PathFINDER

WINTER 2025





WINTER 2025

WELCOME FROM NANCY JOSTE, MD PROFESSOR & CHAIR	2
FEATURE TRICORE REFERENCE LABORATORIES	4
FEATURE DIVERSITY, EQUITY AND INCLUSION	7
FEATURE MOHAMMAD VASEF, MD, PROFESSOR EMERITUS	11
RESEARCH PROFILE TIONE BURANDA, PHD, ASSOCIATE PROFESSOR DIRECTOR, CENTER FOR MOLECULAR DISCOVERY	13
FACULTY NEWS	16
RESIDENT, FELLOW & GRADUATE STUDENT NEWS	18
DEPARTMENT NEWS	20
PATHOLOGY JACKETS	21
MAKE A GIFT	22

COVER IMAGE: A map of New Mexico indicating the locations of TriCore Reference Laboratories' patient care facilities with over 70 touchpoints within communities across the state as of 2024.

PathFINDER

Welcome to 2025 and our fall-winter issue of the PathFINDER, our semiannual departmental news magazine. Notable events happening around the department include our preparations for the fall 2025 opening of the UNM Hospital's Critical Care Tower, which has been years in the planning and construction. Our UNM Hospital laboratory will then have two locations within the hospital complex, with a second location in the new Critical Care Tower. It will include a blood bank, frozen section room, and Point of Care Testing. Planning has been a collaboration between UNM Hospital, Pathology, TriCore, and consultants.

This issue celebrates the 30th anniversary of the founding of TriCore Reference Laboratories. This was a tremendous undertaking in the 1990's led by our previous chair, Dr. Mary Lipscomb, Dr. Andrew Horvath, the head of Pathology Associates of Albuquerque, and many others. This effort brought together as partners, TriCore's sponsors UNM Hospital and Presbyterian Hospital, with a goal of also serving other communities in New Mexico. Thirty years later, TriCore is a large regional reference laboratory with a distinguished national reputation. TriCore's Chief Operating Officer, Mr. Eric Carbonneau, chronicles the history of TriCore over the past 30 years.

Also in this issue, we profile one of our tenured research faculty, Dr. Tione Buranda, describing some of his lab's current research efforts and his collaborations. The department has two recently retired faculty to celebrate. We profile Dr. Mohammad Vasef who retired from our



Hematopathology and Molecular Pathology divisions. Among many other outstanding accomplishments, Dr. Vasef was the founding program director of our nationally recognized and ACGME-approved Molecular Genetic Pathology Fellowship. This highly successful fellowship trains two fellows each year. Mentioned in the Faculty News section, Dr. Steve Young is also retiring from his joint UNM and TriCore roles. Dr. Young has had a tremendous impact on TriCore's development into a nationally known clinical trial powerhouse through the TriCore Research Institute.

Highlighted in this edition is our department's newest committee, that of Diversity Equity and Inclusion, and the DEI initiatives undertaken in our department. It is always looking to increase departmental involvement and input into its activities. This issue applauds numerous

~ continued on next page ~

PathFINDER - continued

departmental graduates from Med Lab Sciences, the Biological Science Graduate Program, and the Undergraduate Pipeline Network, all moving on to the next stage of their careers. In the Faculty News section, a big welcome to our newest tenure track research faculty, Katie Zychowski, PhD. Dr. Zychowski expands our department's research focus with her training in toxicology and environmental health science, investigating biological mechanisms following inhaled toxic exposures.

Wishing you a rewarding and productive 2025!

Best Regards,

Nancy Joste, MD

Professor & Chair of Pathology

Please follow us on Facebook, Instagram and Twitter.

Feature

TRICORE REFERENCE LABORATORIES: A 30 YEAR JOURNEY TO IMPROVE THE HEALTH OF OUR COMMUNITIES BY ERIC CARBONNEAU, CHIEF OPERATING OFFICER, TRICORE REFERENCE LABORATORIES

As Chief Operating Officer of TriCore Reference Laboratories, UNM's pathology leadership asked me to tell the story of TriCore, reminding folks where we came from and updating where we are going. To quote the comedian Nate Bargetzge, TriCore "was born in the 1900's." All joking aside, TriCore's mission has not essentially changed since its conception. No matter the wording, TriCore exists to improve healthcare in New Mexico by offering access to high quality laboratory medicine locally. And we are succeeding. By the numbers,

	<u>1998</u>	<u>2024</u>
Tests sent out of state	27%	<2%
Hospitals	3	16
Employees	506	1472
Tests performed annually	3 million	12.5 million

Our local footprint of 70+ touchpoints places us right in the communities where patients live, supporting efforts to improve healthcare access in New Mexico. Our locations include the sixteen hospitals, three cancer centers, our main reference laboratory in Albuquerque, a smaller reference laboratory in Las Cruces, thirteen branch labs and many patient care centers and phlebotomists in office.

