision therapies for tumors with NF1 loss for which few therapeutic options exist. In previous work, our multidisciplinary team identified three new targets and five additional top lead compounds for cancers driven by NF1 loss. Two of our lead molecules share targets - CDK9 and PFKFB3 - with experimental drugs in pre-clinical and clinical trials, thus, we added experimental drugs that target CDK9 and PFKFB3 to the patient-derived-

xenograft models (PDX) in our pipeline. Using chemical and proteomic approaches we also identified the BORC complex as a novel vulnerability/target of cells lacking NF1.

In this application we propose to 1) use chemistry, genomic and proteomic approaches to identify the cellular targets of the remaining five top lead compounds in our pipeline and combined with imaging strategies demonstrate target engagement *in vivo* in cells lacking NF1, 2) validate these targets using genetic approaches and 3) test the efficacy of CDK9, PFKFB3, and BORC inhibitors as well as small molecule inhibitors to new targets in PDX models of GBM. In the future we plan to add PDX models of MPNST, neuroblastoma and therapy-resistant breast cancer to our pipeline.

The long-term goal of this program is to work with the Norris Cotton Cancer Center's Early Phase Trials program to conduct clinical trials with agents that target vulnerabilities of tumor cells driven by NF1 loss to treat what are presently incurable or treatment-resistant cancers.

1 R01NS129121-A1 (Gibbs, PI) 09/01/22 – 08/31/27 0.39 CM

NINDS

Nerve-Specific Fluorophores for Cranial Nerve Preservation using Current Clinical Fluorescence Guided Surgery Infrastructure.

The objective of this proposal is to develop near infrared (NIR) nerve-specific fluorophore(s) compatible with clinical fluorescence guided surgery (FGS) systems. Nearly all FGS systems for neurosurgery have an "800 nm" imaging channel that is optimized for use with indocyanine green (ICG). Our group has developed first-in-class NIR nerve-specific contrast agents, that show promise for imaging using these clinical FGS systems and has made the recent discovery that addition of specific chemical moieties permits blood brain barrier cross, highlighting the cranial nerves. Dr. Gibbs will work closely with Dr. Sanchez to ensure that the mouse models of meningioma and schwannoma are representative of the clinical disease for evaluation of cranial nerve contrast in the context of disease.

Role co-Investigator

C. Clinical Faculty: Activities for which you have been provided protected time (but not funding)

XIV. PROGRAM DEVELOPMENT

XV. ENTREPRENEURIAL ACTIVITIES

Elledge, S. J. and Sanchez, Y., co-inventors. Mammalian checkpoint genes and proteins. U.S. patent 6,218,109 B1. April 17, 2001.

Elledge, S. J. and Sanchez, Y., co-inventors. Mammalian checkpoint proteins polypeptices and encoding sequences thereof. U.S. Patent number RE40789. June 23, 2009.

Sanchez, Y., Ratner, N. and Wood, M. co-inventors. Compositions for identifying novel compositions for the treatment of disease and methods using same. U.S. Non-Provisional Patent Application Serial No. 12/705,781. August 19, 2010.

Sanchez, Y., Allaway, R., and Wood, M. co-inventors/ Method for the treatment of NF-1 pr RAS-associated disorders. US patent 9,775,833. October 3, 2017.
Sanchez, Y., Bouley, S. J., Allaway, R and Wood, M. co-inventors. Vinylogous thioester compounds and methods of use. U.S. patent 9,873,705. January 23, 2018.

Sanchez, Y., Bouley, S. J. co-inventors. Composition and method for inhibiting the BORC complex to treat cancers with NF1 deficiency and dysreguated RAS signaling. US application 62/898,252. September 10, 2019.

Finalist for the $300,000 Venture Development Award in the 2020-21 Dartmouth Innovations Accelerator for Cancer. A joint venture between Dartmouth's Magnuson Center for Entrepreneurship and the Norris Cotton Cancer Center.

XVI. MAJOR COMMITTEE ASSIGNMENTS

A. National/International

YEAR	COMMITTEE	ROLE	INSTITUTION
2002-2003	2003 Program Committee for the 94th Annual Meeting	Member	American Association for Cancer Research
2000	Special Emphasis Panel P01 Review	Member	National Institutes of Environmental Health and Sciences
2001	Program Projects in Ovarian Cancer	Member	Department of Defense
2004	Special Emphasis Panel	Member	National Institutes of Health
2004-present	National Science Foundation	Ad hoc reviewer	National Science F oundation
2006	Mol Gen C Study Section	Ad Hoc member	National Institutes of Health
2007-2011	Mol Gen C Study Section	Member	National Institutes of Health
2009	Editorial Board	Invitation declined due to current membership in study section	Journal of Biological Chemistry
2014-present	Grant Review	Member	Israel Cancer Research Fund

2015	Special Emphasis Panel NIH SPORE Grant review	Ad hoc member	National Institutes of Health
2017	Transformation R01 review panel		National Institutes of Health
2018	MUI-START, a research fund for basic research projects	Ad hoc	Medical University of Innsbruck
2018	ZNS1 SRB-A (22) P01 review	Member	NINDS/ NIH
2019	ZNS1 SRB-A (25) P01 Review	Member	NINDS/ NIH
2020-present	External Advisory Board	Member	JAX Cancer Center
2021-present	Presidential Initiative Steering Committee, Cancer Center Leadership Development	Member	Association of American Cancer Institutes
2021-present	External Advisory Board	Member	USC Norris Comprehensive Cancer Center
2021	NCI Workshop on Rational Drug Discovery	Session Chair	NCI/NIH

B. Regional

C. Institutional

YEAR	COMMITTEE	ROLE	INSTITUTION
1999-2000	Graduate Student Research Forum	Judge	University of Cincinnati
2000-	Graduate Program and Graduate Admissions committee	Member	University of Cincinnati
2000	Graduate Student Recruitment	Co-director	University of Cincinnati
2000-2001	University Research Council	Member	University of Cincinnati
2001-2003	Physician Scientist Training Program Promotion Board	Member	University of Cincinnati
2002-	Medical Student Research Executive Committee	Member	University of Cincinnati
2002-2004	Medical College Grievance Committee	Representative	University of Cincinnati
2002-2003	Search Committee, Vice President and Provost of Health Affairs for the College of Medicine	Member	University of Cincinnati
2003-	Departmental Space Committee	Member	University of Cincinnati
2003-	Graduate Student Recruitment Committee	Member	University of Cincinnati

2004-	Standing Committee for Candidacy Exams	Member	University of Cincinnati
2004	Search Committee, Hematology/Oncology Division Director	Member	University of Cincinnati
2007	Search Committee, Assistant Director Office of Sponsored Programs	Member	Dartmouth Medical School
2007	Search Committee, Molecular Therapeutics Faculty Search	Member	Dartmouth Medical School, Norris Cotton Cancer Center
2008	Management Committee	Member	DCCTS (Dartmouth Center for Clinical and Translational Research): CTSA
2008-2009	Development of Novel Clinical and Translational Methodologies	Component leader	DCCTS
2008-09	Search Committee, Pathology Department Chair	Member	Dartmouth Medical School and DHMC
2008-present	CBMT and MPTT track PEMM graduate Program	Member	Dartmouth Medical School
2010-2012	Search Committee, Faculty Molecular Therapeutics	Chair	Department of Pharmacology and Toxicology and Norris Cotton Cancer Center, Dartmouth Medical School
2010-2011	Search committee Faculty Lung Cancer	Member	Norris Cotton Cancer Center
2010-12	Development of Novel Clinical and Translational Methodologies	Co-Director	SYNERGY: DCCTS, Dartmouth's CTSA
2011-12	Search Committee, Faculty Cancer Mechanisms	Member	Norris Cotton Cancer Center and Department of Biochemistry
2010-present	Organizing Committee	Member	Annual Regional Symposium on Genomic Instability and Cancer
2011	Organizing Committee	Chair and Host	Second Annual Regional Symposium on Genomic Instability and Cancer at Dartmouth
2012	Faculty Search Committee Microbial Pathogenesis	Member	Department of Microbiology and Immunology, Geisel School of Medicine at Dartmouth
2012	Faculty Search Committee Genetics	Member	Geisel School of Medicine at Dartmouth
2012-13	Design Team for Williamson Translational Research Building	Member	Representative for Norris Cotton Cancer Center and

			Geisel
2013-2014	Search committee Dartmouth Provost	Member	Representative for Geisel
2014-2015	Williamson Translational Research Building Design Team	Member	Representative for Norris Cotton Cancer Center
2015	Search Committee Cardiology Section Chief	Member	Department of Medicine
2015	Search Committee GI Oncologist	Member	Norris Cotton Cancer Center, DHMC
2015	Search Committee Neuro-Oncologist	Member	Norris Cotton Cancer Center, DHMC
2016-present	250th anniversary Dartmouth planning committee	Member	Dartmouth College
2017	Faculty Search Committee Biochemistry and Cell Biology	Member	Geisel School of Medicine at Dartmouth
2017	Search Committee Director Norris Cotton Cancer Center	Member	Geisel School of Medicine at Dartmouth
2017-18	Search Committee Faculty in Biomedical Data Science	Member	Geisel School of Medicine at Dartmouth
2017-18	Search Committee Physician scientist Radiation Oncology	Member	Dartmouth-Hitchcock and Norris Cotton Cancer Center
2017-18	Leadership Curricular Review Task Force	Member	Geisel School of Medicine at Dartmouth
2018-19	Search Committee Chief Medical Oncology	Member	Dartmouth-Hitchcock and Norris Cotton Cancer Center
2019	Search Committee D-H Chief Research Officer	Member	Dartmouth-Hitchcock and Geisel School of Medicine at Dartmouth
2020-21	Search Committee	co-chair	Dartmouth-Hitchcock and Norris Cotton Cancer Center Lab-based Physician Scientist
2021	Search Committee Faculty Molecular and Systems Biology	Member	Geisel School of Medicine Dartmouth
2020-21	Search Committee Chief Medical Oncology	Member	Dartmouth-Hitchcock and Norris Cotton Cancer Center
2020-21	Diversity, Equity and Inclusion Roundtables	Co-Moderator	Dartmouth-Hitchcock Norris Cotton Cancer Center

XVII. MEMBERSHIPS, OFFICE AND COMMITTEE ASSIGNMENTS IN PROFESSIONAL SOCIETIES

Alliance for Cellular Signaling, Member, 2002-2006

American Association for Cancer Research, Past Member, 1994-2006

Sigma Xi, Associate Member

XVIII. INSTITUTIONAL CENTER OR PROGRAM AFFILIATIONS

XIX. EDITORIAL BOARDS

2005-2016, Mutation Research-Reviews, Member and Reviewer

2012-2017, American Society for Biochemistry and Molecular Biology's news Magazine Today, Member, Editorial Advisory Board

XX. JOURNAL REFEREE ACTIVITY
Since 2006 reviewed on average of 2.5 manuscripts per year

DATE	JOURNAL NAME
Ad hoc	Journal of Cell Biology
Ad hoc	EMBO
Ad hoc	Molecular Biology of the Cell
Ad hoc	Molecular and Cellular Biology
Ad hoc	Journal of Biological Chemistry
Ad hoc	Nature Reviews in Cancer
Ad hoc	PNAS
Ad hoc	PLOS GENETICS
Ad hoc	PLOS ONE
Ad hoc	Cancer Research
Ad hoc	Oncogene
Ad hoc	Cell Biochemistry and Biophysics
Ad hoc	Cell Cycle
Ad hoc	Molecular Microbiology
Ad hoc	Nucleic Acids Research
Ad hoc	Cancer Biology and Therapy
Ad hoc	Genomics
Ad hoc	Placenta
Ad hoc	Environmental Health Perspectives

XXI. AWARDS AND HONORS

DATE	AWARD NAME
1985	NIH/NIGMS MARC Scholarship and Grant recipient
1987	Summa Cum Laude Graduate, University of Texas at El Paso
1987	University Honors, University of Texas at El Paso Honors Program
1987	Biology Department Honors with Senior Honors, University of Texas at El Paso
1988	NIH/NIGMS Minority Access to Research Careers (MARC) Predoctoral Fellowship recipient
1988	Young Investigator Travel Grant recipient, "Gene Regulation and Oncogenes" Conference, American Association for Cancer Research
1995-1997	NIH/NIGMS NRSA postdoctoral fellowship recipient
2001	Career Development Award, Department of Defense (DOD) Breast Cancer Program
2001	Pew Scholar in the Biomedical Sciences
2009, 2011	NCCC Friends Scholar, Norris Cotton Cancer Center, Dartmouth
2017	Graduate Faculty Mentoring Award, Dartmouth

XXII. INVITED PRESENTATIONS (All listed were the result of individual invitations).

A. International – Invited Lectures

DATE	TOPIC	ORGANIZATION	LOCATION
Nov 2005	Genome Integrity Via Signaling Networks	The Mexican Developmental Biology Society	Taxco, Mexico
June 2012	Academic Program in Molecular Oncology	National Cancer Institute, Mexico	Mexico City, Mexico

B. National – Invited Lectures

DATE	TOPIC When available title it is indicated by " "	ORGANIZATION	LOCATION
Sept 1996	Genome Integrity Checkpoints	Department of Biological Sciences	University of Texas at El Paso
Mar 1997	Genome integrity checkpoint pathways	Department of Biological Sciences	University of California at Santa Cruz
May 1997	DNA damage checkpoint pathways	Department of Biological Sciences	California State University at Los Angeles

Oct 1997	DNA damage checkpoint pathways	Department of Biochemistry	University of Texas-Houston Medical School
Jan 1998	Dissection DNA damage checkpoint pathways in yeast and mammals	Department of Molecular Genetics	University of Cincinnati
Jan 1998	Dissection of checkpoint pathways in yeast and mammals	Lineberger Cancer Center	University of North Carolina at Chapel Hill
Feb 1998	Dissection of checkpoint pathways in yeast and mammals	Department of Biochemistry	Emory School of Medicine
Feb 1998	Dissection of checkpoint pathways in yeast and mammals	Department of Medical Biochemistry	Ohio State University
Mar 1998	Dissection of checkpoint pathways in yeast and mammals	Program in Toxicology	Harvard School of Public Health
Feb 1999	Dissection of checkpoint pathways in yeast and mammals	Department of Anatomy and Cell Biology	Columbia University
Feb 2000	Dissection of checkpoint pathways in yeast and mammals	Department of Biochemistry	Wright State University
Apr 2002	Dissection of checkpoint pathways in yeast and mammals	Department of Zoology	Miami University, Oxford Ohio
June 2002	Dissection of checkpoint pathways in yeast and mammals		University of Pittsburgh Cancer Institute
Oct 2002	Dissection of checkpoint pathways in yeast and mammals	Molecular Genetics and Microbiology	Duke University Medical Center
Dec 2002	Dissection of checkpoint pathways in yeast and mammals	Molecular Biology and Cancer Genetics Group	OSU Comprehensive Cancer Center
Feb 2004	Dissection of checkpoint pathways in yeast and mammals	Departments of Chemistry and Biological Sciences	University of Texas at El Paso
Mar 2004	Dissection of checkpoint pathways in yeast and mammals	Department of Cell Biology and Anatomy	Louisiana State University Health Science Center
Apr 2004	Dissection of checkpoint pathways	Department of Biochemistry	SUNY at Buffalo
May 2004	Dissection of checkpoint pathways in yeast and mammals	Derald H. Ruttenberg Cancer Center	Mount Sinai School of Medicine

Oct 2004	The DNA Damage Checkpoint and PKA Pathways Cooperate to Regulate Mitotic Progression in Budding Yeast	John H. Blaffer Lecture	University of Texas M. D. Anderson Cancer Center
Nov 2004	The DNA Damage Checkpoint and PKA Pathways Cooperate to Regulate Mitotic Progression in Budding Yeast	Department of Biological Sciences	Carnegie Mellon
Nov 2004	Genome Integrity Via Signaling Networks	Department of Pharmacology and Toxicology	Dartmouth Medical School
Jan 2005	Genome Integrity Via Signaling Networks	Department of Genome Sciences	Genome Research Institute
Feb 2005	Genome Integrity Via Signaling Networks	Department Molecular and Cellular Biology	University of Arizona
Feb 2005	Genome Integrity Via Signaling Networks	Cell Division and Cancer Lectures	Vanderbilt University
Mar 2005	Genome Integrity Via Signaling Networks		New York University Cancer Institute
May 2005	Genome Integrity Via Signaling Networks	Department of Genomics and Genetics	Boston University
Mar 2006	Genome Integrity Via Signaling Networks	Ordway Research Institute	Albany New York
Apr 2006	Oncogenes and Genomic Instability	Genetics, Cell Biology and Development	University of Minnesota
Oct 2006	“Oncogenes and Genomic Instability: Lessons from Model Organisms”	Cancer Biology Course	Wistar Institute, University of Pennsylvania
Dec 2006	Oncogenes and Genomic Instability	International Center for Public Health seminar Series	UMDNJ/NJ Medical School
May 2007	Oncogenes and Genomic Instability: Lessons from Model Organisms	Department of Biomedical Sciences	Cornell University
Nov 2007	The role of checkpoints in the early stages of cancer development	Seventh Annual Conference on Liver, Pancreas and Biliary Diseases	Dartmouth Hitchcock Medical Center, Lebanon, NH
Mar 2008	Oncogenes and Genomic Instability: Lessons from Model Organisms	Microbiology and Molecular Genetics	University of Vermont

May 2008	Oncogenes and Genomic Instability: Lessons from Model Organisms	Department of Pathology	Boston University School of Medicine
Jan 2010	The role of checkpoints in the early stages of cancer development	Department of Molecular Genetics, Biochemistry and Microbiology	University of Cincinnati College of Medicine
Jan 2010	The role of checkpoints in the early stages of cancer development	Human Cancer Genetics Program	The Ohio State University College of Medicine.
Dec 2010	Oncogenes and Genomic Instability: Lessons from Model Organisms	Department of Surgery	Leonard M. Miller School of Medicine, Miami, FL
Dec 2010	The role of checkpoints in the early stages of cancer development	Environmental Pathology and Carcinogenesis Seminar Series	University of Vermont College of Medicine, Burlington, VT
Apr 2011	The Role of Checkpoint Pathways During Development and Cancer	Curriculum in Genetics and Molecular Biology Friday Seminar Series	University of North Carolina at Chapel Hill, NC
Mar 2012	“The Role of Checkpoint Pathways During Development and Cancer”	Keynote speaker Genes and Development Program retreat at M.D. Anderson Cancer Center	New Braunfels, TX
May 2012	“The Role of Checkpoint Pathways During Development and Cancer”	Cleveland Clinic	Cleveland, Ohio
July 2013	"Rapid fire: uncovering a unique Chk1-sensitive stage in fetal erythropoiesis"	Invited Speaker Gordon Research Conference: Red Cells	Proctor Academy, NH
Nov 2015	“Synthetic lethality: an old friend with a new job. Finding the Achilles heel of cancer”	Pathology Grand Rounds	University of North Carolina Chapel Hill, NC
May 2016	“Synthetic lethality: an old friend with a new job. Finding the Achilles heel of cancer”	Massey Cancer Center Grand Rounds	Virginia Commonwealth University, Richmond Virginia
Mar 2018	"Promises and Challenges for	Invited Speaker	Ventura California

	Checkpoint Inhibitors as Anti-Cancer Drugs"	Gordon Research Conference DNA Damage Mutation and Cancer	
Apr 2019	"Promises and Challenges for Checkpoint Inhibitors as Anti-Cancer Drugs"	Molecular Biology and Biophysics Seminar Series	UConn Health

C. Regional/Local – Invited Lectures

DATE	TOPIC When available title it is indicated by " "	ORGANIZATION	LOCATION
Feb 1999	Checkpoint pathways in yeast and mammals	Department of Cell and Molecular Biology	University of Cincinnati
Mar 1999	Checkpoint pathways in yeast and mammals	Children's Hospital Research Foundation	University of Cincinnati
Apr 1999	Checkpoint pathways in yeast and mammals	Department of Pathology and Laboratory Medicine	University of Cincinnati
Nov 1999	Checkpoint pathways in yeast and mammals	Department of Biological Sciences	University of Cincinnati
Nov 1999	Checkpoint pathways in yeast and mammals	Department of Molecular and Cellular Physiology	University of Cincinnati College of Medicine
Jan 2001	Checkpoint pathways in yeast and mammals	College of Pharmacy	University of Cincinnati
Oct 2003	Checkpoint pathways in yeast and mammals	Department of Cell and Molecular Biology	University of Cincinnati College of Medicine
Oct 2004	Checkpoint pathways in fungal model systems	Infectious Disease seminar	University of Cincinnati College of Medicine
Sept 2005	Checkpoint pathways in yeast and mammals	School of Pharmacy	University of Cincinnati
Sept 2006	Checkpoint pathways in yeast and mammals	Pharmacology and Toxicology	Dartmouth Medical School
June 2007	The role of checkpoints in the	2007 Dartmouth	Norris Cotton Cancer

	early stages of cancer development	Breast Cancer Symposium	Center
June 2009	The role of checkpoints in the early stages of cancer development	2009 Dartmouth Breast Cancer Symposium	Norris Cotton Cancer Center
Apr 2010	“The unexpected role of checkpoints in the early stages of cancer development: why genetic models are important”	Symposium "Genome Instability and Cancer"	Norris Cotton Cancer Center, Lebanon NH
Apr 2010	“Chemical Approaches to Identify New Drugs for Cancer using Yeast”	Third annual Dartmouth Integrative Biology Symposium-Clinical and Translational Science	Dartmouth College
Apr 2010	The role of checkpoints in the early stages of cancer development	CTOP Research Retreat	Minary Conference Center, Holderness, NH
Sep 2017	Targeting the Achilles Heel of Cancer	Grand Rounds	Norris Cotton Cancer Center

XXIII. BIBLIOGRAPHY

A. Peer-reviewed publications in print or other media
Trainees who are coauthors are underlined.

1. MOST SIGNFICANT PUBLICATIONS (15)

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Sanchez, Y*., Bachant, J*., Wang, H., Liu, D., Fenghua H., Tezlaff, M. and Elledge S. J., *Control of the DNA damage checkpoint by Chk1 and Rad53 protein kinases through distinct mechanisms.* Science, 1999. **286(5442)**:1166-71. *=equal contribution

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Allaway, R.J.*, Fischer, D.A.*, Gardner, T.B., Gordon, S.R., Barth, R.J., Colacchio, T.A., Kacsoh, B.Z., de Abreu, F.B., Peterson, J.D., Choi, J.A., Tomlinson, C.R., Tsongalis, G.J., Padmanabhan, V., Suriawinata, A.A., Greene, C.S.**, **Sanchez, Y.** ** and Smith, K.D.**, *Fine-needle biopsy patient-derived xenografts as tools for drug discovery and individualized therapy for pancreatic cancer.* Oncotarget, 2016 Mar 29. **7(13)**:17087-102. DOI: 10.18632/oncotarget.7718. PMID: 26934555. * = equal contribution; ** = Co-corresponding authors

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* = Corresponding Author

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c. Reviews (All invited and Peer Reviewed)

Sanchez, Y. and Elledge, S. J., *Stopped for repairs*. Bioessays, 1995. **17(6):**545-548.

