Hello and happy summer! This year’s robust summer monsoon season has been a relief, particularly after such an early and devastating fire season. New Mexico now looks as green as it ever gets. COVID-19 cases are still high with Omicron BA.5 but with much less severe illness or hospitalizations.

This edition of the PathFINDER highlights our annual summer transitions with announcements about our graduating students, postdocs, residents, and fellows followed by the arrival of our clinical trainees, the newest members of our department. Congratulations to all our graduates and best of luck in your future endeavors. We extend a hearty welcome to our newly arrived trainees.

In this issue we are hearing from a number of our faculty. Dr. Heather Jarrell is our new (interim since 2020 and permanent since 2021) Chief Medical Investigator. Dr. Jarrell highlights the immense challenges of running a large medical investigator office in a state with limited resources and chronic understaffing. This challenging situation became even more so during the past few years due to the pandemic, the opioid epidemic, and deaths from other drugs and homicides.

Moving on to UNM Hospital, our two Pathologists’ Assistant faculty, PAs Marlena Chavez and Emily Volpicelli, provide a glimpse into daily life in the UNM Hospital Gross Room where these highly trained professionals address whatever comes their way via the UNMH operating rooms. The two of them are essential faculty members and have a critical educational role in training our residents and fellows in gross anatomy, dissection, and clinical decision making. Our anatomic pathology service relies heavily on their expertise to provide the best in patient care.

Dr. Diane Lidke, our Vice Chair for Research, provides our research profile and takes us into her lab illuminating her research into cell-signaling pathways utilizing a variety of modalities. Her work integrates the disciplines of biophysics, bioimaging and quantitative biology to elucidate protein-protein interactions and structure-function relationships and has made her an international leader in her field. Among other honors, Dr. Like was the recipient of the 2022 UNM HSC Annual Excellence in Research Award for Basic Science Research.

Thank you to all of you for everything you do for our department and mission. I feel truly honored to be your chair and am grateful for our staff, trainees, and faculty.

Wishing you all a fulfilling summer with safe travels and good health.

NANCY JOSTE, MD
Professor & Chair of Pathology

Please follow us on Facebook, Instagram and Twitter.
FEATURE
UNWAVERING DEDICATION
THE NEW MEXICO OFFICE OF THE MEDICAL INVESTIGATOR
BY HEATHER JARRELL, MD, CHIEF MEDICAL INVESTIGATOR

How did you choose the UNM Pathology Department and Office of the Medical Investigator?

I met some of the OMI Pathologists during an AAFS (American Academy of Forensic Sciences) meeting when I was a fellow. I'd always known that the OMI was a widely respected program, so I applied for the position and came out for an interview. Once I saw the facility, I knew that I should begin my career at the OMI. Initially, it was difficult to leave Virginia, one of the greenest states in the country, and one that I always admired for its beauty. Transitioning from East Coast life took some time, but now I find that when I visit the East Coast, I miss the New Mexico climate, food, and scenery.

How would you describe the transition to your leadership role as Chief Medical Investigator?

I became the Interim Chief on April 1, 2020 (April Fools’ Day), which was the beginning of the pandemic in NM and the permanent Chief the following year. There really wasn’t much time to think about the transition as much as I would have liked to have prepared for it. We were so busy trying to get the refrigerated trucks initially and then I spent the next two years trying to get the trucks moved out. I’m extremely fortunate to be surrounded by some pretty amazing mentors and colleagues who have been supportive throughout this time. The OMI faculty and staff have admirable and unwavering dedication for serving families. Without their dedication and teamwork, we undoubtedly would have experienced the autopsy backlogs that other offices saw during the pandemic.

How is the OMI different from other medical examiners’ offices?

Not to brag (ok, maybe a little), but the OMI is one of the most well-respected medical examiner offices in the country (giving all the credit to my predecessors). Prior to the arrival of a CT scanner, the OMI was well-known for having many different types of cases that would ensure that trainees were well prepared for their careers upon completion of their fellowship. The construction of a BSL-3 lab is definitely unique to medical examiner offices across the country, which also allowed us to largely avoid a mad scramble and panic phase when COVID-19 hit, as we were already well-equipped to handle those autopsies. Acquiring a CT scanner was a landmark event for the OMI, as very few offices were fortunate enough to have one. The OMI has been at the forefront of the use of technology in this regard, which has really allowed us to supplant and supplement autopsies, adapting to practice with its contributions.