We have also become one of New Mexico's largest employers. We now employee people from entry level high school graduates all the way to doctoral level scientists. Our affiliations with the University of New Mexico, Central New Mexico Community College, Texas Tech University and Northern New Mexico Community College allow for the education and training of many laboratory scientists, pharmacy, and public health professionals, as well as Clinical Residents and Fellows. Yet staffing remains one of our

~ continued on next page ~



Eric Carbonneau, as Chief Operating Officer, leads all of TriCore's Laboratories, the Research Institute, Patient Care Centers, Client Relations, and Information Technology divisions. Affiliated with TriCore for over 25 years, Eric inspires and facilitates excellence by providing the vision, leadership, and innovation necessary to ensure operational controls, administrative procedures, and personnel are in place to effectively grow the enterprise. Eric received his Medical Lab Scientist degree from the University of New Mexico and holds a Master's Degree in Health Systems from the University of Medicine and Dentistry of New Jersey.

Feature - continued



TriCore's Woodward location in Albuquerque houses the main reference laboratory, the research institute, and administrative offices.

biggest challenges; therefore, TriCore has augmented our affiliate partners with employer-based training in phlebotomy and histology. We proudly contribute to building the laboratory workforce of the future.

Sticking with comedians, Amy Poehler once said, "Find a group of people who challenge and inspire you, spend a lot of time with them, and it will change your life." Like most healthcare organizations, TriCore has seen many changes over the years. The people I work with, pathologists, executives, laboratorians, and warehouse staff, to name a few, helped guide TriCore to meet every challenge. From the organization's creation by the original pathology leaders at UNM and Presbyterian in the 1990s, to building the core lab in 2004, to, not one, but two pandemics (2009 and 2019-2023), TriCore has overcome its challenges by these teams working together as partners.

The strategy of TriCore has changed over the years. Early on, our focus was on standardizing processes, in-sourcing testing and consolidating testing for efficiency. We then shifted focus to delivering our testing at cost to our sponsor hospital systems: UNM and Presbyterian. After this was established, diversification became our mantra. We expanded and brought forth the TriCore Research Institute which provides testing for 510k submissions, central lab testing and a biorepository. The Rhodes Group was our venture into the IT space with the goal of bringing our technology to others, and TriCore helped launch Clinical Lab 2.0 efforts (Home - Clinical Lab 2.0). Most recently, we started a separate company, PBlaboratories (Home | PB Laboratories | Cannabis Testing for New Mexico) which provides safety testing for cannabis products in New Mexico. All of these efforts have the same mission, improving the health of our communities.

TriCore finished our strategic plan for the years 2025-2027 with a renewed dedication to our foundation of quality and expanding healthcare access for our communities. Our most updated mission statement is "We improve the health of our communities through excellence in laboratory science, education and research." As we continue work to uphold the fundamental mission, we also set a Vision for the future to "be an indispensable partner in building the future of healthcare." We will strive for this Vision over the next three years with focus on these three strategic objectives:

- 1. Build the culture that empowers our exceptional team.
- 2. Deliver an unparalleled experience to our patients, partners, and community.
- 3. Leverage our expertise, community footprint and strategic partnerships to achieve the growth worth fighting for.

An example of our approach relates to an improvement in how we communicate results to patients. In the past year, TriCore launched MyTricore, a patient portal allowing patients to view their lab results regardless of the ordering health system. This has improved patient satisfaction for ease of accessing their results, as well as employee satisfaction for decreasing their tasks related to providing results. Most recently, TriCore launched a direct-to-consumer testing service, which leverages the MyTriCore technology to allow consumers to order select wellness and personal health management tests on their own. I encourage everyone to view our offering at Order Your Own Tests. MyTriCore is an example of a TriCore continuous improvement initiative to improve our work culture, deliver an unparalleled experience to patients, and leverage our expertise to achieve the right kind of growth that best serves our community.

In the coming years, you will see TriCore engage more actively with our community. For example, in 2025 we intend to pilot a service to close healthcare gaps, with our Patient Care Center phlebotomists asking patients with a diabetes diagnosis if they have completed their standing HgbA1c testing. Equally important, we will continue to expand our access and scale our services as our partner systems, UNM, Presbyterian and Lovelace, expand their footprint across the state, all while maintaining service and quality standards. Finally, we will work with our professional networks, ATALAN, The Compass Group of Labs, and the National Independent Labs, to share the excellence we are bringing to New Mexico with fellow laboratorians across the nation.