Chen, Y. and **Sanchez, Y.** *Chk1 in the DNA damage response: conserved roles from yeasts to mammals*. DNA Repair, 2004. **3**:1025-1032.

Searle, J.S. and **Sanchez, Y.**, *Stopped for repairs: a new role for nutrient sensing pathways?* Cell cycle, 2004 Jul 17. **3(7)**:865-8. Epub 2004 Jul 17.

Chen, Y., Pereira, E. and **Sanchez, Y.**, *Chk1*. AfCS-Nature Molecule Pages, 2007 Jan. DOI:10.1038/mp.a000642.01.

Pereira, E., Solis, W. and **Sanchez, Y.**, *Chk2*. AfCS-Nature Molecule Pages, 2009 Jan. DOI: 10.1038/mp.a000643.01

d. Book Chapters:

Searle, J.S. and **Sanchez, Y.**, *Dissecting layers of mitotic regulation essential for maintaining genomic stability* in *Yeast as a tool in cancer research*, J. Heitman and J. L. Nitiss, editors. 2007, Springer: Dordecht The Netherlands.

Poisson, J.M., Chen, Y. and **Sanchez, Y**., *Transcription and genomic integrity* in *Gene Expression and Regulation*, J. Ma, Editor. 2005, Higher Education Press and Springer:Beijing.

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Presentations at National Meetings:
*presented by

1. Honican, D.M., Jiang, K., Butler, J. and **Sanchez, Y.***, *The checkpoint kinase Chk1 is in complexes that bind DNA and regulates the DNA binding and kinase activities of the DNA-PK*. Keystone meeting on DNA replication, recombination and repair. 2002. Snow Bird, UT. (#)

2. Searle, J.S.*, Schollaert, K.L., Houston, I., Wilkins, B. and **Sanchez, Y.**, *The DNA damage checkpoint and PKA pathways cooperate to regulate mitotic progression in budding yeast*. FASEB Summer Research Conference Yeast Chromosome Structure, Replication and Segregation. Snowmass, CO. June 28, 2002. (#)
3. **Sanchez, Y.**, 5th Annual Chinese-American Beckman Frontiers of Science Symposium, U.S. National Academy of Sciences and the Chinese Academy of Sciences. October 11-13, 2002. Irvine, CA.

4. Honican, D.M, Kecheng, J., Chen, Y., Searle, J.S., Schollaert, K. and **Sanchez, Y*.**, Checkpoint pathways as therapeutic targets for breast cancer. DOD Era of Hope Breast Cancer Research Program meeting. 2002. Orlando, FL.

5. Wood, M.*, Kaur, M. and **Sanchez, Y.**, *Budding yeast as a platform for drug discovery for neurofibromatosis type 1*. Poster presentation at 36th Annual Meeting of New England Pharmacologists. 2007. Dedham.

6. Wood, M.* and **Sanchez, Y.**, *Budding yeast as a platform to study genome instability in neurofibromatosis type 1*. 2008 Children's Tumor Foundation Neurofibromatosis Conference. 2008. Bonita Springs, FL.

7. Wood, M.* and **Sanchez, Y.**, *Loss of the Saccharomyces cerevisiae neurofibromin homologues IRA1 and IRA2 modifies the cellular response to DNA damage*. 2009 Children's Tumor Foundation Neurofibromatosis Conference. 2009. Portland, OR.

8. Wood, M.*, Ratner, N., Seibel, W. and **Sanchez, Y.**, *Identification of compounds for treatment of neurofibromatosis type 1 with a yeast-based chemical screen*. Poster presentation at 2009 Northeast Regional Yeast Meeting. 2009. Ithaca, NY. (#)

9. Allaway, R.*, Wood, M., Bouley, S., Seibel, W.L., Ratner, N., Fadul, C., Greene, C. and **Sanchez, Y.**, *Targeting the vices of NF1/Ras axis-driven tumors: Transcription and autophagy*. Poster presentation at the Children's Tumor Foundation 2015 NF Conference. 2015. Monterey, CA.

10. Allaway, R.*, Wood, M., Downey, S., Bouley, S., Seibel, W., Ratner, N. and **Sanchez, Y.**, *NFi dysregulatd tumor cells are susceptible to perturbation of proteolytic mechanisms and mitrochondria*. Poster presentation at the 2016 Keystone Conference on Mitrochondrial Dynamics. 2016. Steamboat Springs, CO. (#)

11. Bouley S.J*., Allaway, R.J., Wood, M.D., Grassetti, A.V., Hou, H.W., Gerber, S., Wu, J., Seibel, W., Ratner, N., Dragnev, K.H. and **Sanchez, Y.**, *Targeting NF1 dysregulated tumors using a synthetic lethal approach*. Poster presentation at Molecular Therapeutics of Cancer Research Conference. 2016 July. Seattle, WA. (#)

12. Bouley S.J*., Allaway, R.J., Wood, M.D., Grassetti, A.V., Hou, H.W., Gerber, S., Wu, J., Seibel, W., Ratner, N., Dragnev, K.H. and **Sanchez, Y.**, *Targeting NF1 dysregulated tumors using a synthetic lethal approach*. Poster presentation at NF Conference. 2017 June. Washington, D.C.

13. Bouley S.J*., Allaway, R.J., Wood, M.D., Grassetti, A.V., Hou, H.W., Gerber, S., Wu, J., Seibel, W., Ratner, N., Dragnev, K.H. and **Sanchez, Y.**, *Targeting NF1 dysregulated tumors using a synthetic lethal approach*. Oral presentation at Molecular Therapeutics of Cancer Research Conference. 2017 July. Burlington, VT. (#)

14. Bouley S.J*., Allaway, R.J., Wood, M.D., Grassetti, A.V., Hou, H.W., Gerber, S., Wu, J., Seibel, W., Ratner, N., Dragnev, K.H. and **Sanchez, Y.**, *Targeting NF1 dysregulated tumors using a synthetic lethal approach*. Poster presentation at Molecular Therapeutics of Cancer Research Conference. 2018 July. Sundance, UT. (#)

Presentations at International Meetings:

1. Searle, J.S.*, Schollaert, K.L., Houston, I., Wilkins, B. and **Sanchez, Y.**, *The DNA damage checkpoint and PKA pathways converge on APC substrates and Cdc20 to regulate mitotic progression*. XXI International Conference on Yeast Genetics and Molecular Biology. July 7, 2003. Goteborg, Sweden. (#)

2. Chen, Y., Poisson, J.M., Schollaert K.L. and **Sanchez, Y.***, *Genome integrity via signaling networks: Lessons from model organisms*. 9th International and 36th Annual Meeting of the Environmental Mutagen Society "Global Issues in Genetic Toxicology and Environmental Mutagens." 2005 September. San Francisco, CA. (#)

3. Chen, Y., Poisson, J.M., Schollaert, K.L. y **Sanchez, Y.***, *La Integridad del genoma por la vía de redes de señalización: lecciones en organismos modelo*. National Congress of the Mexican Developmental Biology Society. 2005 November. Taxco, Mexico. (#)

4. Bouley S.J*., Allaway, R.J., Wood, M.D., Grassetti, A.V., Hou, H.W., Gerber, S., Wu, J., Seibel, W., Ratner, N., Dragney, K.H. and **Sanchez, Y.**, *Targeting NF1 dysregulated tumors using a synthetic lethal approach.* Poster presentation at Joint Global Neurofibromatosis Conference. 2018 November. Paris, France.

XXIV. PERSONAL STATEMENT

RESEARCH ACCOMPLISHMENTS AND CURRENT RESEARCH PROJECTS

A. Dissection of human DNA Damage checkpoint pathways. As a postdoctoral fellow in Dr. Stephen Elledge's laboratory, I used biochemical and genetic approaches in yeast and mammalian cells to dissect the signaling pathways that regulate DNA replication and mitosis following DNA damage (Navas, Sanchez and Elledge, 1996, Sanchez, et al, 1996, 1997, 1999). My work showed that the pathways were conserved and that an evolutionarily conserved checkpoint kinase 1 (Chk1) functions to regulate progression through mitosis

following DNA damage (Sanchez *et al*., 1999; Sanchez *et al*., 1997). The conservation of these kinases allowed me to clone the human and yeast checkpoint kinase 1 genes (US patents 6218109 and 6307015). Human Chk1 regulates mitotic progression by blocking the activation of Cdk1/Cyclin complexes, which are the essential components of the cell cycle engine. The discovery of Chk1 and its function led to the development of the human Chk1 kinase as an oncology target currently in Phase II clinical trials. A fourth manuscript (Sanchez, *et al.,* 1999), which was finished in my own laboratory, made several important contributions to our understanding of how cells coordinate cell cycle transitions with genomic integrity. Several of these publications were highlighted in the body of work of Dr. Stephen Elledge's recognized for the Lasker award in 2015 (Cortez, Zhou and Sanchez, 2015).

B. Structural and spatial-temporal requirements for transmission of signal from sites of DNA damage. We identified Chk1-interacting proteins (Chips), which uncovered layers of regulation of Chk1 by post-translational modification and sub-cellular localization, and that contribute to signaling specificity in response to a variety of cues. My studies uncovered not only potential Chk1 targets (DNA metabolism proteins and transcription factors), which play key roles in genomic stability and carcinogenesis, but also Chips that are canonical signal transduction proteins. One such protein, 14-3-3, falls in the adaptor/scaffold category. Recognition sites of the 14-3-3 protein surround phospho-serine residues, and in many cases, contribute to protein regulation by changing sub-cellular localization (Jiang, *et al*. 2003). We showed that the essential checkpoint kinase Chk1 is associated with chromatin, where it is phosphorylated on Atr and non-Atr phosphorylation sites in the absence of exogenous DNA damage. This finding indicates that Chk1 has a role in an intrinsic checkpoint at every cell cycle to monitor the integrity of replication forks. We also showed that following a checkpoint response, the amplification of the checkpoint signal leads to increased phospho-Chk1 in both chromatin and soluble nuclear compartments. Phosphorylation of Chk1 on Ser345, an Atr consensus site, serves as a docking site for 14-3-3 proteins that leads to the interference of a Nuclear Export Signal regulating the sub-cellular localization of Chk1. We identified conserved residues in the C-terminus of Chk1 that regulate its activation through conformational changes (Chen, et al., 2009 and Pereira, Chen and Sanchez, 2009) These studies provided the first evidence for spatial-temporal regulation of an effector kinase during checkpoint signaling.
My laboratory used the yeast model to elucidate the pathways that regulate anaphase and mitotic exit following DNA damage and uncovered a role for PKA and nutrient sensing pathways in this response (Searle, *et al*., 2004, 2011; Wood and Sanchez, 2010). My team also used the yeast model to reconstitute checkpoint signaling from a single episomal origin of replication and used this system to delineate the proteins required for signaling from stalled replication forks (Caldwell, *et al*. 2008).

C. Cancer drug discovery. My laboratory built genetic platforms for synthetic lethal chemical screens to identify and develop compounds with selective efficacy against cancers with dysregulated Ras signaling that lack targeted therapies. We combined yeast models with human models in high-throughput chemical synthetic lethality screens, in collaboration with Dr. Nancy Ratner at the University of Cincinnati Children's Hospital and Medical Center (CCHMC), to discover compounds targeting cancer cells in which *NF1* loss drives tumor formation. In this screen we identified 3 lead compounds, one of which shares a target with inhibitors in clinical trials, Cdk9, which sustains oncogenic levels of transcription necessary for survival of RAS dysregulated tumor cells (Wood, et al, 2011). A second screen identified

lead compounds, including Y100, which disrupt mitochondrial metabolism (Allaway, *et al.,* 2017). We developed assays in yeast, and carried out medicinal chemistry and proteomic approaches, to identify a cellular target of three of these molecules, two of which share targets with drugs in clinical trials (Wood, *et al*, 2011; Allaway, *et al*., 2016; Allaway, *et al*., 2017 and Bouley, *et al*, in review). We built an interdisciplinary team at Dartmouth, PENN, CCHMC and Jackson laboratories (JAX), which reflects the expertise required to move our leads into pre-clinical models and includes experts in Small Animal Pharmacology and Imaging (Lewis, M.D., MB., BCh., FRCP, Hoopes, D.V.M., Ph.D., and Pogue, Ph.D.), Chemistry (Mierke, Ph.D. Wu, Ph.D. and Pletnev, Ph.D.), Genomics and Bioinformatics (Tomlinson, Ph.D., and Greene, Ph.D.), Proteomics, (Gerber, Ph.D.), Genetically Engineered models of Neurofibroma (Ratner, Ph.D.), Patient Derived Xenograft models (Smith, Simmons and Evans as well as JAX), orthotopic GBM models (Hoopes, D.V.M., Ph.D. and Pogue, Ph.D.) and GBM and Pancreatic Cancer oncology (Fadul, M.D., Leach, M.D. and Smith, M.D.). A partnership with Dr. Greene (now at UPENN) resulted in the first RNA-based classifier that identified tumors with Ras pathway activation regardless of mutation status (Way *et al*., 2017, 2018). This classifier will be used to predict the response to compounds effective against Ras pathway-activated cells. The long-term objective of this research funded by a multi-PI R01 is to work with our board of scientific and clinical advisors to design Phase I trials with agents that target pathways that are efficacious at shrinking neurological and other tumors driven by Ras pathway dysregulation in our pre-clinical models.

D. The role of checkpoint pathways in embryonic development and disease. The ATR kinase is activated in proliferating cells that sustain single-stranded breaks or replication blocks. ATR phosphorylates Chk1 as part of the S phase and DNA damage checkpoint responses. The ATR/Chk1 pathway plays three key roles in the response to replication blocks: 1) to stabilize replication forks and delay activation of late replication origins, 2) to delay cell cycle progression and 3) once replication is completed, to allow the repair of pathological structures that arise from collapsed replication forks. $ATR^{-/-}$ and $Chek1^{-/-}$ embryos die between the blastocyst stage and E7.5, by accumulating apoptotic cells. To better understand the role of Chk1 in development, we developed a mouse expressing a hypomorphic variant of the mouse Chek1 gene, $Chek1^{R156Q}$. The $CHEK1^{R156Q}$ mutation changes a highly conserved arginine in the activation loop that stabilizes the active Chk1 conformation. We found that the Chk1R156Q kinase had less than 20% of the activity of wild-type Chk1 protein. Therefore, this allele genetically mimics pharmacological inhibition of Chk1 in vivo. Unlike null embryos, $Chek1^{R156Q/R156Q}$ embryos die at ~E13.5, with defective erythropoiesis and dilated cardiomyopathy. At this stage the fetal liver is largely an erythropoietic tissue. Fetal livers from $Chek1^{R156Q/R156Q}$ embryos do not show a defect in stem/progenitor cells; however, they only have 25% of fully differentiated erythrocytes (Ter119+) compared to wild-type embryos. We observed DNA damage, in both the fetal liver and in circulating blood cells. We also found markers of apoptosis, in E12.5-13.5 fetal livers. We show that the specific checkpoint-dependent differentiation step defective in $Chek1^{R156Q/R156Q}$ embryos occurs during a single, developmentally-specific cell cycle that is coupled to an increase in intra-S phase DNA synthesis. This has been shown to be necessary to trigger the onset of the erythroid transcriptional program. We also found that we can recapitulate the differentiation-stage specific loss of erythroid precursors accompanied by DNA damage and cell death in wild-type fetal liver cells following pharmacological inhibition of Chk1 at E11.5-12.5. We hypothesize that the rapid DNA synthesis in cells undergoing the erythroid commitment step, coupled with the DNA damage from hypoxia and increased

transcription, makes them especially sensitive to S phase checkpoint defects such as those conferred by the Chek1^{R156Q} mutation. These findings explain the erythropoietic defects of Chek1$^{R156Q/R156Q}$ embryos. Furthermore, we found that pharmacologic inhibition of Chk1 in E14.5 embryos and adult mice using experimental drugs in clinical trials for cancer also leads to the same erythropoietic defect and depletion of the S1-S4 cells of the erythroipoietic lineage. Our data suggest that we have uncovered a unifying mechanism specific to erythroid differentiation in primitive, early myeloid progenitor (EMP), definitive and adult erythropoiesis that makes this process dependent on Chk1 activity (Artinger, E.L. *et al*., in preparation). My laboratory is now in a unique position to uncover, at the molecular level, the role that the DNA damage checkpoint pathways play in a critical stage of erythropoiesis that has unique DNA replication dynamics (Artinger, E., *et al*., in preparation). Inhibition of Chk1 is being proposed as a monotherapy in cancer. We will explore interventions that could ameliorate the anemia caused by genetic and pharmacological inhibition of Chk1 using our genetically engineered mouse model.

LEADERSHIP

As the Associate Director of Basic Sciences at the Norris Cotton Cancer Center (NCCC) since July of 2011, my vision has been to build and maintain excellence in basic science, as this provides the foundation for biomedical discoveries that can be translated into the clinic. This vision leverages the fact that many of the targets of drugs developed or that are under development as cancer treatments were first identified in model organisms such as yeast and flies, including one of the drug targets studied by my laboratory.

In my role at the cancer center, I have implemented mechanisms to foster communication between basic scientists and clinicians and to build on the strengths of the institutions in our region to create an infrastructure that facilitates the translation of basic science discoveries. This infrastructure would ensure that bench discoveries that could reduce the impact of cancer move to pre-clinical platforms and to the clinic in a timely fashion.

As the Associate Director for Basic Sciences at NCCC, I support 3 of the 4 Research Programs in the Cancer Center, which include 87 faculty that span 15 departments: Cancer Biology and Therapeutics (CBT), Immunology and Cancer Immunotherapy (ICI), Translational Engineering in Cancer (TEC).

My roles include:

1. Integrating leadership initiatives with the Associate Directors for Population Science and Clinical Research to ensure high-quality collaborative activities across research programs.

2. As a member of the Early Phase Trials Program (EPTP) steering committee, I ensure that opportunities for translational research are explored and supported by Pilot Funding, and that effective clinical collaborations for translational research are nurtured effectively. I facilitate and support strategic faculty recruitments into inter-disciplinary teams who will bridge the gap in the translation continuum.

3. To increase bi-directional translation I worked with program directors and leaders of clinical oncology groups or COGs to increase basic scientist participation in COGs. Several COG leaders host short science presentations once a month at their tumor board meetings. COG leaders and members participate in the recruitment of key translational faculty.

4. I help recruit outstanding new faculty to the Cancer Center (internal and external) through close interaction with basic science department chairs and the Director of the Cancer Center.