What were some of the challenges faced by the OMI over the past two years?

The OMI has been able to hire four forensic pathologists over the course of the past year, with two fellows who will be starting as faculty this summer/fall. The nationwide forensic pathologist shortage has significantly impacted many medical examiner offices, with increasing opiate and other drug deaths, homicides, and pandemic-related deaths straining an overburdened system to the point of exhaustion. The dedication and commitment of the OMI faculty and staff has been enduring.

What are your favorite moments?

My favorite part about my job is getting complicated cases where you’re initially really stumped and you have no idea what the person died from on the date of autopsy, but then all of the pieces come together to give you the answer and you’re able to give the family an answer as to why their loved one died. One such case was a young man in his late 20s who was found deceased. His autopsy showed nearly non-existent adrenal glands and a small thyroid gland. Toxicology was negative for alcohol and common drugs of abuse. Vitreous electrolytes showed hyponatremia and histology demonstrated a pituitary tumor that ultimately caused his death. This is one of those cases that is probably once in a lifetime and only an autopsy would have provided the answer. So much of what we do as forensic pathologists is so tragic, and our daily “norm” gets completely skewed such that we have to make a conscious shift back to everyone else’s “norms.” Cases like these are rewarding and are often the assurances that what we’re doing is worth the mental strain that so much of our job demands.
Describ e a t y p ical d ay  in t he UNMH Gro ss Ro o m.

A  t yp ical d ay in the Gross Room is filled with lots of communication and teamwork. We begin by discussing clinical histories of anticipated resections. This drives our workflow as we divide cases to be grossed and plan for frozen sections. If you were to walk into the Gross Room, you may see us cutting an amputation on the bone saw. We may be weighing a mass so large, the nurse had to wheel it in on a cart. We might be photographing a tumor or inking the margins of a specimen sent for frozen section. You may find us at the resident’s bench discussing a pathological process or going over anatomy. Every day, PAs, pathologists, residents, and staff come together to achieve the best possible outcome for our patients.

Continued on page 7
How do PAs interact with the residents and various trainees on rotation?

UNM PAs not only work with pathology residents, but we also welcome and inspire the interests of other curious minds, from undecided undergraduate students, to surgical oncology fellows. The trainee schedules are determined by factors such as career path, time allowance, and/or level of interest/education. Our residents spend three, two-month rotations with us on surgical pathology; during that time, they maintain a three-day cycle of grossing, reviewing slides, and signing-out. The PAs are continuously available to oversee and guide all trainees during their time in the gross room. As dedicated PAs, we provide excellent patient care, and expect no less from the trainees. We stress the importance utilizing all available resources, including patient history, operative notes, manuals, and the Faxitron, our breast radiograph instrument which allows us to precisely localize breast lesions. We teach proper grossing techniques and sampling and offer editing suggestions to gross descriptions to help ensure both adequacy and clarity for each case. In the end, our goal is that the trainee gains the comfort and confidence required to accurately gross independently.

What were some of the challenges you faced over the past two years?

Along with daily teaching, the PAs prepare and present Grossing 101 lectures to our first-year pathology residents and any other trainees that may be rotating through. Prior to the COVID pandemic, these lectures were predominantly delivered in the gross room through hands-on experiences using mock specimens. Because distancing mandates forced us to eliminate the hands-on interactions, we instead had to fully prepare PowerPoint lectures to be delivered via Zoom. It was challenging to collect, organize and deliver grossing information in a captivating and effective manner via Zoom; however, we did learn and solidify a great deal of knowledge in the preparation. Another repercussion of COVID is a recent increase in complex specimens. The early days of the pandemic initiated a decrease in patients seeking treatment and/or preventative care, with a resultant decline in the number of surgical specimens. Now that society is flowing again, and since most pathological conditions refuse to clear on their own, we have been seeing an increase of these delayed, now complex, cases.

What are your favorite moments?