I will conclude with a question I am often asked, why do you work for TriCore? My first response is easy, all of the people associated with TriCore, the pathology groups, hospital staff and of course, the 1500+ employees I interact with each day. My second response is because I care about New Mexico. I see the critical importance of our work, transforming a lab test result into information that impacts lives. All with no shareholders nor dividends to report, as our non-profit status allows us to focus on what needs to be done, rather than the margin at hand. Ralph Waldo Emerson wrote "To leave the world a bit better...because you have lived. This is to have succeeded." I believe TriCore has succeeded, and I am proud to be a small part of it.

Feature

THE DEPARTMENT'S COMMITTEE FOR DIVERSITY. EQUITY AND INCLUSION (DEI) BY DANIEL GALLEGO UMANA, MD, ASSISTANT PROFESSOR AND DIRECTOR, AND RUTH KIEF, STAFF AND ASSOCIATE DIRECTOR

WHAT IS THE MISSION OF THE DEPARTMENT'S COMMITTEE FOR DIVERSITY, EQUITY, AND INCLUSION (DEI)?

The mission of the DEI Committee is to foster an environment that values and promotes diversity, equity, and inclusion within the Department of Pathology. The committee strives to create a culture where everyone feels welcome, respected, and supported, regardless of their identity or background. It is committed to addressing systemic inequities through inclusive policies, practices, and programs, while encouraging open dialogue and continuous learning.

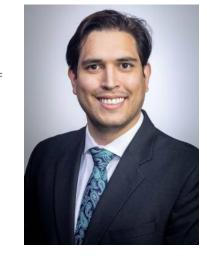
WHO ARE THE MEMBERS OF THE PATHOLOGY DEI COMMITTEE?

The current members of the Pathology DEI committee include Drs. Daniel Gallego Umana, Nancy Joste, Devon Chabot-Richards, Barbara Masten, Mariah Hukins, and Audra Kerwin, as well as staff members Amber Valdez and Ruth Kief. When the committee was formed, Drs. Devon Chabot-Richards and Tione Buranda, along with our former Department Administrator Nancy Risenhoover, worked with School of Medicine leadership to establish the foundation for the work we are currently doing. We would like to acknowledge and thank them for the outstanding work they did to get us started.

WHAT ARE THE CURRENT GOALS OF THE COMMITTEE?

The DEI Committee has strategic goals that we hope to achieve in the next three to five years. These include:

• Recruiting, training, and retaining a diverse organization that represents the communities we serve.



Dr. Daniel Gallego Umana, Director



Ruth Kief, Associate Director

- Creating a welcoming Environment where everyone feels respected and supported.
- Fostering creativity, innovation and teamwork while addressing disparities.

WHAT ARE SOME OFFERINGS THE DEPARTMENT HAS SPONSORED TOWARDS THESE GOALS?

The Department is working to implement several initiatives to support DEI goals, including:

- Recruiting and Retention
 - o Expanded outreach channels and recruitment strategies to attract diverse candidates.
 - o Working on establishing an observership program to provide exposure and opportunities for underrepresented individuals.
- Support and Inclusion
 - o Establishing mentorship and sponsorship programs.
 - o Creating community and employee resource groups (ERGs).
 - o Cultivating inclusive leadership through training and development.
- Education and Innovation
 - o Providing diversity and inclusion training for faculty, staff, and students.
 - o Promoting diversity in pathology education and training programs.
 - o Facilitating inclusive team-building activities.
 - o Launching inclusive research and collaboration initiatives.

HOW DOES OUR COMMITTEE INTERACT WITH OTHER DEPARTMENTS AND THE SCHOOL OF MEDICINE?

The DEI Committee collaborates with others primarily by our inclusion in the School of Medicine's Office of Diversity, Education, and Inclusion's BeAJEDI Council which meets monthly. During these meetings we learn of institutional initiatives, legislative issues, as well as:

- Share best practices and resources for diversity, equity, and inclusion.
- Engage in joint initiatives that promote equity in healthcare, research, and education.
- Contribute to broader institutional changes by aligning departmental goals with the university's overarching DEI objectives.
- Foster partnerships to enhance mentorship, career advancement, and representation across academic medicine.

Feature - continued

HOW CAN I HELP WITH THESE INITIATIVES AS A MEMBER OF THE PATHOLOGY DEPARTMENT?

You can contribute to the DEI initiatives by:

- Advocacy and Awareness: Promoting an inclusive culture through respectful dialogue, active listening, and supporting colleagues from diverse backgrounds.
- Participation: Engaging in committee activities (join our volunteer team at Roadrunner Food Bank), mentorship programs, or ERGs. *Contact any committee member to express your interest*~
- Outreach: Helping to expand outreach efforts to recruit diverse candidates and serve as an ambassador for DEI values.
- **Feedback:** Providing constructive input on policies, guidelines, or practices to improve inclusion and equity. *Contact any committee member to provide feedback*~
- **Education:** Participating in diversity and inclusion training sessions and encouraging others to do the same.
- **Innovation:** Contributing ideas for research, education, and team-building activities that align with DEI goals.