5. Designing new initiatives to support interdisciplinary team science. In 2015, I spearheaded a seed-funding program to support multi-investigator programs. This new initiative has supported interdisciplinary programs in immuno-engineering, imaging, breast cancer recurrence and global health initiatives.

6. Facilitating provision of research technologies and services to Cancer Center members that would be difficult or impossible for them to establish in their own laboratories or to obtain elsewhere, through collaboration with the Associate Director of Shared Resources. In the past six years in support of our research programs I worked with the Associate Director of Shared Resources to stimulate the development of new shared resource technologies, including Next Generation Sequencing, Single Cell Sequencing, Immune Monitoring state of the art equipment, LC- MS/MS for Clinical Pharmacology and more recently the Patient Derived Xenograft (PDX) service within the Mouse Modeling Shared Resource.

FACULTY CAREER DEVELOPMENT, RESEARCH TRAINING AND EDUCATION

As Co-Director of SYNERGY's program for Novel Clinical and Translational Methodologies, (2008-2020) I directed, with Drs. Anna Tosteson and Rick Enelow, the SYNERGY Pilot program for Methodology and Technology Innovation for Translational Research (MITRA). The role of the MITRA program was to seed interdisciplinary collaborations to facilitate the translation of Dartmouth discoveries into the clinic.

As Co-Director of SYNERGY's Office of Research Education, Training, and Career Development with Dr. Martha Bruce, and Associate Director of the SYNERGY Scholars program (modeled after the NIH KL2 Mentored Career Development Award), we oversaw the SYNERGY Scholars program, Clinical Research Fellows, Advanced Certificate and Pilot programs. We ran the Research Works in Progress, a platform for content expert mentoring and peer-to-peer mentoring for junior physicians/clinicians for the development of their funding proposals or clinical protocols. Our office also facilitated access to resources that are used to support Dartmouth and Dartmouth-Hitchcock investigators in the preparation of grant proposals, clinical protocols and manuscripts.

I have taught in the SYNERGY Program (2012-2020) where I served as a mentor to junior faculty who were developing independent programs in translational research. In 2019 the NCCC launched the D-H Cancer Faculty Fellows Program (40% protected time for research). We continue to offer the Research Works in Progress to D-H Cancer Faculty Fellows and other physicians/clinicians who seek feedback for the development of their funding proposals or clinical protocols. My roles in career development at SYNERGY and NCCC are complementary.

EDUCATION AND TEACHING

As a faculty member in the former Department of Pharmacology and Toxicology at the Geisel School of Medicine at Dartmouth, I taught mechanisms of drug action including Pharmacodynamics and Pharmacokinetics to second year medical students for several years. I was module leader in the Medical Pharmacology course. I am a member of the Graduate Program Committee for Cancer Biology and Molecular Therapeutics in the Graduate Program of Experimental and Molecular Medicine (PEMM) at Dartmouth. I am also a member of the graduate programs of Molecular and Cellular Biology and Quantitative Biomedical Sciences.

I see my role in graduate education as a facilitator of learning rather than a lecturer who provides material that the students must reproduce in an exam. I have lectured on very complex topics at the graduate level to students with very diverse educational backgrounds. The emphasis of my lectures is on the application of different molecular, genetic or biochemical approaches to study any problem in biology and medicine. Also, I stress the value of model organisms, in my case the budding yeast *Saccharomyces cerevisiae*, for studies of biological problems that impinge on human physiology and on diseases such as cancer.

My lectures to graduate students contain material from the latest published work and my exams provide problems that the students must address using genetic and biochemical approaches. My goal is to teach using primary literature to promote critical reading and thinking in the students. These traits are not only important for all individuals but are essential for a student to develop into a successful scientist.

My philosophy is that experiential learning should be a part of every didactic tool kit. Consistent with this philosophy, my laboratory has welcomed graduate, medical, undergraduate as well as high school students. During their time in my laboratory, students learn to design and carry out experiments that address hypotheses. Students have the opportunity to present their work and review current publications on their topic at our weekly lab meetings. My laboratory has trained over four dozen undergraduate students who have continued careers in medicine, veterinary medicine and biomedical research.

DIVERSITY EQUITY AND INCLUSION

As a Mexican American scientist, faculty and leader I bring a unique perspective to Diversity, Equity, and Inclusion (DEI) efforts at academic institutions. I am an advocate for the use of innovative approaches to leverage every recruitment opportunity (leadership, faculty, learner and staff) to diversify our institutions and communities. I share these views with NCCC's Executive Council [Director, Deputy Director and Associate Directors (ADs)] where we explore mechanisms to increase diversity through our recruitment efforts to Dartmouth and Dartmouth-Hitchcock, including enlisting search firms to provide a diverse slate of candidates for key leadership roles jointly recruited to NCCC and D-HH.

In July 2020, Dr. Leach convened NCCC Roundtable for DEI, first as a listening tour to facilitate discussions around racism and other forms of discrimination and inequity at NCCC and the broader upper Valley community. Beginning in the Fall 2020, I co-moderate the DEI Roundtable with my colleague Katie Lenhoff, MPH. The DEI Roundtable identified priority areas in DEI for NCCC in March of 2021: 1) Diversifying Leadership, (which I co-lead with Dr. Arminja Kettenbach); 2) Diversifying Faculty and Staff; 3) Retention of a Diverse Workforce; 4) Culture and Welcoming Environment and 5) Diversifying and Supporting the Student/Learner Pipeline.

As a result of our outreach to capture best practices for diversifying leadership at other cancer centers, I was invited to serve on the Presidential Initiative steering committee for Dr. Caryn Lerman, incoming President of the Association of American Cancer Institutes (AACI). Dr. Lerman's Presidential Initiative aims to Develop Cancer Center Leaders with the goal of increasing diversity in the leadership of AACI Cancer Centers and the academic institutions that they are affiliated with.

Along with the NCCC Director and the AD for population sciences we supported the submission of an application to the NIH Common Fund for the Faculty Institutional Recruitment for Sustainable Transformation (FIRST) grant. The proposal aimed to recruit a cohort of 12 URM faculty, to create a welcoming environment, implement career development tools to ensure the success of the recruits, as well as to implement innovative programs to change the culture at Dartmouth. NCCC pledged recruitment packages for five to six of the 12 positions, which will be hired into the Geisel School of Medicine and Thayer School of Engineering. In doing so, NCCC committed all currently available tenure-track faculty slots to advance the goals of the FIRST program. Although the application did not receive a fundable score, the process resulted in leadership buy-in and commitment of institutional resources toward the goals stated in the FIRST application. Also, the initiatives and programs developed for the FIRST program will serve as a roadmap for our cancer center and institutions to recruit, develop and retain a diverse cohort of faculty.

MEMO

To: Cinnamon Blair
Chair, UNM Naming Committee

From: Dr. Yolanda Sanchez PhD
Director & CEO, UNM Comprehensive Cancer Center

Date: March 6, 2023

Re: **Creation and Appointment of Dr. Sarah Adams to the Donna M. Tomky and Robert W. Geer Professorship in Ovarian Cancer Research**

Dear Ms. Blair and members of the naming committee,

On behalf of the UNM Comprehensive Cancer Center, I would like to request approval to create the Donna M. Tomky and Robert W. Geer Professorship in Ovarian Cancer Research. This naming request is respectfully submitted in accordance with UNM Administrative Policy 1020: Naming Facilities, Spaces, Endowments, and Programs, under Section 2.2.

At age 65, Donna M. Tomky, was diagnosed with advanced stage ovarian cancer. Donna, an Adult Nurse Practitioner specializing in endocrinology, was able to engage in peer-to-peer discussions with her oncologists putting her and her husband Robert 'Bob' Geer at immediate ease. Their first encounter progressed into amazing care with a positive attitude from all staff including the nurses, patient navigators, technicians, support groups, custodial staff and her team of physicians. Complementing her exceptional care, the Cancer Center's light open spaces and beautiful views created a calming environment. This experience led Bob to fund an endowment to support future generations of cancer doctors and researchers dedicated to finding the most advanced treatments and cures here in New Mexico.

Since 2012, Dr. Sarah Adams has held the Victor and Ruby Hansen Surface Endowed Professor in Ovarian Cancer Research. As prescribed by Faculty Handbook Policy C170 "Endowed Chairs and Named Professorships" and in consultation with faculty within the department, we seek approval to appoint Dr. Adams to the Donna M. Tomky and Robert W. Geer Professorship in Ovarian Cancer Research.

Dr. Adams is a gynecological oncologist and holds a research appointment. Her lab focuses on tumor immunology and the development of novel treatment strategies for ovarian cancer. She recently demonstrated that PARP inhibition synergizes with CTLA4 immune checkpoint blockade in BRCA1 deficient ovarian cancer models. Based on the success of preclinical models, Dr. Adams initiated clinical trials in 2016 with early results demonstrating substantial responses among heavily pre-treated patients. This trial was selected for expansion to three additional NCI Cancer

Centers as the first clinical trial opened through the Oncology Research Information Exchange Network (ORIEN). In addition, these results provided a foundation for a second, expanded trial through NRG to test whether this combination is active in a larger cohort of patients and to isolate the contribution of the immune agent. A phase II clinical trial opened in 2019 looking at new drugs targeting platinum sensitive recurrent ovarian cancer. This study was one of the first NRG studies selected by a program within the Moon Shot initiative. The translation of Dr. Adams work to clinical testing has spurred ongoing mechanistic studies in the lab focused on understanding tumor-tumor microenvironment interactions that modulate the efficacy of tumor-directed agents.

With Dr. Adams experience in translating work from the lab to national clinical trials, she was appointed to be the Associate Director for Translational Science at the UNM Comprehensive Cancer Center. Her aim is to build the infrastructure needed for the successful development for investigator-initiated trials based on the Cancer Center's science.

Dr. Adams attended the University of Chicago Pritzker School of Medicine (2001), interned and was a resident of University of Chicago Hospitals, with specialty in Obstetrics and Gynecology (2005) and was a fellow with University of Pennsylvania Hospitals (2009), with a specialty in Gynecologic Oncology. For your consideration, I have included Dr. Adams updated CV including additional information from her former appointment in 2012.

Thank you for your time and consideration of this request.

CURRICULUM VITAE

Date: February 27, 2023

Name: **Sarah F. Adams, MD**

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Licensure/ Certifications:

Oral Boards, Gynecologic Oncology – Passed, 2014
Oral Boards, Obstetrics and Gynecology – Passed, 2009
Written Boards, Gynecologic Oncology – Passed, 2012
Written Boards, Obstetrics and Gynecology – Passed, 2005
New Mexico, License #: MD2012-0668
Commonwealth of Pennsylvania Medical License (Inactive), 2006
State of Illinois Medical License (Inactive), 2001

Education:

07/2006-06/2009 Gynecologic Oncology Fellowship
Department of Obstetrics and Gynecology
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Philadelphia, PA

07/2002-06/2005 Residency
Department of Obstetrics and Gynecology
The University of Chicago Hospitals
Chicago, IL

09/1997-06/2001 Medical School
Pritzker School of Medicine
The University of Chicago
Chicago, IL

09/1992-06/1996 Harvard University
Cambridge, MA
B.A. Biochemistry, *cum laude*

Academic Appointments:

07/01/2022-	Professor with Tenure, Division of Gynecologic Oncology Department of Obstetrics and Gynecology University of New Mexico School of Medicine, Albuquerque, NM
07/2016-2022	Associate Professor with Tenure, Division of Gynecologic Oncology Department of Obstetrics and Gynecology University of New Mexico School of Medicine, Albuquerque, NM
09/2012-	Victor and Ruby Hansen Surface Endowed Professor in Ovarian Cancer Research The University of New Mexico Comprehensive Cancer Center University of New Mexico School of Medicine, Albuquerque, NM
09/2012- 07/2016	Assistant Professor, Division of Gynecologic Oncology Department of Obstetrics and Gynecology University of New Mexico School of Medicine, Albuquerque, NM
07/2009-07/2012	Assistant Professor, Division of Gynecologic Oncology Department of Obstetrics and Gynecology The University of Pennsylvania, Philadelphia, PA
07/2006-07/2009	Instructor, Division of Gynecology Oncology Department of Obstetrics and Gynecology University of Pennsylvania Hospitals, Philadelphia, PA
07/2005-06/2006	Assistant Professor, Department of Obstetrics and Gynecology University of Illinois Hospital, Chicago, IL

Professional Recognition:

2022	Fellow, American Gynecological and Obstetrical Society
2021	UNM School of Medicine Award for Excellence in Medical Student Education
2020	Ovarian Cancer Research Alliance Liz Tilberis Research Prize for Outstanding Early Career Investigators
2020	UNM School of Medicine Award for Excellence in Medical Student Education
2019	Herbst Lecturer, Division of Gynecologic Oncology, University of Chicago
2019	UNM School of Medicine Award for Excellence in Medical Student Education
2018	Hope and Healing Honor, Cancer Support Now
2018	Faculty Excellence in Research Award for Clinical Science, UNM HSC
2018	UNM School of Medicine Award for Excellence in Medical Student Education
2017	UNM School of Medicine Award for Excellence in Medical Student Education
2016	UNM School of Medicine Award for Excellence in Medical Student Education
2015	ACOG Council on Resident Education National Faculty Teaching Award
2015	UNM School of Medicine Award for Medical Student Education
2015	Liz Tilberis Early Career Award Competitive Renewal
2014	UNM School of Medicine Award for Excellence in Medical Student Education
2013	Palliative Care Superstar Award , UNM Hospitals
2012	Ruby and Victor Hansen Surface Endowed Professor of Ovarian Cancer Research
2012	Clarence C. Briscoe Award for Excellence in the Teaching and Practice of OB/GYN

2012	Recognized as a "Health Care Hero", Pennsylvania Hospital
2011	Top Reviewer, *Gynecologic Oncology*, Elsevier
2011	Liz Tilberis Scholar, Ovarian Cancer Research Fund
2010	ACOG Council on Resident Education National Faculty Teaching Award
2011	NIH Loan Repayment Program Award Renewal
2009	NIH Loan Repayment Program Award
2009	ASCO Cancer Foundation Young Investigator Award
2008	American Association for Cancer Research Scholar-in-Training Award
2004	Academic Chief Resident, Department of OB/GYN, University of Chicago Hospitals
2003, 2005	Arnold P. Gold Foundation Resident Physician Award for Humanism and Excellence in Medicine
2003	Golden Apple Resident Teaching Award
2003	Berlex Best Teaching Resident Award
2002	Chicago Association of Gynecologic Oncologists, First Place Research Award
2001	AMWA Academic Excellence Award

Professional Societies:

2022-	American Gynecological and Obstetrical Society
2019-	Western Association of Gynecologic Oncologists
2016-	Member, American Association for the Advancement of Science
2016-	Member, European Association for Tumor Immunology
2016-	Member, Society for the Immunotherapy of Cancer Invited member, Gynecologic Cancers Immunotherapy Guidelines Expert Panel 2022
2015-	Member, NRG Oncology Core Member, Developmental Therapeutics Committee 2018 Core Member, Ovarian Cancer Committee 2018
2014-	Full Member, Society of Gynecologic Oncologists Member, Program Committee 2016 Co-Chair, Program Committee 2022 Co-Founder and Director, SGO BRIDGES Research Initiative 2021-
2012-	Member, American Association of Immunologists
2011-	Fellow, American Congress of Obstetrics and Gynecology
2009-2014	Candidate Member, Society of Gynecologic Oncologists Member, Clinical Practice Committee 2009-2014
2009-	American Association for Cancer Research Program Committee 2021-2022
2007-	Member, American Society of Clinical Oncology

Community outreach:

2022	"Recurrent Ovarian Cancer", Ovarian Cancer Research Alliance Annual Meeting
2022-	Appointed Scientific Advisor, Ovarian Cancer Research Alliance
2022	Ovarian Cancer Research Alliance Webinar, "Highlights from the 2022 SGO Annual Meeting – Ovarian Cancer", over 750 registrants, April 19, 2022
2021	Gynecologic Cancer Awareness Project, Invited speaker, "PARP Inhibitors for Gynecologic Cancers, Albuquerque, NM

2019 Gynecologic Cancer Awareness Project, Invited speaker, "Treatment of Gynecologic Cancers", Albuquerque, NM

2016 "New treatment strategies for ovarian cancer", keynote speaker, American Cancer Society Relay for Life, Los Alamos, New Mexico

2016 "New treatment strategies for ovarian cancer", Invited speaker, American Cancer Society Annual Gala, Santa Fe

2015 American Cancer Society Annual Gala, Invited speaker, "Ovarian cancer research update", Santa Fe, NM

2015 American Cancer Society, Invited speaker, "New treatments for ovarian cancer", Albuquerque, NM

2014 New Mexico Cancer Services, Ask the Oncologist Forum, Invited speaker, "Updates on treatment for gynecologic cancers", Albuquerque, NM

2014 American Cancer Society, Volunteer training session, Invited speaker, "Ovarian cancer research update", Albuquerque, NM

2014 American Cancer Society, Fundraiser and community event, Invited speaker "Ovarian cancer research update", Las Cruces, NM

2014 International Women's Forum, Quarterly Meeting, Invited speaker, "Ovarian cancer research update", Albuquerque, NM

2014 "Ask the Oncologist – Gynecologic Cancers" Family Cancer Retreat, Cancer Services of New Mexico

2013 "Goals of cancer research", Invited speaker, American Cancer Center Relay for Life Event, Alomogordo, New Mexico

Invited Lectures:

2022 "Bridging the clinical/translational divide to accelerate progress in ovarian cancer treatment" University of Kansas Department of OB/GYN Grand Rounds, November 18, 2022

2022 "Cancer vaccines: challenges and opportunities". UNMCCC Oncology Grand Rounds, September 19, 2022

2022 "Utilizing preclinical models to develop targeted therapies for rare endometrial cancers" Johns Hopkins Inaugural Endometrial Cancer Symposium: How Preventive and Precision-Based Approaches will Improve Patient Outcomes, July 29, 2022

2022 "Immune therapy for ovarian cancer" Ovarian Cancer Committee, NRG Semi-annual Meeting, July 2022, Chicago, IL

2022 Ovarian Cancer Research Alliance Webinar, "Highlights from the 2022 SGO Annual Meeting – Ovarian Cancer", over 750 registrants, April 19, 2022 https://ocrahope.org/2022/05/video-whats-new-in-ovarian-cancer-research-and-treatment/

2022 "Context matters" Forbeck Forum to Advance Treatment for Ovarian Cancer, Monterey CA, March, 2022.

2021 "Biomarker Development and Correlative Studies Linked with a Clinical Trial" Cancer Therapeutics Research Seminar, UNMCCC

2020 "Context Matters: Optimizing Treatment for Ovarian Cancer" University of Iowa Cancer Center Translational Science Research Program, November 6, 2020

2020 "Context Matters: Optimizing Treatment for Ovarian Cancer" Department of OB/GYN, Stanford University, February 26, 2020

2019 "Olaparib and Tremelimumab for Recurrent Ovarian Cancer", AstraZeneca Externally Sponsored Research Symposium, Washington, DC

2019 "Updates in Gynecologic Cancer Treatment", invited speaker, Gynecologic Cancer Assistance Program Seminar, Albuquerque, NM.

2019 "Translating Lab Results to Clinical Trials", Cancer Therapeutics and Oncology Grand Rounds, University of New Mexico Comprehensive Cancer Center.