Every day in the gross room brings about good times. Group discussions about staging, post-sign out gross/histology correlations, showing each other cases, sharing knowledge, harmoniously conquering countless frozen, or naturally working as a team all make for good times in the gross room. Watching the residents and other trainees grow toward and conquer independence equate to great times. The best moment, however, is walking out the door every day knowing that we worked to the absolute best of our ability to provide excellent patient care.
FELLOWSHIPS
CYTOPATHOLOGY
BY NADJA FALK, MD, ASSOCIATE PROFESSOR, DIRECTOR CYTOPATHOLOGY FELLOWSHIP PROGRAM

The University of New Mexico Department of Pathology is pleased to recognize our graduating cytopathology fellow, Dr. Arwyn Cunningham. Dr. Cunningham attended osteopathic school at The University of Pikeville – Kentucky College. She completed her AP/CP pathology residency at The University of South Dakota – Sanford School of Medicine, where she served as chief resident. Prior to her cytopathology fellowship, she completed a very intensive surgical pathology fellowship at The University of Texas Medical Branch at Galveston. During the course of her fellowship, Dr. Cunningham has honed her diagnostic skills and become outstanding at performing ultrasound-guided fine needle aspirations. She will be joining Genesis Medical in Quad Cities, Iowa, a hospital-based practice. We would like to take this opportunity to thank Dr. Cunningham for her hard work, resident / medical student teaching and the many improvements she has made to the service overall.

We would like to welcome our incoming 2022-23 Cytopathology Fellow:

Merry (Beth) Spradling, DO

Degree: DO from Arizona College of Medicine, Midwestern University, Glendale AZ

AP/CP Residency: Centura Health at Penrose-St. Francis

Coming from Colorado Springs, CO

Continued on page 9

As we come to the end of the academic year, we know that these fellows are not only excellent diagnosticians and practitioners, but also amazing colleagues and consummate professionals. We are proud of them, and we look forward to seeing where they may travel in what are certain to be impactful and exciting careers. We are so pleased that these outstanding physicians joined our “friendly association” of UNM Hematopathology along the way.

Anthony “Jake” Emanuel, MD

Dr. Jake Emanuel received his medical degree from and completed his AP/CP Residency at the Medical University of South Carolina (MUSC). During his time with us Dr. Emanuel took on an especially important project, assisting our new cytometry laboratory with the development and validation of testing for the T-cell receptor (TCR) beta chain constant region (TRBC1), an exciting new strategy for the assessment and diagnosis of T-cell lymphoproliferative disorders. After graduation, Dr. Emanuel will complete a Surgical Pathology fellowship at MUSC, and then enter practice with Dominion Pathology Associates in Roanoke, Virginia.

Stephanie Holdener, MD

Dr. Stephanie Holdener received her MD degree from the University of South Florida Morsani College of Medicine. Her AP/CP residency training was at Baylor College of Medicine, and she joined our department after her Cytopathology Fellowship at MD Anderson Cancer Center. As befits a board certified cytopathologist, Dr. Holdener has distinguished herself as an ace morphologist and diagnostician during the year. She has recently published studies on CNS intravascular lymphoma and FNA diagnosis of metastatic melanoma. Dr. Holdener will be enjoying the Rockies after she journeys up I-25 to enter practice at Denver Health. She says she is already planning her return visits to Albuquerque.

Elise Venable, MBBS

Dr. Elise Venable received her MBBS from University of Queensland, Australia, and came to UNM after her AP/CP Residency at Mayo Clinic Rochester. Dr. Venable has distinguished herself as an exceptional communicator, and quickly became a favorite “go to” hematopathologist for many of our diverse clients and clinicians when they had questions on complicated cases. Dr. Venable has been honored by ASCP as a Top 40 under Forty in pathology and laboratory medicine and has served on the CAP Cytogenetics committee. We are fortunate that Dr. Venable will remain in our department for one more year, as she completes her Molecular Genetic Pathology fellowship here at UNM.

Feras Zaiem, MD

Dr. Feras Zaiem received his MD from the University of Damascus School of Medicine, and completed AP/CP Residency at Wayne State University/Detroit Medical Center. We first met Dr. Zaiem when he elected to spend a rotation at UNM as a visiting resident in hematopathology; during which time it became readily apparent that he was a terrific budding hematopathologist and we successfully recruited him to the fellowship. We feel an especially close working relationship with Dr. Zaiem, as our work together stretches back over so many years now. Dr. Zaiem has a particular interest in therapy-related myeloid neoplasms, and has contributed to the Bone Marrow Pathology group in this area. Dr. Zaiem will next complete an Oncologic Pathology fellowship at Memorial Sloan-Kettering Cancer Center in New York City.