Department of Pathology Diversity, Equity, and Inclusion Mission Statement

The Department of Pathology is committed to fostering an environment that values and promotes diversity, equity, and inclusion. We believe a diverse and inclusive department leads to better outcomes for our patients, employees, learners, and scientific community. We are dedicated to creating an environment where everyone feels welcome, respected, and supported, regardless of their race, ethnicity, gender, sexual orientation, age, religion, ability, or any other aspect of their identity. We are committed to recruiting and retaining diverse employees and learners by providing all members of our department with the support and resources they need to succeed. We acknowledge that past and present systemic inequalities have created barriers to access and success for underrepresented groups, and we are committed to addressing these inequities through inclusive policies, practices, and programs. We encourage open dialogue, mutual respect, and continuous learning, and we strive to create a culture where everyone feels comfortable sharing their experiences, perspectives, and ideas. Creating a just and equitable department requires continuous effort, and we are dedicated to this work.



Feature

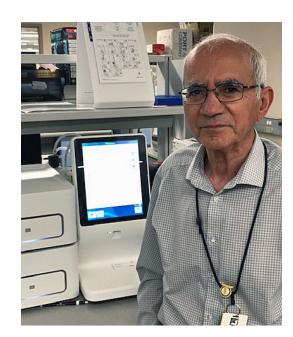
HEMATOPATHOLOGIST, MOLECULAR GENETIC PATHOLOGIST, EDUCATOR

BY MOHAMMAD VASEF, MD, PROFESSOR EMERITUS

HOW DID YOU CHOOSE THE UNM PATHOLOGY DEPARTMENT?

I chose the University of New Mexico Health Sciences Center for many reasons, including its educational programs, the collegiality of its team members, research opportunities, strong hematopathology training program, and its location in the great Southwest. During my interview, I had an opportunity to speak with Dr. Kathy Foucar and other faculty members and learn more about the UNM pathology department. I was very impressed with the openness, flexibility to pursue ideas, diversity of the academic mission, and the strength of the UNM hematopathology program, which is among the most prestigious nationally. I was offered the faculty position in the division of hematopathology. I was recruited in 2005 by Dr. Mary Lipscomb, the chair of the Department of Pathology at the time.

DESCRIBE YOUR ROLE AS A PATHOLOGIST, BOTH CLINICALLY AND AS AN EDUCATOR.



I am a hematopathologist and molecular genetic pathologist. I am strongly interested in teaching, researching, and managing complex hematopathology and molecular pathology-related cases with access to innovative technology. I enjoy educating the next generation of pathologists by teaching them the integration of morphology, the immunophenotype, and the rapidly evolving molecular genetics data to generate a comprehensive pathology report that would guide the clinicians and provide high-quality patient care. I also conduct research projects with pathology residents and fellows and help them with the write up of abstracts/posters and scientific manuscripts to present at national meetings and publish their work in pathology journals, respectively.

In the lab at TriCore, with the Biocartis research instrument used for a multi-institutional study.

WHAT DO YOU VIEW AS YOUR BIGGEST CAREER ACCOMPLISHMENTS?

I am the founding director of the Molecular Genetic Pathology (MGP) Fellowship at UNM. This ACGME-approved MGP training program was initiated in 2007, and the first fellow began in 2008. The UNM MGP fellowship program has been among the most successful nationwide and continues to train two fellows each academic year.

My second biggest career accomplishment was the publication of the Diagnostic Pathology: Molecular Oncology book. The first edition of the book was published in 2016. The book was put together with the contributions of many expert pathologists in the field, including several UNM pathology faculty members. The book was highly commended by The British Medical Association (BMA) Book Awards 2016. Of note, the book's third edition was published in January of 2024.

WHAT WERE SOME OF YOUR FAVORITE MOMENTS?

- 1. The day ACGME notified me of the UNM Molecular Genetic Pathology fellowship accreditation approval.
- 2. The incredible 26-mile in length, 'End-To-End' hike that includes the entire crest of the Sandia Mountain in a single day with participation of several of our Hematopathology and Molecular Genetic Pathology faculty members and fellows.

HOW WOULD YOU DESCRIBE YOUR TRANSITION SINCE RETIRING FROM UNM?

I retired from UNM effective January 1st of 2024. However, I hold an academic appointment at UNM and continue to work as a PI in a couple of sponsored research projects at TriCore Reference Laboratories. In my free time, I hike regularly and take banjo music lessons.



The E-to-E 26-mile hikers in 2011, including Dr. Vasef (far right), Professor Emerita Dr. Carla Wilson (crouching in front), and several Pathology Department trainees.

RESEARCH PROFILE

BY TIONE BURANDA, PHD, ASSOCIATE PROFESSOR DIRECTOR OF THE CENTER FOR MOLECULAR DISCOVERY (CMD)

HOW DID YOU CHOOSE THE UNM PATHOLOGY DEPARTMENT?