2019 "Context Matters: Optimizing Treatment for Ovarian Cancer" 2019 Herbst Lecture, University of Chicago

2018 "When Cancer Comes Back", invited speaker, Ovarian Cancer Research Fund Alliance National Meeting, Washington DC

2017 "Advances in ovarian cancer research", invited speaker, Phi Beta Psi Sorority Foundation Annual Meeting, Albuquerque, NM

2017 "Recurrent ovarian cancer", invited speaker, Ovarian Cancer Research Fund Alliance National Meeting, Chicago, IL

2016 "Management of recurrent ovarian cancer", Webinar for the Ovarian Cancer Research Fund Alliance, over 400 participants https://ocrfa.org/patients/resources/webinars/

2016 "Immunotherapy for ovarian cancer" Invited webinar for AstraZeneca U.S. Medical Affairs Group

2016 "Immunotherapeutic targets for ovarian cancer", Cancer Therapeutics Research Program, University of New Mexico Comprehensive Cancer Center

2016 "When ovarian cancer comes back", Invited speaker, Ovarian Cancer Research Fund Alliance National Meeting, Washington DC

2016 "Immune therapy for ovarian cancer" Grand Rounds, Department of Gynecologic Oncology, University of Texas M D Anderson Cancer Center

2016 "Immunotherapy for gynecologic cancers" Grand Rounds, Department of Obstetrics and Gynecology, University of New Mexico

2016 "Immunotherapy for Ovarian Cancer" Invited speaker, Winter Meeting of the Society of Gynecologic Oncology, Lake Tahoe, CA

2016 "Future Directions for Immune Therapy of Gynecologic Cancers", Invited speaker, Winter Meeting of the Society of Gynecologic Oncology, Lake Tahoe, CA

2015 "In the know about ovarian cancer recurrence", Invited speaker, Annual Meeting of the Ovarian Cancer National Alliance, San Diego, CA

2015 "Impact of the peritoneal immune environment on ovarian cancer progression and response to therapy" Invited speaker, The University of Chicago Department of OB/GYN

2014 "Impact of surgery (and pregnancy) on cancer development, dissemination and outcomes" University of New Mexico Department of OB/GYN Grand Rounds

2014 "Location, location, location: how real estate considerations direct ovarian cancer progression", Lightning Research Rounds, The University of New Mexico

2014 "Tumor immunology: an update", Invited speaker, Johns Hopkins University Bench-to-Bedside Seminar Series

2014 "Life as a clinician-scientist: living the dream" Invited Speaker, Annual Retreat for the University of New Mexico MD/PhD program

2014 "Update on gynecologic cancers", Women's Health Conference, Albuquerque

2014 "Ovarian tumor immunology" Grand Rounds, The University of New Mexico Department of Pathology and Laboratory Science

2013 "Location, location, location: the impact of the peritoneal environment on ovarian cancer dissemination and recurrence". Grand Rounds, The University of New Mexico Department of Obstetrics and Gynecology

2013 "Recurrent ovarian cancer" Webinar, The Ovarian Cancer Research Fund, https://ocrf.webex.com/ocrf/lsr.php?AT=pb&SP=EC&rID=6485487&rKey=032fe73545a384ba 125 registered participants

2012 "Immune therapy for ovarian cancer" Grand Rounds, The University of New Mexico Department of Obstetrics and Gynecology

2012 "Immune therapy for ovarian cancer" Invited speaker, Grand Rounds, The University of Chicago Hospitals Department of Obstetrics and Gynecology

2010 "Clinical Trials in Ovarian Cancer", Invited speaker at the Regional Conference of the National Ovarian Cancer Alliance, Radnor, Pennsylvania

2010 "Immune Therapy for Advanced Ovarian Cancer". Invited speaker at "Break the Silence", the 5th Annual Ovarian Cancer Conference sponsored by the National Ovarian Cancer Coalition and Mercy Cancer Center, Des Moines, Iowa

2010 "Ascites-based immunotherapy for the treatment of advanced ovarian cancer" Grand Rounds, Pennsylvania Hospital, Department of Obstetrics and Gynecology

2010 "Ascites-based immunotherapy for the treatment of advanced ovarian cancer" Grand Rounds, Hospital of the University of Pennsylvania Department of Obstetrics and Gynecology

Research and Scholarly Achievements:

Peer-Reviewed Publications:

1. Steinkamp MP, Lagutina I, Brayer KJ, Schultz F, Burke D, Pankratz VS, **Adams SF**, Hudson LG, Ness SA, Wandinger-Ness A. Humanized patient derived xenograft models of disseminated ovarian cancer recapitulate key aspects of the tumor immune environment within the peritoneal cavity. *Cancer Research Communications* 2023 Feb 22; 3(2).

2. Disis ML, **Adams SF**, Bajpai J, et al. Society for Immunotherapy of Cacner (SITC) clinical practice guideline on immunotherapy for the treatment of gynecologic cancer. *J ImmunoTherapy of Cancer* 2022.

3. Angela N. Bartley, Anne M. Mills, Eric Konnick, Michael Overman, Christina B. Ventura, Lesley Souter, Carol Colasacco, Zsofia K. Stadler, Sarah Kerr, Brooke E Howitt, Heather Hampel, **Sarah F. Adams**, Wenora Johnson, Cristina Magi-Galluzzi, Antonia R. Sepulveda, Russell R. Broaddus; Mismatch Repair and Microsatellite Instability Testing for Immune Checkpoint Inhibitor Therapy: Guideline From the College of American Pathologists in Collaboration With the Association for Molecular Pathology and Fight Colorectal Cancer. *Arch Pathol Lab Med* 2022; doi: https://doi.org/10.5858/arpa.2021-0632-CP

4. Guo J, DeMay H, Franco S, Noureddine A, Tang L, Brinker CJ, Kusewitt DF, **Adams SF*,** Serda RE*. Cancer vaccines from cryogenically silicified tumor cells functionalized with pathogen-associated molecular patterns. *Nature Biomedical Engineering* 2022 Jan; 6(1): 19-31.

5. **Adams SF**, Grimm AJ, Chiang CL-L, Mookerjee A, Flies D, Jean S, McCann GA, Michaux J, Pak H, Huber F, Neal C, Dangaj D, Bassani-Sternberg M, Rusakiewicz S, Facciabene A, Coukos G, gimotty PA, Kandalaft LE. Rapid tumor vaccine using Toll-like receptor-activated ovarian cancer ascites monocytes. *Journal for ImmunoTherapy of Cancer* 2020; **8**:e00875. Doi:10.1136/jitc-2020-000875.

6. Ray AL, Nofchissey RA, Kahn MA, Reidy MA, Lerner MR, Wu W, Guo S, Hill SL, Weygant N, **Adams SF**, Castillo EF, Berry WL, Stout MB and Morris KT. The role of sex in the innate and adaptive immune environment of metastatic colorectal cancer. *Br J Cancer* 26 May 2020; 162; doi.org/10.1038/s4146-020-0913-8.

7. Hudson LG, Cook LS, Grimes MM, Muller CY, **Adams SF**, Wandinger-Ness A. Dual actions of ketorolac in metastatic ovarian cancer. *Cancers* 2019, 11, 1049; doi 10.3390

8. Flies DB, Higuchi T, Harris JC, Jha V, Gimotty PA, **Adams SF** Immune checkpoint blockade reveals the stimulatory capacity of tumor-associated CD103+ dendritic cells in late-stage ovarian cancer. *OncoImmunology*, DOI:10.1080/2162402X.2016.1185583

9. Higuchi T, Flies DB, Marjon NA, Mantia-Smaldone G, Ronner L, Gimotty PA, **Adams S** CTLA-4 blockade synergizes therapeutically with PARP-inhibition in BCA1-deficient ovarian cancer. *Cancer Immunol Res* 2015 Jul 2. Pii:canimm.0044.2015 [Epub ahead of print] PMID: 26138335. http://www.ncbi.nlm.nih.gov/pubmed/26138335

10. Guo Y, Kenney SR, Muller CY, **Adams S**, Rugledge T, Romero E, Murray-Krezan C, Prekeris R, Sklar LA, Hudson LG and Wandinger-Ness A. R-ketorolac targets Cdc42 and Rac1 and alters ovarian cancer cell behaviors critical for invasion and metastasis. *Mol Cancer Ther* pii: molcanther.0419.2015. [Epub ahead of print]PMID: 26206334 http://www.ncbi.nlm.nih.gov/pubmed/26206334, 2015 Jul 23.

11. Guo Y, Kenney SR, Cook L, **Adams SF,** Rutledge T, Romero E, Oprea TI, Bedrick E, Wiggins CL, Kang H, Lomo L, Muller CY, Wandinger-Ness A, Hudson LG. A novel pharmacologic activity of ketorolac for therapeutic benefit in ovarian cancer. *Clin Cancer Res.* pii: clincanres 0461.2015 [Epub ahead of print] PMID:26071482 http://www.ncbi.nlm.nih.gov/pubmed/26071482, 2015 Jun 12.

12. **Adams SF**, Benencia F. Immunotherapy for ovarian cancer: what are the targets of the future? Future Oncol. 11(9):1293-6. doi: 10.2217/fon.15.44. PMID: 25952776 http://www.ncbi.nlm.nih.gov/pubmed/25952776, 2015.

13. Muller CY, Hudson LG, Kenney SR, Guo Y, Gaede M, **Adams SF**, Rutledge T, Wandinger-Ness, A. R-ketorolac as a GTPase inhibitor: Phase 0 intraperitoneal pharmacokinetic and biologic activity in ovarian cancer patients. Abstract #135 Gynecol Oncol 133(supplement1) p262, June 2014.

14. Mantia-Smaldone G, Ronner L, Blair A, Gamerman V, Morse C, Orsulic S, Rubin S, Gimotty P, **Adams S.** The immunomodulatory effects of pegylated liposomal doxorubicin are amplified in BRCA1-deficient ovarian tumors and can be exploited to improve treatment response in a mouse model. *Gynecologic Oncology*. 133(3): 584-90, 2014 June.

15. Ramirez PT, **Adams S,** Boggess JF, et al.Robotic-Assisted Surgery in Gynecologic Oncology: A Society of Gynecologic Oncology Consensus Statement Developed by the Society of Gynecologic Oncology's Clinical Practice Robotics Task Force. *Gynecologic Oncology*. 124(2): 180-4, 2012 February.

16. Hwang WT*, **Adams SF*,** Tahirovic E, Hagemann I, Coukos G**.** Prognostic Significance of Tumor-infiltrating T-cells in Ovarian Cancer: a Meta-analysis *Gynecologic Oncology*. 124(2); 192-8. *Accompanying editorial on pages 178-9. * Authors contributed equally,* 2012 February.

17. **Adams S**, Marsh E, Elmasri W, Halberstadt SM, VanDecker S, Sammel MD, Bradbury A, Daly M, Karlan B, Rubin SC. A high response rate to liposomal doxorubicin is seen among women

with *BRCA* mutations treated for recurrent epithelial ovarian cancer.*Gynecol Oncol*. 123(3):486-91, 2011 Dec.

18. Hagemann AR, Cadungog M, Hagemann IS, Hammond R, **Adams SF**, Chu CS, Rubin SC, Zhang L, Addya K, Birrer MJ, Gimotty PA, Coukos G. Tissue-Based Immune Monitoring I: Tumor Core Needle Biopsies Allow In-Depth Interrogation of the Tumor Microenvironment *Cancer Biol Ther*. 2011 Aug 15;12(4):357-66. Epub 2011 Aug 15.

19. Alagkiozidis I, Facciabene A, Tsiatas M, Carpenito C, Benencia F, **Adams S**, Jonak Z, June C, Powell D, Coukos G. Time-dependent Cytotoxic Drugs Selectively Cooperate with IL-18 for Cancer Chemo-immunotherapy. *J Transl Med*.;9:77, 2011 May 25.

20. Cardenas-Goicoechea SJ, **Adams S**, Bhat SB, Randall T. Surgical outcomes of robotic-assisted surgical staging for endometrial cancer are equivalent to traditional laparoscopic staging at a minimally invasive surgical center. *Gynecologic Oncology*. 117(2): 224-8, 2010 May.

21. Davis MA, **Adams SF,** Eun D, Lee D, Randall TC. Robotic-assisted laparoscopic exenteration in recurrent cervical cancer Robotics improved the surgical experience for two women with recurrent cervical cancer. *Am J Obstet Gynecol*. 202(6):663.e1, 2010 June.

22. Robinson B, Liao JB, **Adams SF**, Randall TC. Vaginal Cuff Dehiscence After Robotic Total Laparoscopic Hysterectomy. *American Journal of Obstetrics and Gynecology*. 114(2Pt1):369-71, 2009 August.

23. Alagkiozidis I, Facciabene A, Carpentino C, Benencia F, Jonak Z, **Adams S**, Carroll RG, Gimotty P, Hammond R, Danet-Desnoyres G, June CH, Powell DJ, Coukos G. Increased immunogenicity of surviving tumor cells enables cooperation between liposomal doxorubicin and IL-18. *J Translational Medicine*. 7: 104, 2009 Dec.

24. **Adams SF,** Levine DA, Cadungog MG, Hammond R, Facciabene A, Olvera N, Rubin SC, Boyd J, Gimotty P, Coukos G. Intraepithelial T cells and tumor proliferation: interactions and impact on benefit from surgical cytoreduction in advanced serous ovarian cancer. *Cancer*. 115(13) 2891-902, 2009 July.

25. Gimotty P, Zhang L, Alagkiozidis I, Cadungog M, **Adams S**, Chu C, Katsaros D, Coukos G. Immune prognostic factors in ovarian cancer: lessons from translational research. *Disease Markers*. 23(5-6): 445-52, 2007.

26. Zhang L, Volinia S, Bonome T, Calin GA, Yang N , Atlamazoglou V, Liu C-G, Giannakakis A, Greshock J, Hasegawa K, Johnstone CN, **Adams S**, Lassus H, Huang J, Megraw MS, Thireou T, Liang S, Leminen A, Sandaltzopoulos R, Naomoto Y, Katsaros D, Gimotty PA, Huang Q, Bützow R, DeMichele A, Rustgi AK, Weber BL, Birrer MJ, Hatzigeorgiou AG,Croce CM, Coukos G. Genomic and epigenetic alterations deregulate microRNA expression in human epithelial ovarian cancer. *Proc Natl Acad Sci USA*. 105(19): 7004-9, 2008.

27. **Adams SF**, Hickson JA, Hutto JY, Montag A, Lengyel E, Yamada SD. PDGFR-□ as a potential therapeutic target in uterine sarcomas. *Gynecologic Oncology*. March*;* 104:524-8, 2007 March.

28. **Adams S**, Gallagher J, Mahowald M. Refusal of treatment during pregnancy. *Clinics in Perinatology*. 30: 127-140, 2003 March.

29. Yamada SD, Hickson JA, Hrobowski, Y, Vander Griend DJ, Benson D, Montag A, Karrison T, Huo D, Rutgers J, **Adams S**, Rinker-Schaeffer CW. Mitogen-activated protein kinase kinase 4 (MKK4) acts as a metastasis suppressor gene in human ovarian carcinoma. *Cancer Research.* 62:6717-6723, 2002 November.

30. **Adams SF,** Yamada SD, Montag A, Rotmensch J. An alpha-fetoprotein-producing hepatoid adenocarcinoma of the endometrium. *Gynecologic Oncology*. 83:418-421, 2001 November.

31. Betz JM, Gay ML, Mossoba MM, **Adams S**, Portz BS. Chiral gas chromatographic determination of ephedrine-type alkaloids in dietary supplements containing *Ma Huang*. *Journal AOAC International*. 80(2):303-315, 1996 March – April.

32. Mossoba MM, **Adams S**, Roach JA, Trucksess MW. Analysis of trichothecene mycotoxins in contaminated grains by gas chromatography/matrix isolation/fourier transform infrared spectroscopy and gas chromatography/mass spectrometry. *Journal AOAC International*. 79(5):1116-1123. 1996 Sept-Oct.

Invited Editorials:

1. **Adams S.** Suboptimal cytoreduction: the confounding effects of tumor biology. Gynecol Oncol. 2015 Dec;139(3):389-90. doi: 10.1016/j.ygyno.2015.10.026. PMID: 26651457

Book Chapters:

1. **Adams S.** Oncologic Emergencies. Manual of Gynecologic Oncology. In Chu C and Rubin S (eds.). New Jersey World Scientific Publishing Company 285-309, 2011.

2. **Adams S**, Rubin S. Oncologic Emergencies. In Benrubi G. (ed). *Obstetric and Gynecologic Emergencies.* New York: Churchill Livingstone, 307-15, 2010.

3. Coukos G, **Adams S** Berek J. Tumor immunology and immunotherapy. Ovarian Cancer: State of the Art. 2009.

4. Coukos G, Alagkoizidis I, Cadungog M, **Adams S**, Chu C, Conejo-Garcia JR, Zou W, Curiel T, Katsaros D, Zhang L, Gimotty P. Immune biomarkers in ovarian cancer. In: Levenback C, Sood AK, Lu KH, and Coleman RL eds. Prognostic and Predictive Factors in Gynecologic Cancers. London, UK: Informa Healthcare. pp. 125-139, 2007.

Refereed Abstracts:

1. Franco S, Wilson C, Taylor E, Medina L, De May H, Selwyn R, **Adams S**, Serda R, PD-1 immune checkpoint blockade enhances eradication of disseminated ovarian cancer. 2022 Annual Meeting of the Society of Immunotherapy of Cancer, Boston MA, November 9, 2022.

2. Falcon DM, Kinjyo I, **Adams SF**, PARP inhibition increases the suppressive capacity of tumor-associated Tregs in a BRCA1-deficient model of ovarian cancer. 2022 Annual Meeting of the Society of Immunotherapy of Cancer, Boston, MA, November 9, 2022.

3. Randall L, et al, MOONSTONE/GOG3032: A phase 2, open label, single-arm study to evaluate the efficacy and safety of niraparib and dostarlimab in patients with platinum-resistant ovarian cancer. ASCO 2022 Annual Meeting.

4. Kinjyo I, Falcon DM, Morris KT, Gimotty PA, **Adams SF** PARP inhibition interacts with IFNg in the ovarian tumor microenvironment to induce immunogenic cancer cell death and sustain anti-tumor immunity. Plenary Presentation, 2022 Annual Meeting of the American Association of Immunologists, Portland, OR, May 5, 2022

5. Falcon D, **Adams SF** The PARP inhibitor ABT-888 impairs the suppressive capacity of regulatory T cells through modulation of FOXP3 and CTLA4. 2022 Annual Meeting of the American Association of Immunologists, Portland, OR, May 5, 2022.

6. **Adams SF**, Muller CY, O'Malley D, et al. RNAseq biomarkers IFIT1B and VSTM5 predict PFS and clinical benefit in a multi-site phase I/II trial of olaparib and tremelimumab for gBRCAm recurrent ovarian cancer. Late Breaking Abstract Plenary Presentation, 2022 Annual Meeting of the Society of Gynecologic Oncology, Phoenix, AZ, March 20, 2022

7. Jones D, Falcon D, Miller M, Goff CD, Kinjyo I, Prossnitz E, **Adams SF**. A pilot study of the impact of estrogen signaling on tumor immunity in a syngeneic mouse model of ovarian cancer. 2022 Annual Meeting of the Society of Gynecologic Oncology, Phoenix, AZ, March 18, 2022

8. Falcon D, Miller M, Kinjo I, Gregory C, **Adams S**. Estrogen deprivation influences the activation and polarization status of tumor-infiltrating T cells in a mouse model of ovarian cancer. Society for Immunotherapy of Cancer Annual Meeting, November 6, 2020

9. Randall L, et al, MOONSTONE/GOG3032: A phase 2, open label, single-arm study to evaluate the efficacy and safety of niraparib and dostarlimab in patients with platinum-resistant ovarian cancer. EMSO Virtual Congress 2020.

10. Miller M, **Adams SF** Assessing the impact of immune therapy in the setting of PARP inhibitor resistance. Plenary talk, Western Association of Gynecologic Oncologists Annual Meeting, June 2020.

11. Kinjo I, **Adams SF**. PARP inhibition interacts with IFNg in the ovarian tumor microenvironment to promote immunogenic cell death. AACR Annual Meeting, June 2020.

12. Serda R, DeMay H, Gou J, Franco S, Kusewitt D, **Adams S** Creating personalized cancer vaccines through cell biomineralization. Society for Immunotherapy of Cancer Meeting, November 2019.

13. DeMay, H, Desai SP, Kinjyo I, **Adams SF**. Enriching effector T cells in the peritoneal tumor microenvironment using the route of cisplatin administration (IV vs IP). AACR Ovarian Cancer Conference, Orlando, Florida September 2019

14. Kinjyo I, **Adams SF** PARP inhibition interacts with IFN-gamma in the ovarian tumor microenvironment to promote immunogenic cell death. Invited plenary session, Immunology of Human Diseases Symposium, New Mexico Consortium, Santa Fe July 30 2019.

15. Desai SP, Bahmani M, Kinjo I, DeMay H, **Adams SF** T cell trafficking within the peritoneal tumor environment and ovarian cancer progression. Annual Meeting of the American Society of Clinical Oncologists May 31, 2019 Chicago, IL

16. DeMay H, Desai SP, Kinjo I, **Adams SF** CD49dhigh T cells in the ovarian cancer microenvironment are a potential target for the optimization of immune therapy in ovarian cancer. American Society of Clinical Oncologists, May 31, 2019.

17. De May H, Guo J, Tang L, **Adams S**, Serda R. Biomineralized tumor cells as a therapeutic vaccine for ovarian cancer. University of New Mexico STEM Research Day Feb 2019.

18. Harris JC, Sethi A, Muller CY, Rutledge TL, Rixe O, Morris KT, Gimotty PA, **Adams SF**, "Correlation between prior surgery and immune related gastrointestinal toxicity among women receiving olaparib and tremelimumab for the treatment of recurrent ovarian cancer". Society for Immunotherapy of Cancer Annual Meeting, Washington DC, November 2018

19. Ray A, Nofchissey R, **Adams S**, Berry W, Morris K. "Innate and adaptive immune responses to metastatic colorectal cancer differ by sex and correlate with survival. Society for Immunotherapy of Cancer Annual Meeting, Washington DC, November 2018

20. Noureddine A, Tang L, Sanchez K, Baty K, Brinker J, Selwyn R, **Adams S**, Serda RE, "Nanoparticle platforms for cancer immunotherapy" BioVenture Conference, March 2018

21. Guo J, Brinker J, Selwyn R, **Adams S**, Serda RE, "Siloxane cell replicas for cancer immunotherapy" BioVenture Conference, March 2018

22. Sahebjam S, Yap TA, Hong DS, Rao A, **Adams S**, Efuni S, Grebennik D, Healy D, Ogunmefun E, Liu Y, Tayama T, Rixe O. KHK2455, a long-acting selective IDO-1 inhibitor in combination with mogamulizumab, an anti-CCR4 monoclonal antibody, in patients with advanced solid tumors: preliminary safety report and phamacodynamic activity from a first-in-human study. Poster presentation, Annual Meeting of the Society for Immunotherapy of Cancer, Washington DC, November 8, 2017.