Continued from page 9

FELLOWSHIPS
HEMATOPATHOLOGY
BY DAVID CZUCHELEWSKI, MD, PROFESSOR, DIRECTOR HEMATOPATHOLOGY FELLOWSHIP PROGRAM, DIVISION DIVISION CHIEF HEMATOPATHOLOGY

The Oxford dictionary offers two definitions for the term “fellowship.” The first, more bureaucratic definition is “the status of a fellow in a college or society.” Our four outstanding Hematopathology fellows this year have indeed been fellows in such an organization (i.e., our department and medical center). But the second definition expands upon the concept of fellowship in an important way: “a friendly association, especially with people who share one’s interests.” This hint of collegiality and solidarity strikes me as particularly apt when I consider our group for the 2021-2022 academic year. The members of this graduating class truly stand out for their degree of camaraderie and easy cooperation, and for the mutual respect they have for one another.

Continued on page 10
We would like to welcome our new 2022-23 Hematopathology fellows:

Kaia Adams, MD
Degree: MD, MS from Saba University School of Medicine, Saba, Dutch Caribbean
AP/CP Residency: South Dakota State University, Brookings, SD
Coming from Sioux Falls, SD

Michael Franklin, DO
Degree: DO from Pacific Northwest University of Health Sciences College of Osteopathic Medicine
AP/CP Residency: The University of New Mexico School of Medicine
Staying here in Albuquerque, NM

Jordan Redemann, MD
Degree: MD from University of Oklahoma College of Medicine
AP/CP Residency: The University of New Mexico School of Medicine
Staying here in Albuquerque, NM

Andres Mindiola Romeo, MD
Degree: MD from University of Zulia School of Medicine, Maracaibo, Venezuela
AP/CP Residency: Dartmouth-Hitchcock Medical Center
Coming from Lebanon, NH

Daniel Gallego, MD
Dr. Gallego received his medical degree at the Universidad del Valle in Columbia. He completed anatomic and clinical pathology residency, as well as a hematopathology fellowship, at the University of Washington in Seattle. As a board certified hematopathologist, he started his fellowship by introducing blood smears and touch preps to the office, setting up a mini staining station at his desk. His fellowship here has been one of learning, both for attendings and trainees. He is always using the literature to delve deeper into topics and already has several projects ongoing. We are so lucky to have him continue on as faculty next year. I am excited to see what his innovative ways of thinking will bring our field.

Michael Harrell, MD
Dr. Harrell received his medical degree from Case Western Reserve School of Medicine in Cleveland. He is well known to UNM as he completed his anatomic and clinical pathology here prior to fellowship. Dr. Harrell is also well known for his unique sense of humor and often laughing can be heard down the hall when he’s around. In a field like ours, laughter is the best medicine. But aside from humor, Dr. Harrell is known for asking probing and insightful questions about our field, inciting out of the box thinking that keeps us all on our toes. He was also extremely active in teaching trainees and rotators who visit our office. Next year, he will be working at the Los Angeles Medical Examiner’s Office, where he can be with his fiancée, Dr. Suddock.

Aidan Kerr, MD
Dr. Kerr received his medical degree from Temple University in Philadelphia. He stayed in Pennsylvania for residency, completing anatomic and clinical pathology training at Thomas Jefferson University Hospital. During his fellowship here, he has been the quiet and even-keeled fellow. He is no nonsense, getting his work done efficiently. To be home with his wife and kids, one of whom was born right in the middle of his fellowship. Despite having a newborn at home, Dr. Kerr has always been reliable in his work. It’s like stress doesn’t even touch him. He will make a great faculty mentor next year at the OMI.

FELLOWSHIPS
FORENSIC PATHOLOGY
BY DR. LAUREN DECKER, ASSISTANT PROFESSOR, DIRECTOR, FORENSIC PATHOLOGY FELLOWSHIP PROGRAM

I think we can all agree, but I will be the first to say, we will dearly miss our 2021-2022 Forensic Pathology Fellows. Luckily, we will be keeping two on faculty at the OMI! This year’s group of fellows have been a challenge in the best way possible. Not only do they understand the most complex concepts in forensics, they push boundaries of what is normally done, set the standards higher, and question the normal standards by which forensic pathologists hold themselves accountable. It has been a unique learning experience to have such eager and knowledgeable fellows this year. I am so proud of their progress and growth and want to thank them for all they have done for the office and taught me during this year.
We would like to welcome our new 2022-23 Forensic Fellows:

Brittany DePasquale, MD
From Philadelphia, Pennsylvania
Hospital of the University of Pennsylvania for AP/CP residency
Children's Hospital of Philadelphia for pediatric pathology

Kimberly Johnson, MD
From Milwaukee, Wisconsin
Medical College of Wisconsin for AP/CP residency

Harley Schainost, MD
From Albuquerque, New Mexico
The University of New Mexico for AP/CP residency

Natalie Taylor, MD
From Madison, Wisconsin
University of Wisconsin Hospital for AP/CP residency

Audra Kerwin, MD
After joining the Forensics Fellowship Program mid-year, Audra Kerwin, MD, will be staying with us through 2022 completing her off-cycle fellowship. Please check on her after the month of June when she was the only fellow taking all the cases!

FELLOWSHIPS
MOLECULAR GENETIC PATHOLOGY

BY MOHAMMAD VASEF, MD, PROFESSOR, DIRECTOR MOLECULAR GENETIC PATHOLOGY
FELLOWSHIP PROGRAM

The University of New Mexico Molecular Genetic Pathology (MGP) Fellowship program is pleased to recognize our outstanding MGP fellows graduating on June 30, 2022. Dr. S. Burke Van Norman and Dr. Philip M. Barber have been invaluable assets to our Department of Pathology and TriCore Molecular Diagnostic Laboratory in new molecular genetic tests optimization and validations. Burke and Phil had impressive performance in all areas of the MGP fellowship with excellent evaluations from all rotation directors. Both Phil and Burke played a significant role in all aspects of molecular genetic pathology services including integration of morphology with next generation sequencing results that is so crucial in patient management and critical treatment-related decisions by the clinical team in the era of personalized medicine.

Despite the ongoing COVID pandemic and its associated limitations, Phil and Burke were very much engaged in everyday activities in their different rotations with excellent evaluations from all rotation directors. Most recently, they jointly put together a comprehensive guide for triaging and for analysis of our complex NGS myeloid gene panel which I included in our fellow orientation package. I very much thank them for the nice job. You both raised the bar high for our future fellows.

Philip M. Barber, MBBS
Dr. Philip M. Barber (Phil) received his medical degree from University of Queensland School of Medicine in Australia. He did his AP/CP residency in Orlando Health Department of Pathology in Florida followed by a hematopathology fellowship in Washington University in St. Louis before he came to UNM for his fellowship in Molecular Pathology. Phil is joining Wilmington Pathology Associates in North Carolina.

Steven Burke Van Norman, MD
Dr. Steven Burke Van Norman (Burke) received his medical degree from the College of Medicine at Duke University, in North Carolina in 2016. He then completed his combined anatomic and clinical pathology residency training and a hematopathology fellowship at the University of Michigan before he came to UNM for his molecular pathology fellowship. Burke is joining Utah Pathology Services in Salt Lake City.
We congratulate our graduating fellows and would like to welcome our new 2022-23 Molecular Genetic Pathology Fellows:

**Elise Venable, MBBS**
- Degree: MBBS from University of Queensland
- AP/CP Residency: Mayo Clinic, Rochester, MN
- Hematopathology Fellowship: The University of New Mexico
- Staying here in Albuquerque, NM

**Ashish Patil, MBBS, PhD**
- Degree: MBBS from Jawaharlal Nehru Medical College, India
- AP/CP Residency: Louisiana State University Health Sciences Center, Shreveport, LA
- Coming from Miami, FL

We would also like to welcome our incoming 2022-23 Surgical Pathology Fellow:

**Ryland Richards, MD**
- MD from State University of New York Upstate Medical University, Syracuse, New York
- AP/CP Residency: Dartmouth-Hitchcock Medical Center
- Coming from Lebanon, New Hampshire

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**FELLOWSHIPS**
**SURGICAL PATHOLOGY**
**BY SHWETA AGARWAL, MD, ASSISTANT PROFESSOR, DIRECTOR SURGICAL PATHOLOGY FELLOWSHIP PROGRAM**

**Nathan Ryan, MD**
- Dr. Nathan Ryan received his MD degree from St. George’s University School of Medicine (SGU), Grenada, West Indies in 2016. He completed his AP/CP pathology residency training at Augusta University Medical Center (AUMC) in Augusta, GA, in 2020, followed by cytopathology fellowship at Medical University of South Carolina (MUSC), Charleston, SC, before joining UNM as surgical pathology fellow. During his fellowship, Dr. Ryan has become proficient in diagnosis of both cancer as well as non-cancer cases spanning a large variety of organ systems. He has also participated in resident education by teaching them both at the scope as well as during “Unknown conferences.”
- Dr. Ryan will be transitioning to a general surgical pathology practice at Delta Pathology, Louisiana. On behalf of all AP faculty, I wish Dr. Ryan all the best in his future endeavors.