Genealogy: I was recruited as a post-doctoral fellow in Dr. Larry Sklar's research lab.

WHAT ARE YOU CURRENTLY WORKING ON?

My research is multidisciplinary and focuses on the role of integrins and small GTPases in host-pathogen interactions. Specifically, I am interested in how these factors regulate the host's immune response to infections caused by hantaviruses and SARS-CoV-2. We have developed assays to measure the interactions between viruses and host cells. To mitigate the biosafety constraints associated with BSL-3 level containment, we established a biosafety committee-approved protocol to UV-inactivate virus species and fluorescently label their envelope membranes. This allows us to conduct our experiments outside of BSL-3 containment while utilizing equipment unavailable in the limited BSL-3 environment. In this way, we have utilized the inactivated and fluorescently labeled virus particles as probes for drug discovery assays

and to investigate cellular entry mechanisms. In 2017, my lab collaborated with Dr. Angela Wandinger-Ness' lab in the Pathology Department to develop G-Trap, a high-throughput flow cytometry assay for examining how viruses or bacteria affect nucleotide binding to small GTPases. This assay can measure GTP loading for up to six targets simultaneously. Small GTPases are vital in signaling pathways and immune responses, allowing us to limit diagnostic biomarkers to fewer than five effectively. The G-Trap assay is a uniquely valuable tool for our research.

My laboratory research is currently funded by a Multi-PI project in collaboration with Dr. Gregory Bix's laboratory at Tulane University. RF1 AG078677-01: "Investigating the role and therapeutic potential of the α 5 β 1 integrin in risk factors for COVID-19-associated cognitive impairment." We investigate the role of integrin and GTPase signaling axis associated with cell entry. We also leverage our center's library compounds known to modulate GTPase signaling required for cell entry.

I am the Interim Director of the UNM Center for Molecular Discovery (CMD). In this role, I assist UNM principal investigators (PIs) in developing high-throughput format assays that are compatible with flow cytometry or plate reader platforms. As the interim CMD director, I oversee the Drug Discovery and Repurposing Core (DDRC) of the UNM Clinical and Translational Science Center (CTSC) by integrating drug discovery capabilities at our CTSC hub with the national Clinical and Translational Science Awards (CTSA) Program network to enhance the discovery of drug candidates. We support the CTSC's OPIOIDD function (Core H2) in developing an assay to evaluate the impact of opioids on patient immune response using a single biomarker (Rac1•GTP) to predict the positive and negative effects of opioid medication in chronic

pain treatment. Our premise is that pain and opiates modulate the activation status of peripheral blood innate and adaptive immune cells to a distinguishable extent relative to control cases. We have recently used the G-Trap assay to analyze the activation status of peripheral blood leukocytes of 105 pain patients, wherein we identified cases at potential risk of opioid use disorder (OUD). We consider this an essential first step for early identification of OUD, thus enabling early intervention. We submitted an R21 grant application under consideration at the National Institutes of Drug Abuse (NIDA) and are working on a manuscript draft.

DESCRIBE YOUR CURRENT RESEARCH COLLABORATIONS.

- Generating lots of data requires expertise in informatics, and we rely on Cristian Bologa, PhD,
 Research Professor of Internal Medicine, for data analysis and machine learning (submitted
 manuscripts: "A model for predicting bacteremia species based on host immune response" and
 "Immune Response Biomarkers for Surveillance and Early Prediction of Opioid Use Disorder"). CTSC's
 Drug Discovery and Repurposing Core (DDRC) is currently engaged in analyzing data derived from
 peripheral blood samples collected at the UNM Pain Clinic. Our excellent team includes Reza
 Ehsanian, MD, PhD, Vice Chair of Clinical Research and Assistant Professor in the Department of
 Anesthesiology and Critical Care Medicine (along with three medical students) for patient
 recruitment and clinical data analysis; Mark Shilling for patient recruitment and sample collection;
 Karin High, PhD, Distinguished Professor and Vice Chair of Research in Department of
 Anesthesiology; Virginie Bondu, conducting GTPase activity laboratory assays; Kimberly Page, PhD,
 MPH, MS, Professor in the Department of Internal Medicine, who leads the UNM CTSC Opioid-Use
 Populations with Integration, Outreach, Informatics, and Drug Discovery (OPIOIDD) Function; as well
 as Cristian Bologa, PhD, specializing in bioinformatics and multivariate data modeling.
- 2. We are currently collaborating with Dr. Steven Bradfute from the UNM Center for Global Health and the Department of Internal Medicine on a project supported by a Defense Threat Reduction Agency (DTRA) grant, titled "Unsupervised and Semi-supervised ML/AI with Iterative Experimentation for Rapid Identification of Targeted Alphaviral Small Molecules." The Compound Management Division (CMD) is responsible for dispensing compounds from a library of 20,000 anti-viral compounds for screening in the BSL-3 lab. We have successfully completed both the primary and secondary dose-response screens. I also attend weekly joint meetings with Dr. Bradfute and the Bioinformatics group to analyze the data.
- 3. Completed the screening of Prestwick Library to support a CTSC pilot project titled "Determining the Role of an Alzheimer's Disease Risk Gene-IL1RAP in Regulating Tau Pathology" for Dr. Kiran Bhasker's student's F32 application in the Department of Molecular Genetics and Microbiology.
- 4. Dr. Aaron Neumann, Associate Professor in the Department of Pathology, pilot project titled, "Tools to search for glucan unmasking antifungal drugs."
- ~ continued on next page ~