23. **S Adams**, O Rixe, J-H Lee, D McCance, S Westgate, S Eberhardt, T Rutledge, C Muller, "Phase I study combining olaparib and tremelimumab for the treatment of women with BRCA-deficient recurrent ovarian cancer" Annual Meeting of the American Society of Clinical Oncology, Chicago, IL June 3 2017.

24. Flies D, Ornatowski W, Higuchi T, **Adams SF**. IL-10 blockade sensitizes ovarian cancer to anti-PD-1 antibody therapy by editing tumor-associated leukocyte populations. Poster presentation; Society for the Immunotherapy of Cancer Annual Meeting, Washington DC, November 9, 2016.

25. Higuchi T, Flies D, Marjon NA, Mantia-Smaldone G, Ronner L, Gimotty P, **Adams SF**. Poly (ADP-ribose) polymerase-inhibition and CTLA-4 blockade exhibit therapeutic synergy against BRCA1-deficient ovarian cancer; Poster presentation; New York City, October 6, 2014, Cancer Immunotherapy: Out of the Gate, Cancer Research Institute Conference.

26. Muller CY, Hudson L, Kenney SR, Guo Y, Gaede M, **Adams S**, Rutledge T, Wandinger-Ness A. (R)-Ketorolac as a GTPase inhibitor: Phase 0 intraperitoneal pharmacokinetic and biologic activity in ovarian cancer patients; Plenary session presentation, Tampa Florida, 2014 Annual meeting of the Society of Gynecologic Oncologists.

27. Alldredge J, Flies D, Higuchi T, Ma T, **Adams S.** Impaired interleukin-10 signaling restricts ovarian cancer growth in the peritoneal cavity. Abstract presented. Chicago, IL. 2014 annual meeting of the American Society of Clinical Oncology.

28. Higuchi T, Flies D, Mantia-Smaldone G, Ronner PL, Alldredge J, Orsulic S, **Adams S.** PARP-inhibition synergizes with anti-CTLA-4 immune therapy to promote rejection of peritoneal tumors in mouse models of ovarian cancer; Poster presentation, Tampa Florida, 2014 Annual meeting of the Society of Gynecologic Oncologists.

29. Guo Y, Kenney SR, Romero E, Oprea T, **Adams S**, Muller C, Sklar L, Hudson L, Wandinger-Ness A. Selected NSAIDs target GTPases for ovarian cancer therapy; Miami, Florida, 2013 American Association for Cancer Research Ovarian Cancer meeting,

30. Morse C, Jha V, Loomis R, Ord T, Olalere D, Mainigi M, **Adams S**. Ovulation induction with gonadotropins accelerates tumor growth and alters the intratumoral T cell population in an ovarian cancer model. Poster presentation, Los Angeles, March 2013, Annual Meeting of the Society of Gynecologic Oncologists.

31. Mantia-Smaldone G, Gamerman V, Gimotty P, Loomis R, Orsulic S, Rubin S, Coukos G, **Adams S.** CD8+ T cell-mediated immune responses are critical to the increased efficacy of Doxil in *BRCA1* deficient tumors. Featured poster presentation, Austin Texas, Annual Meeting of the Society of Gynecologic Oncologists.

32. Mantia-Smaldone G, Marsh E, Loomis R, Orsulic S, Rubin S, Coukos G, **Adams S**. BRCA1 deficient tumors demonstrate enhanced cytotoxicity and T cell recruitment following Doxil treatment. Plenary session presentation, Orlando, Florida, 2011 Annual Meeting of the Society of Gynecologic Oncologists.

33. Kandalaft L, Powel D, Smith L, **Adams S**, Liao J, Hagemann A, Tanyi J, Ye Q, Best A, Torigian D, Chu C, Rugin S, Bosch M, Coukos G. Autologous whole tumor antigen combinatorial immunotherapy for recurrent ovarian cancer. Poster presentation, Washington DC, September 2010, 25th annual meeting of the iSTBc.

34. Jean S, **Adams SF**, Facciabene A, Peng X, Coukos G. Rapid, durable restoration of malignant ascites-derived antigen presenting cell immunogenicity by Toll-like receptor agonists. Poster presentation, Chicago, IL, 2010 meeting of the American Society of Clinical Oncology.

35. **Adams SF,** Facciabene A, McCann G, Jean S, Peng X, Gamerman V, Gimotty P, Coukos G. Intraperitoneal injection of ascites-derived antigen-presenting cells following *ex vivo* treatment with TLR-agonists confers significant protection against tumor challenge. Poster presentation, San Francisco, CA, 2010 meeting of the Society of Gynecologic Oncologists.

36. Marsh EB, **Adams SF**, Sammel M, Coukos G, Rubin SC. Women with germline BRCA mutations show significantly improved response rates, progression-free and overall survival following treatment with liposomal doxorubicin (Doxil) for recurrent ovarian cancer. Poster presentation, San Francisco, CA, 2010 meeting of the Society of Gynecologic Oncologists.

37. Tanyi JL, Montone K, McCann G, Coukos G, Hagemann A, Liao J, **Adams S**, Chu CS Clinical and immunologic predictors of bevacizumab-induced gastrointestinal perforation. Poster presentation, San Francisco, CA, 2010 meeting of the Society of Gynecologic Oncologists.

38. Davis MA, **Adams SF,** Eun D, Lee D, Randall TC. Robotic assisted laparoscopic anterior pelvic exenteration in recurrent cervical cancer. Poster presentation, San Francisco, CA, 2010 meeting of the Society of Gynecologic Oncologists.

39. **Adams S**, Facciabene A, Peng X, Coukos G. Malignant ascites cells as a potential source for both active and passive immunotherapy for women with ovarian cancer. Poster presentation, San Antonio, TX, 2009 meeting of the Society of Gynecologic Oncologists.

40. **Adams S**, Facciabene A, Peng X, Coukos G. Development of a polyvalent cellular vaccine against ovarian cancer using ascites-derived antigen presenting cells. Poster presentation, 2008 Annual Meeting of the Society of Gynecologic Oncologists.

41. **Adams S**, Facciabene A, Peng X, Coukos G. Development of a polyvalent cellular vaccine against ovarian cancer using ascites-derived antigen presenting cells. Plenary session presentation at the 2008 meeting of the American Association of Cancer Research, San Diego, California

42. **Adams S**, Levine D, Cadungog M, Zhang L, Hammond R, Boyd J, Gimotty P, Coukos G. Highly proliferative serous ovarian tumors recruit high numbers of intratumoral CD8+ T cells. Poster presentation, 2008 Annual Meeting of the Society of Gynecologic Oncologists

43. Kim SH, Lee KK, **Adams S**, Cadungog M, Chu CS, Katsaros D, Gimotty P, Coukos G. Intratumoral T cells in recurrent epithelial ovarian carcinomas. Poster presentation at the 2008 Annual Meeting of the Society of Gynecologic Oncologists.

44. **Adams S**, Levine D, Cadungog M, Zhang L, Barakat R, Hammond R, Boyd J, Gimotty P, Coukos G. Ki67 expression provides long-term prognostic information for suboptimally debulked patients with advanced epithelial ovarian cancer. Poster presentation, Chicago, Illinois, 2007 American Society of Clinical Oncology Meeting.

45. **Adams S,** Levine D, Cadungog M, Zhang L, Barakat R, Hammond R, Boyd J, Gimotty P, Coukos G. Immune biomarkers are predictive of overall survival in advanced epithelial ovarian cancer. Plenary session presentation at the 2007 meeting of the Society of Gynecologic Oncologists.

46. **Adams S**, Yocom J, Montag A, Hickson J, Tomek R, Lengyel E, Yamada SD. PDGFR-alpha is highly expressed in gynecologic sarcomas. Poster presentation, New Orleans, LA, 2005 meeting of the Society of Gynecologic Oncologists.

47. **Adams S,** Montag A, Waggoner S, Rotmensch J, Yamada SD. C-kit expression in uterine sarcomas. Presented at the 2002 Resident Research Day, Chicago Association of Gynecologic Oncologists. First place award.

Patents:

U.S. Provisional Patent Application No. 62/557,934 Filed September 13, 2018 2017-090-02 "Siloxane Cell Replicas, Methods of Making and Methods of Using" Inventors: Rita Serda, Jeff Brinker, Jacob Agola, Jimin Guo, **Sarah Adams**

Original Clinical Protocols:

1. INST1509 “Single institution prospective laboratory study of cancer and immune cells in the ascites fluid of ovarian cancer patients to test alternative therapies”
   Principal Investigator: **Sarah Adams, MD**
   Sponsor: University of New Mexico Cancer Center
   Dates: 2014-present
   Sites: University of New Mexico

2. INST 1419 ”A phase 1-2 study of the Combination of Olaparib and Tremelimumab, in BRCA1 and BRCA2 Mutation Carriers with Recurrent Ovarian Cancer” (NCT02571725)
   Principal Investigator: **Sarah Adams, MD**
   Sponsor: New Mexico Cancer Care Alliance
   Target enrollment: 50
   Dates: March 2016-present
   Sites: New Mexico Cancer Care Alliance, University of Virginia, Ohio State University, Moffit Cancer Center.

3. NRG-GY021 “A phase II randomized trial of olaparib versus olaparib plus tremelimumab in platinum-sensitive recurrent ovarian cancer” (NCT04034927)
   Study Chair: **Sarah Adams, MD**
   Study Co-Chair: Paul DiSilvestro, MD
   Sponsor: National Clinical Trials Network through the National Cancer Institute
   Target enrollment: 170
   Status: Opened October 12, 2019; selected for translational collaboration with the Cancer Immune Monitoring an Analysis Centers and Cancer Immunologic Data Commons.

Current Grant and Contract Funding:

1. Mechanisms of selective therapeutic synergy of PARP inhibition and CTLA4 blockade engaged by interferon gamma in the ovarian tumor microenvironment
   R37CA229221 MERIT Award
   Principal Investigator: **Sarah Adams, MD**
   Funding Organization: National Cancer Institute
   Funding Dates: 02/2019-01/2026
   Goal: To determine how IFNg in the tumor microenvironment skews cell death in response to PARP inhibition to promote tumor immunity in ovarian cancer.

2. A novel mechanism for the immunomodulatory effects of PARP inhibitors
   OCRA Liz Tilberis Career Development Award
   PI: Ichiko Kinjyo, MD, PhD
   Role: Research Mentor
   Funding Organization: Ovarian Cancer Research Alliance
   Funding Dates: 06/21-05/24
   Goal: To test the impact of PARP inhibition on T cell metabolism and function in ovarian cancer models.

3. Impact of estrogen signaling on tumor immunity and response to immune therapy in ovarian cancer
   OC200292 Pilot Award
   Principal Investigator: **Sarah Adams, MD**
   Funding Organization: Department of Defense Ovarian Cancer Research Program

Funding Dates: 05/01/21-04/30/23
Goal: To test the impact of selective estrogen receptor antagonists on tumor-associated lymphocyte function and response to immune therapy in ovarian cancer models.

4. Treating advanced uterine endometrial cancer by reactivating p53
CA210610
Principal Investigator: Kimberly Leslie, MD
Role: Co-Investigator
Funding Organization: Department of Defense Endometrial Cancer Research Program
Funding Dates: 2022-2027
Goal: To identify a safe and effective treatment for advanced endometrial cancer through reactivation of the p53 tumor suppressor.

5. Oncolytic immunotherapy for ovarian cancer
UNMCCC Pilot Award
Principal Investigator: Eric Bartee, PhD
Role: Collaborator
Funding Organization: University of New Mexico Comprehensive Cancer Center
Funding Dates: March 2021-December 2022
Goal: To conduct preliminary studies testing a combination of modified oncolytic viral therapy and cytotoxic agents for treatment efficacy in ovarian cancer models.

6. INST 1419: A phase 1-2 study of the Combination of Olaparib and Tremelimumab, in BRCA1 and BRCA2 Mutation Carriers with Recurrent Ovarian Cancer
Principal Investigator: **Sarah Adams, MD**
Sponsor: New Mexico Cancer Care Alliance
Funding Organization: AstraZeneca
Funding Dates: May 2016-December 2023
Goal: To evaluate the safety and preliminary efficacy of combined treatment with a PARP inhibitor and a CTLA4 immune checkpoint antibody for the treatment of recurrent ovarian cancer in women with germline BRCA gene mutations.

7. University of New Mexico Cancer Center Support Grant
P30CA118100
Principal Investigator: Alan Tomkinson, PhD
Role: Co-Leader of the Cancer Therapeutics Research Program
Funding Dates: 05/18-08/23
Goal: To present the accomplishments and strategic plans for the Cancer Therapeutics Research Program as part of the CCSG P30 renewal and to promote faculty development and program growth through the development of seminars and retreats.

Past Grant and Contract Funding:

1. Monitoring therapeutic response to cancer immunotherapy using non-invasive imaging
Principal Investigator: **Sarah Adams, MD**
Funding Organization: University of New Mexico Comprehensive Cancer Center
Funding Dates: July 2018-2019

Goal: To test a non-invasive strategy for assessing the efficacy of immune therapy in murine cancer models.

2. Correlative studies for INST1419: A phase 1-2 study of the Combination of Olaparib and Tremelimumab, in BRCA1 and BRCA2 Mutation Carriers with Recurrent Ovarian Cancer
   Principal Investigator: **Sarah Adams, MD**
   Funding Organization: University of New Mexico Comprehensive Cancer Center Early Phase Clinical Research Support
   Funding Dates: September 2017-September 2019
   Goal: To support initial analyses of patient samples collected through INST1419

3. Developing predictive biomarkers of autoimmune toxicity associated with immune checkpoint blockade in the treatment of ovarian cancer
   Principal Investigator: **Sarah Adams, MD**
   Funding Organization: Seligman Family Fund
   Funding Dates: August 2017-June 2019
   Goal: To conduct preliminary assessments of toxicity patterns in women enrolled in INST1419.

4. A pilot study testing the expression of an interferon gene signature in tumor samples from women enrolled in a phase I/II study of combined PARP-inhibition and immune checkpoint blockade
   Principal Investigator: **Sarah Adams, MD**
   Funding Organization: University of New Mexico Cancer Center Shared Resources Pilot Grant
   Funding Dates: May 2017-April 2018
   Goal: To conduct preliminary analyses of patient samples collected as part of INST1419.

5. Resident lymphocytes: critical targets for successful immune therapy
   Principal Investigator: **Sarah Adams, MD**
   Funding Organization: University of New Mexico Cancer Center Shared Resources Pilot Grant
   Funding Dates: August 2016-August 2017
   Goal: To test a role for resident lymphocytes in the response to immune therapy in ovarian cancer models.

6. Liz Tilberis Early Career Renewal Award, "Development of combination therapy with PARP-inhibitors and anti-CTLA4 immunomodulation for BRCA1- epithelial ovarian cancer"
   Principal Investigator: **Sarah Adams, M.D.**
   Funding Organization: Ovarian Cancer Research Fund
   Funding Dates: 02/01/15-01/31/17
   Goal: To complete preclinical studies to support the translation of a treatment protocol combining PARP inhibition and anti-CTLA4 antibody for women with $BRCA^{-/-}$ ovarian cancer.

7. "IL-10 blockade to restrict intraperitoneal ovarian cancer metastasis"
   Principal Investigator: **Sarah Adams, M.D.**
   Funding Organization: Phi Beta Psi Foundation
   Funding Dates: 2014-2016
   Goal: To test the role of interleukin-10 in permitting peritoneal dissemination of ovarian cancer cells.

8. "Targeting DNA repair pathways to sensitize ovarian tumor to immune therapy"
   Principal Investigator: **Sarah Adams, M.D.**
   Funding Orginzation: Oxnard Foundation
   Funding Dates: 2014-2018

Goal: To examine a role for DNA repair pathways in sensitizing ovarian tumors to immune therapy.

9. Mentored Research Scholar Award, "Intestinal immune tolerance promotes ovarian cancer dissemination"
   Principal Investigator: **Sarah Adams, M.D.**
   Funding Organization: The American Cancer Society
   Funding Dates: 2012-2017
   Goal: To determine how intestinal leukocytes contribute to ovarian cancer progression in the peritoneal cavity using murine cancer models.

10. Liz Tilberis Scholar Award, "Development of combination therapy with PARP-inhibitors and anti-CTLA4 immunomodulation for $BRCA1^{-/-}$ epithelial ovarian cancer"
    Principal Investigator: **Sarah Adams, M.D.**
    Funding Organization: The Ovarian Cancer Research Fund
    Funding Dates: 2011-2015
    Goal: To test a protocol combining PARP inhibition and anti-CTLA4 antibody the treatment of $BRCA^{-/-}$ ovarian cancer in murine models.

11. "Point-of-care Tumor Marker Detection – Ovarian Tumors"
    Principal Investigator: Justin Baca, MD, PhD, Department of Emergency Medicine
    Collaborator: **Sarah Adams, M.D.**
    Funding Organization: The Center for Future Technologies in Cancer Care
    Funding Dates: 2014-2015
    Goal: To develop a biosensor system for point-of-care diagnosis of ovarian cancers.

12. Pilot Research Award, "A pilot study to evaluate intraperitoneal leukocyte function and trafficking in the setting of ascites and peritoneal carcinomatosis in a mouse model of ovarian cancer"
    Principal Investigator: **Sarah Adams, M.D.**
    Funding Organization: University of Pennsylvania
    Funding Dates: 2011 - 2012
    Goal: To develop preliminary data describing the role of intestinal leukocytes in ovarian cancer dissemination.

13. "Characterization of the enhanced anti-tumor activity of Doxil in women with hereditary ovarian cancer"
    Principal Investigator: **Sarah Adams, M.D.**
    Funding Organization: The Kaleidoscope of Hope Ovarian Cancer Foundation
    Funding Dates: 2010-2011
    Goal: Determine the role of T cells in mediating the clinical response to Doxil in BRCA1-ovarian cancers.

14. "Immunotherapy for advanced or recurrent ovarian cancer using autologous ascites cells"
    Principal Investigator: **Sarah Adams, M.D.**
    Funding Organization: Ovarian Cancer SPORE Pilot Project Award
    Funding Dates: 2009 - 2010
    Goal: Elucidate the mechanisms underlying the rapid restoration of anti-tumor immunogenicity of ascites-derived antigen presenting cells in human samples and murine models.

15. Paul Calabresi Award for Research in Clinical Oncology (NIH K12) Cellular and molecular biologics in clinical cancer research
    Principal Investigator: **Sarah Adams, M.D.**
    Funding Organization: National Institutes of Health
    Funding Dates: 2009-2012
    Goal: Career development award to protect 75% FTE for research in ovarian cancer immunology following the completion of clinical fellowship training.

16. Young Investigator Award. "Optimization of personalized immunotherapy for women with ovarian cancer using autologous ascites cells."
    Principal Investigator: **Sarah Adams, M.D.**
    Funding Organization: ASCO Cancer Foundation
    Funding Dates: 2009-2010
    Goal: To test a vaccine strategy for ovarian cancer using ascites-derived antigen-presenting cells.

17. "Development of personalized immunotherapy for ovarian cancer using autologous ascites cells"
    Principal Investigator: **Sarah Adams, M.D.**
    Funding Organization: Sandy Rollman Ovarian Cancer Foundation
    Funding Dates: 2008-2009
    Goal: To perform pre-clinical feasibility studies testing an ascites-based tumor vaccine for ovarian cancer.

18. "Development of immunotherapy for ovarian cancer using ascites antigen-presenting cells"
    Principal Investigator: **Sarah Adams, M.D.**
    Funding Organization: Florence and Marshall Schwid Ovarian Cancer Research Grant, Gynecologic Cancer Foundation
    Funding Dates: 2007 - 2008
    Goal: To assess the clinical utility of ascites-derived leukocytes for the development of a therapeutic cancer vaccine.