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**Ryland Richards, MD**
- MD from State University of New York Upstate Medical University, Syracuse, New York
- AP/CP Residency: Dartmouth-Hitchcock Medical Center
- Coming from Lebanon, New Hampshire
FELLOWSHIPS
TRANSFUSION MEDICINE

BY JOSEPH GRIGGS, DO, ASSISTANT PROFESSOR, DIRECTOR TRANSFUSION MEDICINE
FELLOWSHIP PROGRAM

Dennis Sosnovske, MD
Dr. Sosnovske earned his MD from Oregon Health & Sciences University and completed his AP/CP residency here at the University of New Mexico. During Dennis’s time at UNM, he had multiple abstracts and presented posters at ISLH, AACC, and ASFA. He was involved with numerous Quality Improvement projects and gave an oral presentation at the local Quality Improvement Patient Safety (QIPS) seminar. He was heavily involved in resident education and residency advocacy, serving on the Resident Council and several hospital task forces, including the Duty Hour, Curriculum, and Right Size Task Forces. Following his Blood Banking and Transfusion Medicine Fellowship, Dennis will be entering practice at the University of Kansas Medical Center.

RESIDENT GRADUATION
MICHAEL FRANKLIN, DO

BY DEVON CHABOT-RICHARDS, MD, ASSOCIATE PROFESSOR, VICE CHAIR FOR EDUCATION, DIRECTOR FOR DIVERSITY, EQUITY AND INCLUSION, DIRECTOR OF THE MOLECULAR DIAGNOSTICS AND ONCOLOGY LABORATORY

Dr. Michael Franklin entered her pathology residency with rather more knowledge about microscopes than the average resident- and even more than the average faculty member! Prior to entering medical school at Pacific Northwest University of Health Sciences, Michael worked as a microscopy technician for Zeiss Microimaging at Marine Biological Laboratory and even published a book of photomicrographs, Magnoliophyta: The Microscopic World of Flowering Plants.

I was pleased when she took an interest in hematopathology during her residency and was impressed with her intelligence, thoughtfulness, and hard work. I collaborated with Michael on writing a chapter on RNA testing in large B-cell lymphomas, a subject to which she did not have much previous exposure, and was pleasantly surprised by her highly organized and careful approach to searching the literature, educating herself, and putting together an incredibly well-written chapter. I would happily collaborate with her on any future research or writing projects!

Throughout her residency, she has also worked on projects including validation of an ultrasensitive in situ hybridization assay for kappa and lambda light chains and a digital pathology project evaluating neural network analysis of gastritis specimens. I am so pleased that Michael will be staying with us for a hematopathology fellowship and am looking forward to seeing all that she accomplishes in her career.
KAITLYN NIELSON, MD

BY JULIE HARRINGTON, MD, ASSISTANT PROFESSOR, ALBUQUERQUE VETERANS’ ADMINISTRATION MEDICAL CENTER

Dr. Kaitlyn Nielson isn’t one for staying within her comfort zone. Unafraid of challenges and new experiences, she moved from the Midwest to the East Coast for medical school and eventually her path led her to New Mexico for residency. Coming to an unfamiliar place without knowing anyone was undoubtedly overwhelming but owing to her warm and bright disposition, Kaitlyn delved into our program feeling welcomed and supported.

Her colleagues describe her as smart, helpful, resourceful, and an overall great person to have on your team. She always had a good attitude and was very respectful of everyone she worked with. Kaitlyn rose within our ranks actively engaged in clinical work and academic endeavors that have earned her the distinction of 2021 Resident of the Year. Kaitlyn kept quite busy during residency involving herself in numerous case reports and poster presentations that include a case of tall cell carcinoma with reverse polarity, a rare subtype of breast carcinoma with an unusual molecular profile.