Research Profile - continued

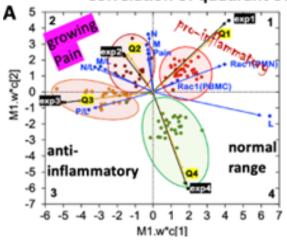
WHAT ARE THE GOALS FOR THE CENTER FOR MOLECULAR DISCOVERY?

As the interim CMD Director, I oversee the Drug Discovery and Repurposing Core (DDRC) link network of the Clinical Translational Science Center (CTSC) at UNM, in partnership with National Center for Advancing Translational Sciences (NCATS). Our goal is to provide resources for repurposing existing drugs for new clinical trials, translate research and trial strengths, offer access to essential technology, develop tools for investigators and start-ups, and support pilot projects through multi-site trials. The CTSC currently has a call for pilot grant applications. The DDRC's mission is to enhance health outcomes by rapidly identifying and providing new drugs for multisite clinical trials and facilitating first-in-human studies. In this context, we have developed an assay to identify biomarkers of opioid use disorder based on immune cell activation from 100 study cases. Our goal is to re-establish the CMD as a functional space for drug discovery by providing critical technologies and user support. We have recently acquired first-generation high through-put flow cytometers from Sartorius. The CMD is additionally supported by Emeritus Research Professor Dr. Bruce Edwards and research scientist Mark Haynes.

WHAT ARE YOUR FAVORITE MOMENTS?

My favorite 2024 moment was when our long-shot G-Trap assay for identifying OUD risk worked as intended. I believe the result made the CMD more relevant and of value to the institution.

Correlation of quadrant occupancy (A) and patient pain levels (B).





A. Partial least squares discriminant analysis (PLS-DA) utilizing immune variables from 105 cases reveals the classification of patients based on their pain levels and the risk of developing opioid use disorder (OUD).

B. Self-reported pain levels correspond to quantitative immune variables. Our goal is to use longitudinal data to predict patient progress towards OUD (Q1) or normal range (Q4) and when to use non-opioid treatment.

Faculty News

NEW FACULTY



KATHERINE (KATIE) ZYCHOWSKI, PHD Assistant Professor, Research, November 18, 2024

FACULTY ACCOLADES

ASCB Fellows Selection

The American Society for Cell Biology (ASCB) released their final cohort of 17 Fellows for 2024, including our own **Elaine Bearer, MD, PhD!** Election as a Fellow of ASCB is an honor bestowed upon ASCB members by their peers. The new cohort was formally recognized at Cell Bio 2024, the joint meeting of the American Society for Cell Biology (ASCB) and the European Molecular Biology Organization (EMBO) in San Diego, December 2024



Outstanding Contributions in Clinical Chemistry Award



In July, at the Association for Diagnostics & Laboratory Medicine (ADLM) International Conference, **David Grenache**, **PhD**, Clinical Professor of Pathology and TriCore's Chief Scientific Officer, was presented with an "Outstanding Contributions Through Service to the Profession of Clinical Chemistry Award." The annual award is almost 60 years old and recognizes individuals who have worked throughout their careers to advance the professional status of clinical chemists. ADLM's President, remarked "It is always a moment of great joy to recognize excellence...Your achievements have brought immense pride to our community, and we look forward to celebrating them with you."

AABB 2024 Annual Meeting

The Association for the Advancement of Blood and Biotherapies (AABB) Annual meeting was held in Houston, Texas, in October. Jay Raval, MD, Joseph Griggs, DO, and Andres Mindiola Romero, MD, FCAP, attended this year, and Dr. Raval presented an education session. They also had a poster presented at the meeting titled, "Multiday Use Of Non-Tunneled Central Venous Catheters In Vetted Adult Outpatients Undergoing Apheresis Collections Of Autologous Peripheral Blood Stem Cells." Their poster is included in the Quality Section of the 2024 abstracts in TRANSFUSION (the AABB Journal).