Journal Reviewer:

2022	Reviewer, *Nature Communications*
2022	Associate Editor, *Cancer*
2022	Reviewer, *Nature*
2022	Reviewer, *Cancer Research*
2020-	Reviewer, *Cancers*
2019-	Reviewer, *Journal of Immunotherapy of Cancer*
2017-	Reviewer, *Cancer*
2017-	Appointed member, Editorial Board, *Gynecologic Oncology*
2016-	Reviewer, *OncoImmunology*
2007-	Reviewer, *Gynecologic Oncology*, recognized as a top reviewer,2011.
2007-	Reviewer, *American Journal of Obstetrics and Gynecology*
2011-	Reviewer, *British Journal of Medicine and Medical Research*
2014-	Reviewer, *Obstetrics and Gynecology*

National Grant Review Committees:

2022-2026	Appointed Member, Cancer Cellular Immunotherapy Study Section, NCI
2021	Ad hoc Reviewer, Department of Defense Ovarian Cancer Research Program

2020-2022	Appointed Member, Cancer Immunotherapy and Immunopathology Study Section, NCI Co-Chair, February 2022
2020	Ad Hoc Reviewer, ZCA1 RPRB-6 (M1) NCI SPORE III
2019	Reviewer, NCI Moonshot Initiative: Advancing Cancer Immunotherapy by Mitigating Adverse Events, RFA-CA-19-044
2019	Reviewer, NCI U54, Immuno-engineering to Improve Immunotherapy, National Cancer Institute RFA-CA-10-013
2019	Ad hoc Reviewer, Cancer Immunotherapy and Immunopathology Study Section, NCI
2018	Scientific Reviewer, Department of Defense Ovarian Cancer Research Program
2018	Reviewer, NCI U01: Opportunities for Collaborative Research at the NIH, PAR-18-646
2018, 2020	Reviewer, Ohio State University Comprehensive Cancer Center Intramural Research Program
2017-present	Scientific Review Committee, Kaleidoscope of Hope Ovarian Cancer Foundation
2015	Reviewer, Department of Defense, Ovarian Cancer Research Program

Teaching/Education:

Classroom and Small Group Sessions:

Lecturer, Immunology, Foundations of Medicine, 2016 - 2023
PGY1 Medical Student Course. Deliver an annual lecture on cancer immune therapy.

Lecturer, BIOM 515, Cancer Biology and Immunology, Spring 2016
Graduate student seminar at the University of New Mexico. Responsible for a seminar on tumor immune therapy and clinical applications of cancer immunobiology.

Faculty Sponsor, Cancer immunology and the tumor microenvironment journal club, Spring 2014 and 2015. Weekly journal club covering topics spanning immunology, immunotherapy, tumor microenvironmental factors impacting disease outcomes.

Lecturer, BIOM 502, Mechanisms of Disease and Clinical Applications, 2011 and 2012
Graduate student seminar course sponsored by the University of Pennsylvania Department of Cell Biology and Immunology. Presented two seminars in both 2011 and 2012: "Ovarian cancer: origins and metastases", and "Endometrial cancer: mechanisms of disease". *Received the highest score on student evaluations among the participating faculty lecturers.*

Original Curriculum Development

SGO BRIDGES Collaborative Research Initiative: Methodology in Clinical Trials and Translational Science to Address Critical Gynecologic Cancer Research Questions. Designed a year-long intensive curriculum spanning preclinical studies to phase III clinical trials, survivorship and outcomes research in gynecologic oncology. Target audience is gynecologic oncologists or medical oncologists or radiation oncologists within their first 10 years of practice. Goal is to develop the next generation of clinical investigators to design and lead innovative investigator-initiated trials to advance the field of gynecologic oncology. Approved by the SGO Executive Committee and the Board of Directors of the Society of Gynecologic Oncologists on October 28, 2021. Funding support obtained in April 2022. Launch date is January 25, 2023.

Resident and Fellow Education:

Fellowship didactics: Tumor immunology; Immune related adverse events; Management of advanced endometrial cancer; Ovarian cancer biology; Cancer in pregnancy; etc. 2019-present.

Adnexal masses and Ovarian Cancer, Resident School Session, April 2013

Endometrial Cancer, Resident School, 2018

Adnexal masses and Ovarian Cancer, Intern School, July 2013, July 2014, July 2015

Teaching during morning rounds, surgical cases, clinic sessions for residents, students, GYO fellows, rotating oncology fellows - ongoing

Remedial surgical instruction for OB/GYN residents, September-October 2014

Undergraduate and pre-baccalaureate student research mentoring:

Abigail Perce, chemistry major, Smith College, 2022-2023

Taylor Landfair, Undergraduate Pipeline Summer Program, UNM June-Aug 2021

Alina Pillmore, undergraduate at the University of New Mexico. June 2019-present

Maryam Bahmani, BA, T cell trafficking in the ovarian tumor environment. November 2018-June 2019. Subsequently accepted into the PhD program at the University of New Mexico.

Mercedes Matlock, Undergraduate Pipeline Summer Program, UNM June-Aug 2018

Lukas Ronner: undergraduate at Carnegie Mellon University; Evaluation of the impact of PARP-inhibition on the immunophenotype of ovarian cancer cells, 2010 - 2011

Medical student research mentoring:

Jaryse Harris, MD: Mechanisms of therapeutic synergy using PARP inhibition and CTLA4 blockade; Gastrointestinal toxicity in women treated with PARP inhibition and CTLA4 immune checkpoint blockade. 2014-2021

Nicole Marjon, M.D.,Ph.D: Impact of PARP-inhibition on the recruitment of T cells to ovarian cancer implants; Role of IL10 in the development of peritoneal metastases in an ovarian cancer model. March 2014 – May 2015

Henning DeMay, M.D.:The impact of surgery on response to primary adjuvant chemotherapy in a murine tumor model. May 2014 –May 2015

Christopher Smith, M.D.: The role of IL10 in ovarian cancer dissemination. September 2014 – May 2015

Christopher Morse, M.D.: Impact of fertility treatment on leukocyte infiltration of tumor implants and on ovarian cancer growth. 2011 – 2012

Graduate student research mentoring:

Henning DeMay, MD/PhD student 2016-2020: The role of resident lymphocytes in patterns of ovarian cancer dissemination and recurrence; Development of a biomineralized cancer vaccine.

Resident research mentoring:

Jill Alldredge, M.D., Determine the role of IL10 in the development of peritoneal metastases in an ovarian cancer model. Resident Research Award 2015, 2013 – 2015. *Recipient of the 2015 Resident Research Prize.*

Stephanie Jean, M.D., Functional plasticity of the ascites-derived leukocyte populations, 2009 – 2010.

S. Joel Cardenas-Goicoechea, M.D.: Surgical outcomes of robotic-assisted staging for endometrial cancer compared with traditional laparosocopic methods. 2008 – 2010

Mitzie Davis, M.D.: Robotic-assisted laparoscopic exenteration for recurrent cervical cancer. 2009 – 2011.

Barbara Robinson, M.D.: Vaginal cuff dehiscence after robotic total laparoscopic hysterectomy. 2010 - 2011

Post-doctoral fellow research mentoring:

Devin Jones, MD, Gynecologic Oncology Fellow: Effects of selective estrogen receptor antagonists on tumor-associated T cell phenotype and functional capacity. July 2021-present.

Marina Miller, MD, Gynecologic Oncology Fellow: Effects of estrogen deprivation on the ovarian tumor microenvironment and impact on response to immune therapy. July 2019-present

Daniel Falcon, PhD, ASERT Fellow: Regulatory T cell editing in response to PARP inhibition and CTLA4 immune checkpoint blockade. September 2019-present

Sharina Palencia Desai, PhD: Trafficking of tumor-associated lymphocytes in ovarian cancer models. January 2017-present. *Awarded a postdoctoral training grant 2017-2018.*

Dallas Flies, Ph.D.: Characterization of the role of the peritoneal immune environment in ovarian cancer development and progression. 2013 – 2016. *Awarded a T32 Postdoctoral Fellow Immunology Grant for 2014-2015.*

Tomoe Higuchi, M.D., Ph.D: Development of combination therapy for ovarian cancer using PARP-inhibition and immune checkpoint blockade. 2013-2016.

Vibha Jha, Ph.D: Identification of CD103 dendritic cells in the setting of ovarian tumor carcinomatosis in murine models. 2011-2012.

Gina Mantia-Smaldone, M.D., Gynecologic Oncology Fellow: Evaluation of the immunomodulatory effects of Doxil chemotherapy in BRCA-deficient ovarian cancer. 2010 – 2012.

Evelyn, Marsh, M.D., Gynecologic Oncology Fellow: Differential response to Doxil in patients with hereditary ovarian cancer. 2009 – 2010.

Faculty Mentoring:

Translational Science Initiative Seed Grant recipient teams 2020-present:
Dario Marchetti, PhD and Bridget Fahy, MD
Andrew Sussman, PhD and Bernard Tawfik, MD
Curt Hageman, MD and Scott Ness, PhD
Michelle Ozbun, PhD and Colleen McCormick, MD
Charles Foucar, MD and Peng Mao, PhD

Ichiko Kinjyo, MD, PhD, Research Assistant Professor, Division of Molecular Medicine. Career Development Grant Recipient 2020. 2018-present

Emily Wu, MD, Assistant Professor, Division of Gynecologic Oncology 2019-present

Benjamin Ferguson, MD, PhD, Assistant Professor, Division of Surgical Oncology 2020-present

Jennifer Ribiero, PhD, Assistant Professor, Brown University, 2020

Supervisory Role:

Director, Residency Research Program, Department of Obstetrics and Gynecology, University of New Mexico. Resource and curriculum development to support resident research projects. August 2014 – 2018.

Departmental Liaison, Medical Student Research Program, University of New Mexico School of Medicine. July 2015-2018.

Associate Director, Translational Science. 2020-present. Design and oversee program and infrastructure development to support translational investigators at the UNM Cancer Center.

Director, Translational Science Initiative (TSI). 2020-present. Developed and launched a program to support collaborations among clinical and translational investigators. As part of this initiative, I oversee the distribution of seed grants to support new collaborative pilot projects. In this role, I mentor applicants in protocol development and research methods.

Adams Lab. 2009-present. I head an independently funded translational research lab focused on ovarian cancer immunology and therapeutic development.

Service:

Present Patient Care Activities at UNM Hospital:

Inpatient: Coverage of the inpatient gynecologic oncology service including management of all inpatients and consults, scheduled gynecologic oncology surgeries, emergent surgical consultations and management of abnormal placentation cases. 17 weeks per year through 2018, currently 13 weeks per year.

Outpatient: Weekly outpatient clinic at the UNMCCC including cancer risk reduction, perioperative care, treatment planning, management of chemotherapy, immune therapy and treatment for patients enrolled on clinical trials, and end-of-life care.

UNMCCC Administrative Roles:

Associate Director, Translational Science Research, UNMCCC Senior leadership position at the UNM Comprehensive Cancer Center. Responsible for developing infrastructure and strategies for faculty engagement and retention to support the translation of Cancer Center science to clinical interventions.

Director, Translational Science Shared Resource Developed and launched a program to support collaborations among clinical and translational investigators. The TSI sponsors quarterly meetings of a Translational Science Focus Group, provides seed funding to support collaborative pilot projects, and supports two developing shared resources, a Correlative Science Lab and a Protocol Development Team. The goal of the TSI is to support the integration of translational studies in clinical protocols and to promote the development of investigator initiated trials based on UNMCCC science.

Co-Leader, P30 Cancer Therapeutics Research Program Presented the Cancer Therapeutics Research Program accomplishments and strategic plans for the CCSG site visit for the UNMCCC in 2020. Co-lead the research program – organize seminars, strategic meetings, faculty recruitment, research support for members.

UNM Committees:

2023	UNM HSC Strategic Planning Working Group, Research and Economic Development
2022	Search Committee, UNMCCC Director and CEO
2021	Search Committee, Senior Clinical Trialist, UNMCCC
2021	Search Committee, Phase I Medical Oncologist, UNMCCC
2020-	Chair, Translational Science Focus Group, UNMCCC
2018-	Co-chair, Faculty Search Committee, Immunology, UNMCCC
2015-2021	University of New Mexico Health Sciences Center Institutional Review Board
2015	Faculty Recruitment Committee, Immunology and cell signaling, UNMCCC
2014-	Program Evaluation Committee, OB/GYN Residency Program, UNM
2013-	Data Safety Monitoring Committee, UNMCCC
2013-	Ovarian Cancer Research Group, Cancer Research Facility, UNM

National Committees:

2022	Scientific Advisor, Ovarian Cancer Research Alliance
2021-	Co-Director, SGO BRIDGES Research Initiative
2021-2022	Invited member, Society for Immunotherapy of Cancer (SITC) Guideline Expert Panel for Gynecologic Malignancies
2021-2022	Program Committee, American Association for Cancer Research 2022 Annual Meeting
2020-2022	Appointed Co-Chair, 2022 Annual Meeting of the Society of Gynecologic Oncologists
2019-	Core Member, Developmental Therapeutics Committee, NRG Oncology
2019-2022	Steering Committee Member, MOONSTONE Trial: A Phase II Open-Label, Single-Arm Study to Evaluate the Efficacy and Safety of the Combination of Niraparib and TSR-042 in Patients with Platinum-Resistant Ovarian Cancer, Tesaro (NCT03955471)
2019	Western Association of Gynecologic Oncology Program Committee

2018-	Core Member, Ovarian Committee, NRG Oncology
2018-2019	Invited member, Expert Panel for the Pathology and Laboratory Quality Center of the College of American Pathologists: "MSI Testing in Patients being considered for Checkpoint Inhibitor Therapy"
2017-	Scientific Review Committee, Kaleidoscope of Hope Ovarian Cancer Foundation
2017-	SWOG appointed member, Uterine Taskforce, NIH Gynecologic Cancer Steering Committee
2016-2017	Program Committee, Society of Gynecologic Oncology
2015-	Developmental Therapeutics Committee, NRG Oncology
2015-2017	Congressional Liaison, Society of Gynecologic Oncology
2012-2016	Medical advisor, HERA Ovarian Cancer Foundation
2012-2014	Board member, HERA Ovarian Cancer Foundation
2009-2014	Clinical Practice Committee, Society of Gynecologic Oncology

Meeting sessions chaired:

2020-2022	Co-Chair, 2022 Annual Meeting of the Society of Gynecologic Oncology
2019-2021	Lead bimonthly safety assessment meetings as the national Study Chair for NRG-GY021, A phase II randomized trial of olaparib versus olaparib plus tremelimumab in platinum-sensitive recurrent ovarian cancer" (NCT04034927)
2020-	Lead quarterly meetings of the UNMCCC Translational Science Focus Group
2019-	Co-Lead monthly meetings for the Cancer Therapeutics Research Program
2013-	Co-Lead quarterly meetings of the Ovarian Cancer Research Group, Cancer Research Facility, UNMCCC

OFFICE OF THE UNIVERSITY SECRETARY

All requests are approved.
Garnett S Stokes
3/16/2023

MEMORANDUM

Date: March 15, 2023

To: Dr. Garnett S. Stokes, President, The University of New Mexico

From: Cinnamon Blair, Chair, UNM Naming Committee

Re: UNM Naming Committee Approvals from March 15, 2023

The University Naming Committee has reviewed and voted on the following requests and recommends your approval. A copy of the departmental requests, along with UNM Policy 1020, are attached for your reference.

Request from Popejoy Hall

Request approval to name the lower-level green room the **'Dr. Dean Yannias Green Room'**
(3.2.1 Interior Space)

Request from UNMROTC

Request approval to name the lounge in the new ROTC Building **'The Patrick Conroy Joint Services Commons'**
(3.2.1 Interior Space)

Requests from the Health Sciences Center (HSC)

Request approval to **appoint Yolanda Sanchez, PhD to the Maurice and Marguerite Liberman Distinguished Chair in Cancer Research**
(3.2.6. Endowed Faculty Positions)

Request approval to create an endowed professorship **'The Donna M. Tomky and Robert W. Geer Professorship in Ovarian Cancer Research'**
(3.2.6. Endowed Faculty Positions)

Request approval to appoint **Dr. Sarah Adams,** as the inaugural holder of the 'The Donna M. Tomky and Robert W. Geer Professorship in Ovarian Cancer Research'
(3.2.6 Endowed Faculty Positions)

Please let me know if you have any questions or wish to discuss them in further detail.

INFORMATION ITEMS

University of New Mexico Board of Regents
Student Success, Teaching and Research Committee
March 30, 2023

Academic Affairs Course Fee Review

Policies

Class and curricular fees, or broadly termed "course" fees, at UNM are determined by the policies spelled out in the Regents Handbook 4.7, "Tuition and Fees," and the University Administrative Policies and Procedures Manual 8210, "Tuition and Related Fees." The relevant portion of the policy is included as Appendix A to this report.

Broadly speaking, "class" fees are fees tied to the specific costs of delivering certain courses with distinctive expenditures. Examples include the travel costs of a field trip, the cost of particular supplies (art or lab), or special instructional materials. Since these fees fund the costs associated with the provision of a specific class, these fees are typically expended in the semester in which the costs are incurred. "Curriculum" fees, by contrast, are used for equipment and/or staff costs related to an entire course of study. Examples include IT requirements of various colleges (e.g., the unique software requirements of Architecture and Planning or Anderson School of Management); unique equipment costs (e.g., piano studios or engineering labs), or the specific technical staff required to maintain the labs and make them accessible to students.

Per policy, the Regents set the level of all tuition rates and fees that apply to all students. Class and curricular fees that apply to a specific course of study, or assessed at the class, department, or college level, are reviewed and authorized by the Provost for Main Campus and the Chancellor for the Health Sciences Center.

Procedures

A request to implement or change a class or curricular fee usually originates in an academic department. Proposals are submitted on a required template (attached as Appendix B and C) that gives the necessary technical data, along with a projected budget and description of the fee's intended use. These are reviewed at the school/college level and require the authorization of the dean or director before being submitted to the Office of the Provost.

The review of a class or curricular fee proposal at the Provost's level has two components:

1. A review for eligibility, per the definitions of UAP 8210. We ensure the description of the fee conforms to the uses detailed in the policy, and that the projected budget is rational and defensible.

2. A consideration of the fee's impact on students, either in terms of scope (e.g., assessing a large fee for a single course) or scale (e.g., curricular fees that would affect large numbers of students). **Fee approvals are not automatic**. In practice, most eligible class fee requests are approved; however curricular fee proposals are often amended or deferred for consideration in the larger context of tuition/fee decisions.

Review

Per policy (UAP 8210.3.2.8), each college/school are to review their course fee collections and expenditures at least every two years, in order "to ensure that expenses are allowable, allocable, reasonable, and timely." This year we reviewed fiscal years 2021 and 2022 for College of Arts and Sciences, College of Education and Human Sciences, School of Engineering, School of Architecture and Planning, College of University Libraries and Learning Sciences, Los Alamos Branch Campus, and Valencia Branch Campus. A summary of this year's reviews is attached as Appendix D.

Transparency

Course fees are published in each semester's registration schedule online and linked to every appropriate class, so that when students enroll they get a real-time calculation of the cost of their course of study. Students may request a specific accounting of the fees they've been charged for any course or curriculum (UAP 8210.3.2.7).

Scope

Class and curricular fees are important parts of the funding streams for most colleges and schools. UNM's main campus units collected $3,767,610 in class and curricular fees in FY22. Proportionally, that represents 2% of their total Instruction and General (I&G) budget. Course fees are a relatively small portion of the average student bill. According to data from the Bursar's Office, the average class and curriculum fees paid per student this fall semester was $107, about 2.3% of the total resident full time (15+ credit hour block) undergraduate tuition bill.

Appendix A

Administrative Policies and Procedures Manual - Policy 8210: Tuition and Related Fees

3.2 Course Fees

Course fees are charged at the time of registration to students enrolling in specific courses. They are not included in the "mandatory fees" portion of "tuition and fees," which are paid by all students. Requests for course fees are made to and approved by the Provost or the Chancellor. Course fees are intended to help defray costs specifically associated with certain courses, and are not intended to replace general operating costs, which are paid from tuition. All students who pay course fees must benefit from the fees charged. Course fees are listed in the "Schedule of Classes" posted on the Registrar's Office website. At the time of registration, a student should have full information on the amount and types of course fees that will be charged for that semester.

There are two (2) types of course fees: class fees and curricular fees.