Another project looked at using deep learning convolutional neural networks to differentiate patterns of colitis. While it’s clear her passion lies in the field of surgical pathology, her altruistic interests are reflected in her involvement training pathology residents on patient safety within the Association of Pathology Chairs Residency Program Directors workgroup. In her spare time Kaitlyn also enjoys traveling, running, baking and psychological thrillers.

The future holds a prosperous and bright career for Kaitlyn as she will complete a surgical pathology fellowship followed by a multidisciplinary breast pathology fellowship at Mayo Clinic. While her intent is to pursue a position within private practice, maybe she could be persuaded to find her calling within the Veterans’ Health Administration?

Congratulations, and thank you Kaitlyn, for gracing our department with your dedication and hard work. You will be missed!

JORDAN REDEMANN, MD

BY DANIEL BABU, MD, ASSISTANT PROFESSOR, ASSOCIATE PROGRAM DIRECTOR PATHOLOGY RESIDENCY PROGRAM, DIRECTOR OF CLINICAL FLOW CYTOMETRY

I first met Dr. Jordan Redemann when he started his hematopathology rotation in his second month of residency. As a brand new faculty member working with a new PGY1 for the first time, I was nervous that my instruction would be ineffective or uninteresting to him. However, Jordan came in bright-eyed and bushy-tailed, and even working with him again four years later, it’s apparent this eagerness has never waned.

Jordan came to the UNM residency program from Oklahoma where he grew up and attended the University of Oklahoma for his undergraduate and medical school studies. He entered residency with a keen interest in the expanding role of technology in pathology practice and followed through on this, pursuing research projects in artificial intelligence which he converted into multiple publications. Additionally, Jordan gave two seminar series talks on digital pathology and most recently on advances in artificial intelligence, which were expertly delivered and showed strong command of a difficult to understand area. Jordan also published on a case of disseminated fungal infection diagnosed from a bedside splenectomy. Perhaps one may have peaked if they have published on the spleen with Dr. Vasef, but Jordan’s accomplishments have been continuous. He was named a chief resident for 2020-2021 right when the pandemic phase started, and Jordan helped hold the residency program together. Recently Jordan was named the winner of the 2022 Resident of the Year Award, which reflect a high opinion of both AP and CP faculty.

We all note that, aside from developing into an astute pathologist, Jordan shows an incredible willingness to lend a hand whenever help is needed... to the point where we may feel guilty about imposing on him. He is a wonderful team player, and as a testament to his affability, prior hematopathology fellows, even after leaving UNM, have asked about Jordan’s progress in residency (and whether he was pursuing hemopath). Fortunately, for those of us at TriCore, Jordan is sticking around at UNM for additional fellowship training in hematopathology and molecular pathology, and we could not be prouder.

A computer wizard, musician, and worthy D&D dungeon master, Jordan can now add board certified pathologist to the list of his many talents. The UNM pathology residency program congratulates Dr. Redemann on a phenomenal residency and wishes him all the best in his fellowship training and beyond.
A few years ago, Harley hosted a welcome party for the incoming residents at her house. I walked up to the front of the home, feeling excited to see our new colleagues but also secretly dreading the small talk and awkwardness of meeting people.

There was a low-level of anxiety that comes with going to a work gathering to welcome newbies... you know, where you wonder if the new residents would be friendly, or more importantly, would the snacks be good? But the door opened, and that anxiety dissipated as we were greeted by the cutest dog that ever lived (in this history of dogs, period). To the right, animal organs and other oddities were on display in full force; to the left, there was a room filled with nerd memorabilia. Every which way were cats wanting attention. And Harley was there, making sure everyone was talked to, and felt welcome. It was... legit. I felt proud that she invited our new residents here, to welcome them to the group.

Attending that party years ago gave me a glimpse into who Harley was as a person outside of work. As her co-resident it wasn’t hard to see that she was easy to work with, that she was driven, that she advocated for the residents, and that she was kind to everyone. When she was Chief—a difficult position in normal circumstances, let alone during a transition of program directors, she worked hard to recruit the best applicants to our program. She was a role model to junior residents. She volunteered for a Big Brothers Big Sisters “Discovery Festival” that exposed elementary and middle school children to pathology in the hopes of having them consider S.T.E.M. careers. She listened to others’ feedback and helped spearhead an initiative to improve resident didactics. In general, whenever there was a need, she seemed to always be there to step up and fill in.