Faculty News

FACULTY RETIREMENT: DR. STEPHEN YOUNG

As noted recently by TriCore Reference Laboratories, we are honored to announce the retirement of **Stephen A. Young, PhD**, whose visionary leadership has impacted our own UNM Molecular Genetic Pathology Fellowship as well as significantly advanced industry development through his work at TriCore. Recognizing the potential to enhance efficiency, Dr. Young spearheaded FDA submission studies, which led to the formation of a dedicated support team comprised of talented technologists and a part-time research coordinator.



Highlights of Dr. Young's Contributions to the TriCore Research Institute:

- Establishment: The TriCore Research Institute was officially named in August 2015.
- Pioneering Trials: The first major multi-site trial focused on the Roche Ultra-Sensitive Amplicor.
- Notable Trials:
 - o Roche Athena HPV screening alternative for cytology
 - o Abbott Alinity m sexually transmitted diseases panel
 - o BD Onclarity™ HPV assay
 - o Roche 6800 and 5800 suites of tests

During the COVID-19 pandemic, Dr. Young's collaboration with multiple sponsors facilitated the availability of over-the-counter (OTC) devices, thanks to the unwavering support of the entire TRI team under his leadership.

The Next Chapter for Dr. Young:

Dr. Young will continue to contribute to the field of in-vitro diagnostics through his new venture, SAY Consulting. His journey in promoting and advancing diagnostic technologies continues.

TRI Next Generation:

A new team of technologists, leaders, and medical directors at TRI will carry forward Dr. Young's legacy. They will continue to collaborate with in-vitro diagnostic industries in the United States and globally, bringing innovative technologies to clinical diagnostics.

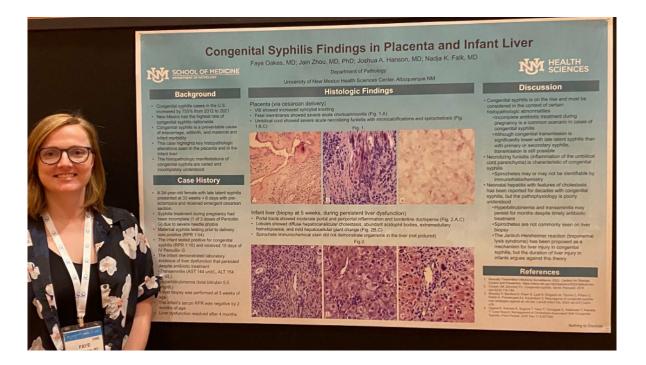
Thank you, Dr. Young, for everything you have done for TriCore, UNM, and the New Mexico community.

Resident and Fellow News

NATIONAL PRESENTATIONS

See photo below from the College of American Pathologists (CAP) conference, held October 19-22, 2024, in Las Vegas, NV, where resident **Dr. Faye Oakes** presented her poster: "Congenital Syphilis Findings in Placenta and Infant Liver."

Resident **Dr. Yonatan Carl** gave an oral presentation titled "Increased Pulmonary Embolism Deaths Among Southwestern U.S. Truck Drivers in the COVID-19 Era" at the National Association of Medical Examiners (NAME) annual meeting in Denver, CO, September 19-20, 2024. A publication is pending.



Graduate Student News

GILLETTE LAB THESIS DEFENSE: ERICA PASCETTI

Erica Pascetti, graduate student in Dr. Jenifer Gillette's research lab, successfully completed her BSGP Thesis Defense on November 8, 2024! Her thesis is titled, "The Tetraspanin CD82 in Hematopoietic Stem and Progenitor Cell Quiescence and Stress." **Erica** is starting a post-doctoral fellowship in Philadelphia.

GILLETTE LAB THESIS DEFENSE: SEBASTIAN RESTREPO CRUZ

On November 7, 2024, **Sebastian Restrepo Cruz**, graduate student in Dr. Jenifer Gillette's research lab, successfully completed his BSGP Thesis Defense! His thesis is titled, "Tetraspanin CD82 Regulation of EGFR Organization and Signaling." **Sebastian** will continue in the Gillette lab as a post-doctoral fellow.



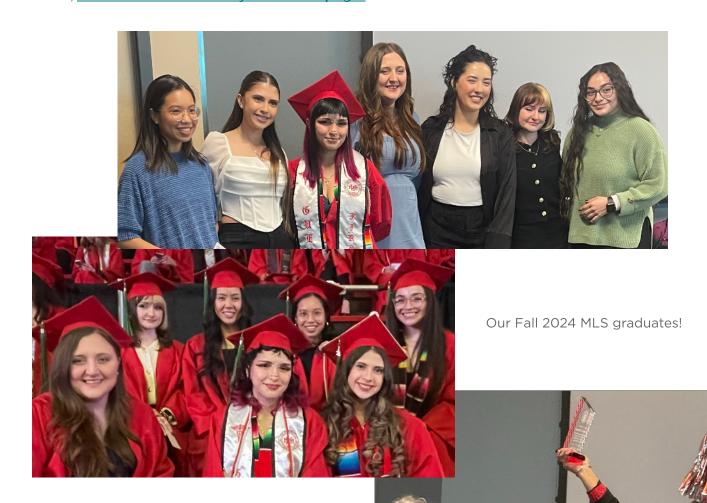
Pictured left to right: Drs. Sebastian Restrepo Cruz, Jennifer Gillette, and Erica Pascetti during crazy defense week!