3.2.1. Class Fees

A class fee is charged to support the instructional needs of a specific course. The fee is used to pay for required, uniquely identifiable materials or services provided to students that exceed the costs of supplies normally required. Class fees may be approved and implemented if they cover any of the following expenses:

- Cost of activities related to a course (e.g., field trip, tickets to off-campus lecture or event)
- Private instruction and models (e.g., guest speakers, models, tutors)
- An object or product of value retained by the student (e.g., artwork, safety gear)
- Class costs (e.g., specialized equipment or materials, safety protections, laboratory supplies, products)

Class fees may not be used to fund any of the following costs:

- The cost of any instructor of record or assistants
- Regular classroom materials and supplies (e.g., paper, photo copies, markers, chalk)
- Faculty and staff computers, equipment, and general non-program-specific software

3.2.2. Curricular Fees

A curricular fee is charged to support curricular needs in the department, college, or school. This fee funds short-term and long-term needs for the purpose of instructing students, including technology, broadly shared materials and equipment, and other expenses relevant to multiple courses in a program. A curricular fee can be assessed as a per-credit-hour fee or predetermined

flat fee. Curricular fees may be approved and implemented if they meet any of the following conditions:

- Expendable curricular costs (e.g., computer hardware and software, networking components, cameras, projectors and recorders, maintenance fees, sound equipment, musical instruments, laboratory equipment, gross anatomy program support)
- Personnel costs associated with curriculum support (e.g., technical staff support and training course development)
- Student progress assessments, clinical or practical skills assessments, and standardized patient costs
- Supplemental instruction programs
- Support of program research requirements and student travel to present research
- Medical education computer support including provision of tutorial and standardized patient computer interfaces (HSC only)
- Develop, install, and maintain technology capabilities in lecture halls and classrooms

Curricular fees may not be used to fund any of the following costs:

- The cost of any instructor of record or assistants
- Administrative equipment and supplies
- Faculty and staff computers, equipment, and general non-program-specific software
- Equipment not used by or accessible to students
- Facility remodeling other than for classrooms and instructional labs
- Regular classroom materials and supplies
- Scholarships (except for the Music Department)
- Travel costs for faculty and staff (except when related to program-specific field trips or HSC clinical experiences)

3.2.3. Payment of Course Fees

Approved fees are collected by the University Cashier Department. Academic departments are not authorized to collect course fees directly from students. Course fees are refunded according to Section 5 of UAP 8215 (“Bursar’s Office Operations and Services”). Departmental requests to waive all or part of a course fee must be sent to the Bursar's Office and include a detailed justification.

3.2.4. Authorization to Assess Course Fees

Assessment of course fees requires the approval of the Provost or the Chancellor. Requests for all course fees must be reviewed and approved by the appropriate dean or branch director prior to submission to the Provost or Chancellor, as applicable, for approval. Subsequent approvals are not required each semester unless a change in the fee, course title, or receiving index number occurs.

3.2.5. Publication of Course Fees

All course fees, along with a brief rationale, must be published on the Bursar's Office website.

3.2.6. Review of Course Fees

Colleges, schools, and departments must review course fees at least every two (2) years to ensure that expenses are allowable, reasonable, and timely. The Provost's Office or Chancellor will submit summary findings of these reviews annually to the Board of Regents.

3.2.7. Accountability to Students

Students may submit a written request to the department, school, or college the fee resides under requesting accountability of course fees assessed. The request should state the specific fee and, in the case of class fees, the specific course number and semester. The department, school, or college will respond to the student with the information as soon as possible, but no later than sixty (60) days after receipt of the request.

3.2.8. Responsibility and Authority

The Provost's Office or Chancellor is responsible for the following functions:

- Approving course fees
- Insuring publication of course fees on the Bursar's Office website

Reviewing course fees and reporting on course fees to the Board of Regents every two (2) years.

OFFICE OF ACADEMIC AFFAIRS

Appendix B

MEMORANDUM

TO: Associate Provost for Academic Affairs/EVP of Health Sciences Office
of the Provost and EVP for Academic Affairs/EVP for Health Sciences
DATE:

FROM: (*Enter: Dean, Executive Director*)
(*Enter: School/College)*
RE: **Course Fee Proposal**

Please answer the following questions and provide any additional documentation that will support this proposal.

- Is this course fee a curriculum or class fee (see policy UAP 8210)?
- Reason for the new/revised fee.
- Have you paid for the expense in the past? How?
- What impact on the students/enrollments will this new/revised fee have?
- How have you communicated the proposed fee to the students? Please explain your process and provide contact information for the college/school.

My signature below confirms that I have read UAP 8210 and understand its requirements (http://policy.unm.edu/university-policies/8000/8210.html) as it relates to class and curriculum fees. Course Fee Approval Form and appropriate back-up documentation are attached to this request. I also maintain that the uses of these class and curriculum fees are integral to our ability to provide a flagship-level education to our students.

_____
Dean/Executive Director Signature

_____
Printed Name

_____
Title

_____
Date

THE UNIVERSITY OF NEW MEXICO – COURSE FEE APPROVAL FORM **Appendix C**

INSTRUCTIONS:
For information regarding the creation of new fees as well as changes to existing fees can found in the UNM Policy 8210 available on the UNM Policy website http://policy.unm.edu/university-policies/8000/8210.html.

All requests for fee increases or new fees must be fully justified financially by matching projected fee revenues to the purposes specified. Examples and blank budget forms are provided on the attached sheet. If fees will be used for repair or replacement of equipment please attach a depreciation schedule found on the Provost Office website http://www.unm.edu/~acadaffr/budget-planning/course-fees.html. Feel free to modify or use additional budget forms as necessary.

Deadlines for receipt of requests:

Spring	First week of September
Summer	Last week of February
Fall	Last week of February

Please identify: Class Fee or Curriculum Fee (see 8210 policy)					**Dept. Contact Person:**						
Department:			**Mail Stop Code:**		**Email:**						
Index Number:			**Program Code:**		**Telephone Number:**						
Subject Code & Course Number	**Does fee apply to all sections?**	**If fee is section specific, provide section #**	**Course Title**	**Effective Term**	**End Term (If applicable)**	**If cross-listed, will equal fees be assessed for all courses in the cross-list?**	**Current Course Fee**	**New/ Revised Course Fee**	**Index/account code (10 digits)-**	***Detail Code (Bursar's use only)***	

REQUIRED APPROVAL SIGNATURES

Chair _____ __/__/__	Dean / Director _____ __/__/__	**Approved** _____ __/__/__ Provost for Academic Affairs
Chair (if cross-listed) _____ __/__/__	Dean / Director (if cross-listed) _____ __/__/__	***FOR BURSAR'S OFFICE ONLY*** Processed By _____ __/__/__
Chair (if cross-listed) _____ __/__/__	Dean / Director (if cross-listed) _____ __/__/__	***FOR OFFICE OF THE REGISTRAR ONLY*** Processed By _____ __/__/__

Sample course fee budget per student
Art Studio 100

Proposed fee		30.00
Description	Drawing materials	
Projected expenses		
	5 pencils @ 2.00/ea	10.00
	4 drawing tablets @ 5.00/ea.	20.00
Total projected expenses per student		30.00

Sample course fee budget per section
Biology 100

Proposed fee		20.00
Description	Lab supplies and equipment	
Projected enrollment		25
Projected revenue		500.00
Projected expenses		
	500 microscope slides (10/student)	100.00
	2 microscopes (1/10th of cost of $1,000 @ 10 yr. replacement cycle)	200.00
	Cultures	200.00
Total projected expenses per section		500.00

Course fee budget
Section:

	Description	Amount
Proposed fee		
Projected enrollment		
Projected revenue		
Projected expenses		
Total projected expenses		

Course fee budget
Section:

	Description	Amount
Proposed fee		
Projected enrollment		
Projected revenue		
Projected expenses		
Total projected expenses		

Course fee budget
Section:

	Description	Amount
Proposed fee		
Projected enrollment		
Projected revenue		
Projected expenses		
Total projected expenses		

Course fee budget
Section:

	Description	Amount
Proposed fee		
Projected enrollment		
Projected revenue		
Projected expenses		
Total projected expenses		

OFFICE OF ACADEMIC AFFAIRS

Review of Course Fees
Fiscal Year 2022 and Fiscal Year 2021

Appendix D

Main Campus Schools/Colleges:
College of Arts and Sciences
College of Education and Human Sciences
School of Engineering
School of Architecture and Planning
College of University Libraries and Learning Services

	FY22- Actuals	FY21 - Actuals
REVENUE		
OA2 - Student Fees	$ 1,902,245	$ 1,842,404
OA4 - Grants Contracts	-	-
OA5 - Sales & Services	2,366	562
OA6 - Other Operating Revenue	25,045	2,939
OP5 - Other Non Operating Revenue	-	-
OS1 - Transfers		
11C0 - Transfer from Research Gen	2,000	-
11E0 - Transfer to Public Service	(10,000)	(10,000)
11F0 - Transfer From Public Service	-	-
11H0 - Transfer To Internal Services	(5,000)	(5,000)
11J0 - Transfer From Internal Services Gen	2,010	-
1240 - Transfer To Plant Fund Minor	(158,773)	(253,908)
1260 - Transfer From Plant Fund Minor	-	2,000
OV1 - Allocations	(4,044)	36,046
OZ1 - Reserves	1,338,496	1,004,591
TOTAL REVENUE	$ 3,094,345	$ 2,619,634
EXPENSES		
OF1 - Salaries	$ 403,657	$ 293,208
OG1 - Payroll Benefits	96,649	73,021
OJ1 - Supplies	773,276	529,018
OJ2 - Travel	13,032	6,707
OJ3 - Student Costs	5,193	113
OJ4 - Research Costs	18,740	13,770
OJ6 - Communication Charges	3,291	1,142
OJ7 - Services	124,018	178,338
OJ8 - Plant Maintenance	135,742	161,673
OJ9 - Utilities	-	-
OJA - Other Expense	24,223	15,553
OM1 - Capital Expenditures	12,942	8,850
TOTAL EXPENSE	$ 1,610,763	$ 1,281,391
RESERVES	$ 1,483,582	$ 1,338,243

OFFICE OF ACADEMIC AFFAIRS

Review of Course Fees
Fiscal Year 2022 and Fiscal Year 2021

School/College/Branch: **College of Arts & Sciences**

	FY22 - Actuals	FY21 - Actuals
REVENUE		
OA2 - Student Fees	$ 884,475	$ 827,612
OA5 - Sales & Services	-	-
OA6 - Other Operating Revenue	-	9
OP5 - Other Non Operating Revenue	-	-
OS1 - Transfers		
1160 - Transfer to Soc. Cultural	-	
11J0 - Transfer From Internal Services	2,010	
1240 - Transfer To Plant Fund Minor	(21,001)	(31,508)
1260 - Transfer from Plant Fund Minor	-	
OV1 - Allocations	-	
OZ1 - Reserves	586,871	380,131
TOTAL REVENUE	$ 1,452,355	$ 1,176,244
EXPENSES		
OF1 - Salaries	$ 199,109	$ 184,434
OG1 - Payroll Benefits	70,610	63,510
OJ1 - Supplies	392,922	219,730
OJ2 - Travel	12,660	6,707
OJ3 - Student Costs	3,658	113
OJ6 - Communication Charges	650	872
OJ7 - Services	82,068	64,854
OJ8 - Plant Maintenance	25,108	33,820
OJ9 - Utilities	-	-
OJA - Other Expense	9,435	6,196
OM1 - Capital Expenditures	5,702	8,850
TOTAL EXPENSE	$ 801,920	$ 589,084
RESERVES	$ 650,435	$ 587,161

Comments:

The College provides support to students using course fees in a multitude of ways. Departments purchase computers, audio/visual equipment, materials, and lab software to help further student success. Course fees are also used to fund student support, lab supplies, equipment, field trips, and necessary capital expenditures and upgrades. Overall balances within the College increased by $63,275. The largest increase was in Communication & Journalism, mainly due to increased emollient in their courses. Reserves in C&J will be used for replacement of several computers and audio/visual equipment used in the student computer labs and classrooms.

Material balances also reside in units such as Math & Stats, Chemistry, Biology, Physics & Astronomy, and Language Learning Center. These departments all have technology and equipment intensive needs and balances are necessary to plan appropriately for replacement of aging equipment. In addition to regular replacement of lab equipment, software, and audiovisual equipment, the departments must have balances sufficient to respond to any unexpected repairs or replacements that may arise during the year.

Additionally, many departments accrued large reserve balances in FY20-FY21 as UNM was in remote operations caused by COVID, and overall expenses decreased. The College will continue to monitor all balances to ensure course fees are being charged appropriately and reserve balances are being managed efficiently.

OFFICE OF ACADEMIC AFFAIRS

Review of Course Fees
Fiscal Year 2022 and Fiscal Year 2021

School/College/Branch:	**College of Education & Human Sciences**	
	FY22 - Actuals	**FY21 - Actuals**
REVENUE		
OA2 - Student Fees	$ 321,700	$ 268,815
OA4 - Grants Contracts	-	-
OA5 - Sales & Services	-	-
OA6 - Other Operating Revenue	-	-
OS1 - Transfers	-	-
1160 - Transfer to Soc. Cultural	-	-
11E0 - Transfer to Public Service	-	-
11F0 - Transfer From Public Service	-	-
11H0 - Transfer To Internal Services	-	-
11N0 - Transfer From Student Aid	-	-
1240 - Transfer To Plant Fund Minor	-	-
12C0 - Transfer to Renewal Replacement	-	-
OV1 - Allocations	(4,044)	36,046
OZ1 - Reserves	259,240	186,264
TOTAL REVENUE	$ 576,896	$ 491,125
EXPENSES		
OF1 - Salaries	$ 84,574	$ 49,816
OG1 - Payroll Benefits	4,943	8,066
OJ1 - Supplies	78,533	57,842
OJ2 - Travel	-	-
OJ3 - Student Costs	100	-
OJ4 - Research Costs	14,931	13,600
OJ6 - Communication Charges	-	-
OJ7 - Services	3,017	714
OJ8 - Plant Maintenance	97,630	98,973
OJ9 - Utilities	-	-
OJA - Other Expense	3,321	2,873
OM1 - Capital Expenditures	-	-
TOTAL EXPENSE	$ 287,050	$ 231,884
RESERVES	$ 289,846	$ 259,240

Comments:

The College of Education and Human Sciences course fees are used for program specific costs, which include equipment, supplies, student related travel and other student costs. Due to the pandemic and limited spending reserve balances slightly increased from FY21 to FY22. Balances will be used for equipment renewals and replacements for students related activities.

OFFICE OF ACADEMIC AFFAIRS

Review of Course Fees
Fiscal Year 2022 and Fiscal Year 2021

School/College/Branch: **School of Engineering**

	FY22 - Actuals	FY21 - Actuals
REVENUE		
OA2 - Student Fees	$ 459,505	$ 491,070
OA5 - Sales & Services	375	-
OA6 - Other Operating Revenue	-	-
OS1 - Transfers		
11C0 - Transfer from Research Gen	2,000	-
11E0 - Transfer to Public Service	(10,000)	(10,000)
11H0 - Transfer To Internal Services	(5,000)	(5,000)
1240 - Transfer To Plant Fund Minor	(137,772)	(122,400)
1260 - Transfer from Plant Fund Minor Gen		2,000
OV1 - Allocations	-	-
OZ1 - Reserves	330,363	315,012
TOTAL REVENUE	$ 639,472	$ 670,682
EXPENSES		
OF1 - Salaries	$ 14,132	$ -
OG1 - Payroll Benefits	10,615	-
OJ1 - Supplies	244,426	215,309
OJ2 - Travel	372	-
OJ3 - Student Costs	1,435	-
OJ6 - Communication Charges	2,641	270
OJ7 - Services	37,952	112,625
OJ8 - Plant Maintenance	7,990	7,619
OJ9 - Utilities	-	-
OJA - Other Expense	4,640	5,037
OM1 - Capital Expenditures	7,240	-
TOTAL EXPENSE	$ 331,442	$ 340,860
RESERVES	$ 308,029	$ 329,821

Comments:

The School of Engineering course fees are used to maintain, replace and upgrade equipment for teaching labs and student computer pods; purchase supplies, software and services for courses; to fund student travel as well as seminar speaker travel and other associated student related costs. Reserve balances will be used to upgrade equipment in the Engineering teaching labs to maintain our ABET accreditation. Because departmental needs are variable and unpredictable, a centralized reserve is also maintained.

OFFICE OF ACADEMIC AFFAIRS

Review of Course Fees
Fiscal Year 2022 and Fiscal Year 2021

School/College/Branch:	**School of Architecture & Planning**	
	FY22 - Actuals	**FY21 - Actuals**
REVENUE		
OA2 - Student Fees	$ 236,565	$ 254,907
OA4 - Grants Contracts	1,991	562
OA5 - Sales & Services	-	-
OA6 - Other Operating Revenue	25,045	2,930
OS1 - Transfers		
11E0 - Transfer to Public Service	-	-
11F0 - Transfer From Public Service	-	-
1240 - Transfer To Plant Fund Minor	-	(100,000)
1280 - Transfer to Plant Fund Major	-	-
OV1 - Allocations	-	-
OZ1 - Reserves	162,021	123,184
TOTAL REVENUE	$ 425,622	$ 281,583
EXPENSES		
OF1 - Salaries	$ 105,843	$ 58,958
OG1 - Payroll Benefits	10,481	1,444
OJ1 - Supplies	57,396	36,137
OJ2 - Travel	-	-
OJ3 - Student Costs	-	-
OJ4 - Research Costs	3,809	170
OJ6 - Communication Charges	-	-
OJ7 - Services	981	145
OJ8 - Plant Maintenance	5,015	21,261
OJ9 - Utilities	-	-
OJA - Other Expense	6,827	1,447
OM1 - Capital Expenditures	-	-
TOTAL EXPENSE	$ 190,351	$ 119,563
RESERVES	$ 235,271	$ 162,021

Comments:

The School of Architecture and Planning course fees are used to maintain, replace and upgrade equipment for both the computer lab and fabrication lab. Course fees are also used for the labs technical staff support and supplies used in each lab. Due to the pandemic and limited spending driven by remote instruction in FY21 reserve balances increased from FY21 to FY22. Balances will be used for equipment renewals and replacements for equipment needs in the labs.

OFFICE OF ACADEMIC AFFAIRS

Review of Course Fees
Fiscal Year 2022 and Fiscal Year 2021

School/College:	**College of University Libraries & Learning Sciences**	
	FY22 - Actuals	**FY21 - Actuals**
REVENUE		
OA2 - Student Fees	$ -	$ -
OA5 - Sales & Services	-	-
OA6 - Other Operating Revenue	-	-
OS1 - Transfers **(please list all transfers)**		
11E0 - Transfer to Public Service	-	-
11F0 - Transfer From Public Service	-	-
1240 - Transfer To Plant Fund Minor	-	-
1280 - Transfer to Plant Fund Major	-	-
OV1 - Allocations	-	-
OZ1 - Reserves	-	-
TOTAL REVENUE	$ -	$ -
EXPENSES		
OF1 - Salaries	$ -	$ -
OG1 - Payroll Benefits	-	-
OJ1 - Supplies	-	-
OJ2 - Travel	-	-
OJ3 - Student Costs	-	-
OJ4 - Research Costs	-	-
OJ6 - Communication Charges	-	-
OJ7 - Services	-	-
OJ8 - Plant Maintenance	-	-
OJ9 - Utilities	-	-
OJA - Other Expense	-	-
OM1 - Capital Expenditures	-	-
TOTAL EXPENSE	$ -	$ -
RESERVES	$ -	$ -

Comments:

College of University Libraries and Learning Services does not collect course fees.

OFFICE OF ACADEMIC AFFAIRS

Review of Course Fees
Fiscal Year 2022 and Fiscal Year 2021

School/College/Branch: **Los Alamos Branch Campus**

	FY22 - Actuals	FY21 - Actuals
REVENUE		
OA2 - Student Fees	$ 104,675	$ 89,457
OA5 - Sales & Services	-	-
OA6 - Other Operating Revenue	-	87
OS1 - Transfers		
11E0 - Transfer to Public Service	-	-
11F0 - Transfer From Public Service	-	-
1240 - Transfer To Plant Fund Minor	-	-
1280 - Transfer to Plant Fund Major	-	-
OV1 - Allocations	(5,000)	-
OZ1 - Reserves	138,869	108,676
TOTAL REVENUE	$ 238,544	$ 198,220
EXPENSES		
OF1 - Salaries	$ 32,306	$ 30,964
OG1 - Payroll Benefits	15,118	12,821
OJ1 - Supplies	19,099	14,406
OJ2 - Travel	-	-
OJ3 - Student Costs	-	-
OJ6 - Communication Charges	-	-
OJ7 - Services	-	1,006
OJ8 - Plant Maintenance	-	-
OJ9 - Utilities	-	-
OJA - Other Expense	224	154
OM1 - Capital Expenditures	3,329	-
TOTAL EXPENSE	$ 70,076	$ 59,351
RESERVES	$ 168,469	$ 138,869

Comments:

Los Alamos course fees are used for chemical supplies for labs, supplies for vocational training programs, art supplies, hazardous waste removal, computer hardware, and costs associated with support for online learning and instructional technology. The majority of reserve balances are affiliated with the online curricular fee, which will be used for renewals and replacements of student-facing computers and accessories.