Department News

MEDICAL LABORATORY SCIENCES PROGRAM FALL 2024 GRADUATES

Congratulations to the Fall 2024 Medical Laboratory Sciences (MLS) program graduates! The Medical Laboratory Sciences program commemorated student achievement with the first ever Pinning Ceremony. Each graduate received a pin and read the American Society for Clinical Pathology (ASCP) Pledge to the Profession. The pin signifies the graduates' completion of the MLS program and their entry into the medical laboratory scientist profession. Part of the ceremony was dedicated to recognizing **Dr. Margaret Alba**, who will be retiring in March 2025. The graduates were accompanied by many proud family members!

Participants in the Commencement and Pinning Ceremonies are pictured below. For details and a video, visit the student society Facebook page!



Pathology Department Chair, Dr. Nancy Joste, applauding for Dr. Margaret Alba

Department News

SUMMER 2024 UPN PROGRAM GRADUATES

Dr. Jennifer Gillette, Professor of Pathology, is the Director of the UNMHSC Undergraduate Pipeline Network (UPN) program. The UPN program brings together undergraduates to conduct summer biomedical research across the UNMHSC campus with the goal of cultivating students' interest in research while helping them attain skills needed to apply for and succeed in post-baccalaureate education. Dr. Gillette says her primary goal for the UPN program is to provide a unique research-focused experience for students to be nudged out of their comfort zone and exposed to the breadth of opportunities that are available to them within the biomedical workforce.



ORDER A PATHOLOGY DEPARTMENT JACKET!

Are you ready for a new Pathology Jacket? We have a soft shell vest and jacket option for this year, as well as hybrid soft shell jackets! The Pathology Department lobo logo is embroidered on the front, and you can choose to add your name for an additional fee. Orders can be made online at the link below and will be shipped directly to your address. Allow approximately three weeks for delivery.

Contact Burt Martinez at <u>brmartinez@salud.unm.edu</u> if you have questions regarding the ordering process.

Click here to order or scan this QR code:

Make a Gift

Your gift today impacts health care and research for tomorrow. Please consider making a recurring, one time, or legacy donation to one of the following funds:

THE PATHOLOGY EDUCATION FUND

Advance the education and research missions of the department.

VISIT: The Pathology Education Fund

THE CHEN HEMATOPATHOLOGY LECTURE SERIES

Support the Department of Pathology annual Hematopathology Lectureship and the education and training of future pathologists.

VISIT: The Chen Hematopathology Lecture Series

THE FOUCAR ENDOWMENT

Invest in future Pathologists. Recruiting and training highly proficient Pathology residents and fellows is a top priority.

VISIT: The Foucar Endowment

THE GEORGE D. MONTOYA RESEARCH SCHOLARSHIP FUND

Encourage UNM students to pursue a career in biomedical research.

VISIT: The George D. Montova Research Scholarship Fund

THE HARVEY ENDOWED CHAIR AND PROFESSORSHIP

Invest in Pathology research faculty. Endowed professorships attract and retain expert faculty who teach passionately and lead innovative translational research.

VISIT: The Harvey Endowed Chair and Professorship

OMI FORENSIC PATHOLOGY FELLOWSHIP PROFESSIONAL DEVELOPMENT

Enhance the education and professional development of OMI Forensic Pathology Fellows.

VISIT: OMI Forensic Pathology Fellowship Professional Development Fund

THE THOMAS M. WILLIAMS & MARGARET G. WILLIAMS ENDOWMENT FOR EDUCATION AND TRAINING

Support the greatest educational and training needs within the Department of Pathology.

VISIT: The Dr. Thomas M. Williams & Margaret G. Williams Endowment for Education and Training

If you need assistance with your gift please contact:

Maggie Schold, MFA, Director of Development, UNM School of Medicine Mobile: (505) 259-9164 or Email: maggie.schold@unmfund.org

Donate by check, estate planning, bequest, charitable annuity, insurance gift, charitable trust and more. Thank you for thinking of the Department of Pathology's funds as you generously give!

Acknowledgements

The University of New Mexico Department of Pathology gratefully acknowledges Nancy Risenhoover for the layout of this newsletter.

For more information on our department, please visit our website:

pathology.unm.edu

Do you have news? Please share! Contact: HSC PathAdmin@salud.unm.edu