OFFICE OF ACADEMIC AFFAIRS

Review of Course Fees
Fiscal Year 2022 and Fiscal Year 2021

School/College/Branch: **Valencia Branch Campus**

	FY22 - Actuals	FY21 - Actuals
REVENUE		
OA2 - Student Fees	$ 33,263	$ 26,235
OA5 - Sales & Services	-	-
OA6 - Other Operating Revenue	-	-
OS1 - Transfers		
11E0 - Transfer to Public Service	-	-
11F0 - Transfer From Public Service	-	-
1240 - Transfer To Plant Fund Minor	-	-
1280 - Transfer to Plant Fund Major	-	-
OV1 - Allocations	-	-
OZ1 - Reserves	2,827	7,708
TOTAL REVENUE	$ 36,089	$ 33,943
EXPENSES		
OF1 - Salaries		
OG1 - Payroll Benefits		
OJ1 - Supplies	28,234	26,176
OJ2 - Travel		
OJ3 - Student Costs	605	770
OJ6 - Communication Charges		
OJ7 - Services		
OJ8 - Plant Maintenance		
OJ9 - Utilities		
OJA - Other Expense	2,586	4,170
OM1 - Capital Expenditures	-	
TOTAL EXPENSE	$ 31,426	$ 31,116
RESERVES	$ 4,663	$ 2,826

Comments:

Course fees at UNM-Valencia are used solely for materials utilized by students in the courses. Uses for fees include: science lab materials and equipment, art supplies (easels, paints, brushes, etc.), computer hardware supplies for use in hardware installation class, etc. Reserve balances are minimal and will be used for student-related needs.

OFFICE OF ACADEMIC AFFAIRS

March 20, 2023

To: Regent Randy Ko, Chair, SSTAR Committee

From: Bill Stanley, Associate Provost for Faculty Success

Re: Recognition of Research and Creative Works Leaders 2022

The Office of Academic Affairs would like to inform the SSTAR committee that two faculty members are being recognized with Research and Creative Works Leader Awards this academic year. These awards are given by the Provost, based on nominations received from the Provost's Tenure and Promotion committee. That committee nominates a few of the most extraordinary candidates for promotion each year, based on their records as assembled for milestone reviews, including evaluations by external and internal peer reviewers. Awards are being given to Professor Irene Salinas Remiro of the Department of Biology, and Professor Brandon Schmandt of the Department of Earth and Planetary Sciences. Both are considered by external and internal reviewers alike to be among the top scholars in the world in their areas of research. We would like to request that SSTAR consider recommending that these two remarkable faculty members to be invited to be recognized by the Board of Regents.

Irene Salinas Remiro

Dr. Irene Salinas is Professor of Biology. She has taught at UNM since 2011, was tenured in 2017, and promoted to Professor in August 2022. She is a comparative immunologist, whose research centers on the role of mucosa in immune responses to pathogens in fish. Her work is characterized by "zooming into molecules, cells and tissues and then zooming out to organismal responses like survival and behavior." Among her important discoveries are ancient forms of antibodies in the mucosa of fish that fight off pathogens they encounter in water; the existence of neurons in nasal passages of fish that "smell" pathogens and trigger very rapid immune responses; the possibility of vaccinating fish through their nasal passages, with potential applications in aquaculture; complex interactions among neurons, immune system responses, and microflora; and protective tissues of African Lungfish that enable these unique animals to

survive for periods on land. She has published over 40 articles in peer reviewed journals as well as 5 book chapters and is much in demand for invited talks in the US and abroad. She is considered one of the leading experts in the world in comparative immunology. Her volume of scholarly output is especially impressive given that she works in field in which scientists must create all their own biological reagents for experiments. Part of her work depends on the use of rare specimens that she must capture live in Tanzania. She merges her pioneering scholarship with mentorship, frequently co-authoring with graduate and undergraduate students. Her research productivity has continued to accelerate, with over 60% of her publications appearing since her tenure in 2017. She has over 6837 citations and an H-index of 34. Her research has been supported continuously with funding from NSF, NIH, and USDA. In addition to her own scholarly accomplishments, she has been active in promoting the equal participation of women and minoritized scholars in the sciences. Among her many efforts in this area, she is co-PI of a recent $15.6 million NIH FIRST grant that supports the hiring of nine new faculty from diverse backgrounds in positions related to biomedical research in the College of Arts and Sciences at UNM. She also provides virtual seminars on bio-informatics for colleagues in Tanzania. She has supervised four post-doctoral fellows, three completed PhD students, and large numbers of master's and bachelor's degree students, with particular emphasis on mentoring students from under-represented groups. Many of her undergraduate and master's level students have gone on to high level professional accomplishments as PhD scientists, physicians, other professionals. She is a reflective and innovative teacher who incorporates active learning and problem-solving elements in classes at all levels.

Brandon Schmandt

Brandon Schmandt is Professor of Earth and Planetary Sciences. He has taught at UNM since 2013, was tenured in 2018, and promoted to Professor in August 2022. He is a seismologist who uses seismic observations, data analysis, and theory to construct 3-D images of Earth's interior. He tests hypotheses about how structures and flows within the mantle, up to 1000 kilometers deep, affect the motion of tectonic plates, mountain belts, earthquakes, magma activity and volcanism nearer the surface, with an emphasis on the Western US. He was a key contributor to a project to image magma flows and reservoirs under Mount St. Helens. His work on the Yellowstone hotspot, which identified a localized high temperature anomaly in the mantle, has provided some of the best evidence to date for a connection between a lower mantle plume and a

surface volcanic hot spot. Reviewers note that he has an unusually broad research agenda, that also includes important work on surface and near-surface phenomena. He uses seismic sensors and data analysis to study seismic events induced by human activities such as wastewater injection. He has refined techniques for distinguishing between earthquakes and human-caused underground explosions, and for measuring sediment transport in riverbeds. Among his methodological contributions are techniques for deploying, and analyzing the data from, some 1,000 temporary, low-cost "node" seismometers to facilitate higher resolution 3D imaging. Colleagues at UNM and around the country view him as one of the leading seismologists of his generation. He has published over 69 peer reviewed articles, including placements in *Nature*; *Science, Nature Communications,* and *Proceedings of the National Academy of Sciences,* and has an H-index of 37. His work has been continuously funded by multiple awards from the National Science Foundation (including a prestigious CAREER award), as well as from the Air Force Research Laboratory. The American Geophysical Union and the Geological Society of America have selected Dr. Schmandt for all three of the most prestigious early- to mid-career awards for scientific achievements. He is one of very few scholars who have been so recognized. He has been elected to leadership positions in the seismology community, in roles that support the cooperative use of high-cost shared instruments. His generosity to the field is evident in his having been recognized by the journal *Geophysical Research Letters* -- each year between 2013 and 2018 -- for excellence in peer-reviewing. He is active in doctoral, masters', and post-doctoral advising, and has been the primary supervisor of 5 completed doctoral students. His students have placed at least 10 student-first authored papers in top journals. He is a dedicated teacher who makes innovative use of technology in the classroom.

TO: UNM Faculty Senate
FROM: Ad-Hoc Committee to the Faculty Senate President on Academic Freedom & Equity
RE: Proposed Resolution: *Defending Academic Freedom to Teach About Race and Gender Justice and Critical Race Theory*
DATE: Nov. 29, 2022

WHEREAS multiple states have already passed, are in the process of debating, and have proposed legislation to curb and limit academic freedom by targeting, undermining, and/or prohibiting academic discussions of racism, gender, sexuality, and related issues deemed "divisive" in American history in primary, secondary, and/or higher education schools, colleges, and universities; and

WHEREAS multiple school districts are also attempting and passing book bans and otherwise restricting access to books in schools, particularly books on racial history and LGBTQ+ relationships and expression; and

WHEREAS multiple organizations in the United States are soliciting, circulating, and publishing misleading information about curriculum in order to encourage the rejection of race and social justice education; and

WHEREAS the Ratified and Signed Collective Bargaining Agreement Between UA-UNM and the Administration, Article 6 (6-23-21) affirms the importance of academic freedom "to the conception of the University as a community of scholars engaged in the pursuit of truth and communication of knowledge in an atmosphere of tolerance and freedom;" and

WHEREAS the University Administrative Policies and Procedures Manual - Policy 2220(1): Freedom of Expression and Dissent (1-14-2002) states: "As an institution that exists for the express purposes of education, research, and public service, the University is dependent upon the unfettered flow of ideas, not only in the classroom and the laboratory, but also in all University activities. As such, protecting freedom of expression is of central importance to the University. The exchange of diverse viewpoints may expose people to ideas some find offensive, even abhorrent. The way that ideas are expressed may cause discomfort to those who disagree with them. The appropriate response to such speech is speech expressing opposing ideas and continued dialogue, not curtailment of speech;" and

WHEREAS the Faculty Handbook Section B, Appendix I (as revised 1990) incorporates the American Association of University Professors' (AAUP) 1940 statement of Principles on Academic Freedom and Tenure and 1970 Interpretive Comments, noting: "As citizens engaged in a profession that depends upon freedom for its health and integrity,

professors have a particular obligation to promote conditions of free inquiry and to further public understanding of academic freedom;" and

WHEREAS the AAUP's statement On the Relationship of Faculty Governance to Academic Freedom (06-1994) noted that academic freedom of faculty members includes the freedom to express their views on academic matters in the classroom and in the conduct of research, having to with their institution and its policies, and in the interest of the general public even if their views are in conflict with others;" and

WHEREAS the Faculty Handbook Section B, Appendix I (as revised 1990) recognizes U.S. Supreme Court jurisprudence stating: "As the Supreme Court said in K*eyishian v. Board of Regents*, 385 U.S. 589 (1967): 'Our Nation is deeply committed to safeguarding academic freedom, which is of transcendent value to all of us and not merely to the teachers concerned. That freedom is therefore a special concern of the First Amendment, which does not tolerate laws that cast a pall of orthodoxy over the classroom;' " and

WHEREAS the Faculty Handbook at B.6.2.1(b) (12-07-98) provides: "Academic freedom is defined in the 1940 Statement of Principles adopted by the American Association of University Professors and is the right of all members of the faculty and graduate students employed in teaching and research positions;" and

WHEREAS the faculty senate statement on Right to Free Speech & Assembly (12-20-11) affirms that universities have historically been vibrant public spaces for political debate, civil protest, and intellectual discourse; and

WHEREAS the faculty senate statement on Right to Free Speech & Assembly (12-20-11) affirms that for democratic life to thrive and for society to flourish, political and intellectual dialogue must be forever protected and cultivated (Right to Free Speech & Assembly); and

WHEREAS faculty have responsibility for the curriculum at their universities, as stated in AAUP's statement on Freedom in the Classrom at II.B. (06-2007); the Faculty Handbook A50: The Faculty's Role in the University's Academic Mission, A51: Faculty Constitution at Sections 2, 6, 7 (12-18-14) and A61.2 Faculty Senate Curricula Committee (8-03-21); and

WHEREAS the term "divisive" is indeterminate, subjective, and chills the capacity of educators to explore a wide variety of topics based on subjective criteria that are inapposite from the goals of education and the development of essential critical thinking skills; and

WHEREAS educating about systemic racism, sexism, and gender discrimination - subjects considered divisive, difficult, controversial, or challenging in proposed or enacted state legislative bills - is critical to the active and engaged pursuit of knowledge

necessary to produce engaged and informed citizens and residents in a multiracial democracy; and

WHEREAS legislation preventing these subjects and topics from inclusion in university instructional curricula poses a threat to continued institutional and program accreditation from the Higher Learning Commission and/or other accrediting bodies; and

WHEREAS over 70 organizations, including the American Association of University Professors (AAUP) and the Association of American Colleges and Universities (AACU), issued the Joint Statement on Legislative Efforts to Restrict Education about Racism and American History (6-16-21) stating their "firm opposition to a spate of legislative proposals being introduced across the country that target academic lessons, presentations, and discussions of racism and related issues in American history in schools, colleges and universities . . . In higher education, under principles of academic freedom that have been widely endorsed, professors are entitled to freedom in the classroom in discussing their subject. Educators, not politicians, should make decisions about teaching and learning;" and

WHEREAS the University's Mission Statement is to (1) "Educate and encourage students to develop the values, habits of mind, knowledge and skills that they need to be enlightened citizens," (2) "Discover and disseminate new knowledge and creative endeavors that will enhance the overall well-being of society", and (3) "Actively support social, cultural and economic development in our communities to enhance the quality of life for all New Mexicans;" and

WHEREAS several departments, committees, and groups at the University– including, for example the UNM Honors College (03-21), College of the University Libraries and Learning Sciences (7-07-20), History, School of Architecture and Planning (2-19-19), Diversity Committee of the College of Education and Human Sciences (6-10-20), Institute for the Study of Race and & Social Justice (2-1-22, Committee for Anti-Racist Education for the Center for Teaching and Learning, Art Museum (06-09-20), Chicana/o Studies and research faculty associated with the Southwest Hispanic Research Institute, Division of Equity and Inclusion (2021), Student Health and Counseling (6-05-20), Black Faculty Alliance (05-20) and School of Law (06-20)– have issued statements affirming the importance of racial, gender, criminal, tribal, and social justice, diversity and inclusion, gender studies, Black studies, and Chicanx studies; and

WHEREAS the Division for Equity and Inclusion's Diversity Statement affirms a commitment to "deploy[s] justice, equity, accessibility, diversity, and inclusion (JEADI) resources to expand opportunity and cultivate potential of students, faculty, and staff at UNM by centering the community wealth of the peoples of New Mexico and beyond;" and

WHEREAS the University's Strategic Planning Framework UNM 2040: Opportunity Defined stated objectives include being a force for social justice, addressing historical

and current injustices and inequities, and actively working to evolve cultural humility and literacy within our communities;

WHEREAS the University's Strategic Planning Framework UNM 2040: Opportunity Defined stated Vision is to: "Be a global leader in realizing human potential, addressing critical community challenges, and demonstrating the power of inclusive diversity;" and

WHEREAS in a nation that has for centuries struggled with issues of racial inequity and injustice, many students do not have adequate knowledge of BIPOC and LGBTQI+ history, New Mexico history, and the policies that contributed to inequities and injustices, UNM has a responsibility and opportunity to help work toward equity and foster racial and social justice.

Now therefore be it **RESOLVED** that the faculty senate resolutely rejects any attempts by bodies external to the faculty to restrict or dictate university curriculum on any matter, including matters related to racial and social justice, and will stand firm against encroachment on faculty authority by the state or federal legislature, or the Boards of Trustees or Board of Regents; and let it be further

RESOLVED that faculty senate support the Joint Statement on Efforts to Restrict Education about Racism (6-16-21), authored by the AAUP, PEN America, the American Historical Association, and the Association of American Colleges & Universities, endorsed by over 70 organizations; and let it be further

RESOLVED that the UNM faculty senate supports the right of academics, regardless of contingent or permanent status, to have autonomy over the inclusion of racial and gender justice, and critical studies in curriculum and pedagogy; and let it be further

RESOLVED that the faculty senate stands with our K-12 colleagues throughout the country and in New Mexico who are affected by similarly harmful legislation when they seek to teach the truth in U.S. history and civics education, and seek to be culturally and linguistically-responsive in their instruction and pedagogy; and let it be further

RESOLVED that faculty senate calls upon the University President, the Provost, the Executive Vice President for UNM Health Sciences and Chief Executive Officer of the UNM Health System, and the UNM Board of Regents to reject any attempts by bodies external to the faculty to restrict or dictate university curriculum on any matter, including matters related to gender, racial, and social justice, and critical studies; and let it be further

RESOLVED that faculty senate calls upon University President, the Provost, the Executive Vice President for UNM Health Sciences and Chief Executive Officer of the UNM Health System, and the UNM Board of Regents to stand firm against encroachment on faculty authority by the state or federal legislature or the Boards of Trustees or the Board of Regents; and let it be further

RESOLVED that faculty senate calls upon University President, the Provost, the Executive Vice President for UNM Health Sciences and Chief Executive Officer of the UNM Health System, and the UNM Board of Regents and the UNM Board of Regents to assure that the University permanently retains a campus climate conducive to intellectual dialogue on race, gender, justice, and critical studies; and let it be further

RESOLVED that the faculty senate calls upon other representative bodies at the university, such as the Faculty Union UA-UNM, the Graduate and Professional Student Body Government, Associated Students at UNM, Latinx Faculty Alliance, Black Faculty Alliance, Native American Faculty Council, and Staff Council, to support this resolution.

Appendix

THE UNIVERSITY OF NEW MEXICO®

UNM Student Wellness

DR. ERIC SCOTT

VICE PRESIDENT FOR STUDENT AFFAIRS

UNM BOARD OF REGENTS SSTAR MEETING

FEBRUARY 2ND, 2023

Purpose and Agenda

Generate a common understanding of the research-informed dimensions of wellness that may serve as key factors in planning and implementing a successful wellness plan and culture at a university.

Consider the coordination of programs, practices, or initiatives and emerging opportunities for future growth related to wellness at UNM.

Engage in constructive dialogue about the next steps in advancing wellness at UNM.

Student Wellness

Student learning is at the core of the academic mission. Students' physical, mental, emotional, social, and spiritual health and well-being have a significant influence on their academic and personal success. Creating a campus environment that supports student health and safety is therefore an important, broad institutional responsibility that requires commitment and activities both inside and outside the classroom. – NASPA Wellness and Health Promotion Knowledge Community

Wellness has been empirically tied to student success and is relevant for students from all backgrounds and levels of study (Baldwin & Towler, 2017).

UNM is diverse, so efforts to support wellness must also be diverse.

Research on Student Wellness is broad and interrelated, but can be placed into several ‘buckets’

UNM 2040 Opportunity Defined Wellness Connections

Goal One: Advance New Mexico

Goal Two: Student Experience and Educational Innovation

Goal Three: Inclusive Excellence

Goal Four: Sustainability

Goal Five: One University

Basic Needs and Physical Health

At a base level, students need access to safe and reliable housing, food, and transportation to meet their basic needs. Once these needs are met, understanding and consuming a healthy diet, regularly exercising, and getting the right amount of sleep advance the physical health of students, which can prepare them to be successful in other facets of wellness. Detriments to physical health, such as substance use disorder, present an opportunity cost for physical wellness and mental health.

See: Balzer & London (2020), Hege et al. (2021), Dunston et al. (2020), Haskett et al. (2021), Arria et al. (2013).

Mental Health

Effectively dealing with the stressors of college life is critical to student success. Common mental health issues, such as anxiety or depression, and more serious ones should be identified and treated proactively. There is often a reciprocal relationship between physical and mental wellbeing. Universities must provide proactive and responsive services for mental health support.

See: Eisenberg et al. (2009), Scwitzer et al. (2018).

Academic Success

Academic challenges and the pressure to succeed can often take a toll on other elements of wellness. Maintaining strong study habits, staying organized, and knowing how and where to seek help when needed can contribute to wellness. Universities should maintain a robust and accessible network of academic support resources and proactively identify students who may benefit from additional academic support.

See: Baldwin & Towler (2017), Ruthig et al. (2011).

Social Support & Sense of Belonging

A strong network of social support that might include friends, family, mentors, and peers is helpful in coping with the challenges of college life. In the context of social support, as with other interactions within the university, students need a sense of belonging and validation of their lived experiences. Through a variety of outlets, faculty and staff should build strong and authentic relationships with students and encourage social support, including engagement in activities that provide a social and emotional outlet. A sense of belonging also has an impact on spiritual wellbeing.

See: Stallman et al. (2018), Strayhorn et al. (2015), Soria et al. (2022), Baker (2013), Sadeghifard et al. (2020).

Financial Stability

Money is often a major source of stress for college students. Effectively managing finances and accessing resources that reduce financial stress can help students feel more financially stable and meet college costs over time. Services that help students identify and manage financial resources can reduce this major stressor.

See: McNair et al. (2022), Falcon (2015).

Work Life Balance

Balancing school, work, and personal life can present varying degrees of difficulty for students. Practicing time management and learning to strategically prioritize tasks can help students achieve a healthy balance and address the many demands on them without the addition of new stress. With more thorough understanding of time as a limited resource and more effective time management skills, students may be able to invest time wisely in wellness and/or student success.

See: Krumrei-Mancuso et al. (2013), Tusuf et al. (2020)

Equity

It is critical that students encounter culturally relevant and culturally responsive resources and experiences. Equity must be a prime consideration in wellness as some students may experience disproportionate barriers or lack of access, while inequality itself can impact a student's physical, emotional, and mental wellness. Institutions should assess whether services are equitable and whether students are being reached by services so that students may be more equitably impacted by wellness initiatives.

See: Strayhorn et al. (2015), Baker (2013), Lopez (2018)

UNM programs, practices, & initiatives

A non-exhaustive list in the attached resource provides a cross section of resources, programs, initiatives, and services that are aligned with key factors and best practices advancing student wellness at UNM.

Emerging opportunities exist and are in various stages of development and implementation.

More intentional coordination, collaboration is a priority (Associate Dean of Students for Student Wellbeing, LoboWell working concept).

Access, visibility, and equity are key in implementation.

Wellness is about services AND culture.

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Discussion

What are your observations about student wellness at UNM?

Are the factors outlined in alignment with your understanding of student wellness?

Should a wellness plan be weighted more towards organizing and scaling existing efforts or developing new ones?

Are there specific additional research-informed approaches or perspectives that should be elevated for consideration?