But residency is only four years of a much longer career, and the field of medicine has a propensity to rob people of their hobbies and passions as they are required to be at the hospital with a demanding schedule. However, Harley continued her longstanding history of kindness to animals and people by not only making the residency program a better place, but our Albuquerque community as well. She somehow managed to find the time to become a mother, to foster animals in need (many of which required medical treatment) and to continue her hobbies despite moving to a new state, leaving behind her family. I hope she was also able to expand her crazy oddities collection.

We are all so excited for her to start her fellowship here at the Office of the Medical Investigator, where I hope we can provide the same type of welcoming environment that she helped to create in our residency program. Harley, I hope forensics is everything you want it to be and more, and I am so excited to work with you again!
"Don’t forget about all the things you used to enjoy doing when you had more free time. They will still be there waiting for you on the other side!"

- Michael Franklin -
How did you choose the UNM Pathology Department?

I first met Bridget Wilson, at a Biophysical Society meeting, when I was just beginning to look for my next position after my postdoc. She invited me to visit UNM and I was impressed by the science going on in the department, in particular by the vision that Bridget and Jan Oliver had for the NM Spatiotemporal Modeling Center, bringing together cell biologists, physicists, mathematicians and modelers to advance our understanding of cell signaling. When Bridget and Jan later recruited me as part of the STMC, I knew it was the place I wanted to be.

What are the goals for your lab?

The overall goal for my lab is to understand signaling in cancer and immune cells. As a biophysics-oriented lab, we quantify how protein-protein interactions and structure-function relationships regulate signal transduction. To do this, we primarily use fluorescence microscopy techniques to image over a range of spatiotemporal scales, from single molecule to single cell to tissue.

What are your research goals?

Our main research goal is to better understand the molecular mechanisms of signaling in both normal and diseased states, as well as the influence of therapeutics on protein function. As part of this goal we also develop advanced microscopy methods for quantifying protein dynamics and localization in cells. This includes single molecule dynamics to determine protein-protein interaction kinetics (diffusion, off-rates) and super-resolution imaging to determine lateral protein distribution (oligomerization, aggregation).

What are you currently working on?

We currently have projects focused on signaling by receptor tyrosine kinases (RTKs), FcERI, and PD-1. We also collaborate with Genmab to understand the mechanisms of how their unique Hexabody antibody-based therapeutics alter protein distribution and cell signaling outcomes. A major theme in the lab right now is about receptor crosstalk. Typically, the activity of membrane receptors is often studied in isolation. But it is becoming increasingly clear that interactions between disparate membrane receptors and their signaling pathways play a critical role in directing signaling outcomes or providing for therapeutic escape. We look at how this crosstalk happens in EGFR interactions with HER2 or RON, FcERI crosstalk with integrins, and the influence of PD-1 on TCR.

How do you integrate education and training into your laboratory work?

My lab includes undergraduates, graduate students and postdoctoral fellows from biomedical sciences, chemistry, biology and engineering backgrounds. This provides a multidisciplinary environment, which I think is a key aspect for training the next generation of scientists. I also emphasize teamwork, which naturally leads to trainees learning from each other as well as development of their mentoring and teaching skills. I also integrate my laboratory work into education and training. My teaching in the Biomedical Sciences Graduate Program (BSPG) involves course blocks focused on cell signaling and advanced microscopy techniques. I integrate examples from my own research in these lectures.

Describe your role as the Vice Chair for Research for the Pathology Department.

Our department is very diverse, with faculty engaged in clinical work, education and research. The majority of the faculty are clinicians and the Department Chair has typically been a trained MD. My role as Vice Chair for Research is to represent the basic science faculty, bringing the research needs to the Chair and helping to form the research mission of the department. I work closely with Dr. Jennifer Gillette (Senior Advisor for Research) and the other basic science faculty to develop our priorities in research directions, hiring and infrastructure.

About Dr. Lidke: Dr. Diane Lidke has given > 110 invited seminars and talks and has served as Monitoring Editor for Molecular Biology of the Cell since 2014. This year she was named to the Editorial Board of the Biophysical Journal. Notable recent achievements include the UNM Excellence in Research Award in 2021 and a 2nd time recognition for UNM-BSPG Outstanding Mentor Award in 2021.
**NEW FACULTY**

*Daniel Gallego, MD*, Assistant Professor, Clinician Educator, OMI, July 1, 2022

*Ryland Richards, MD*, Instructor/Fellow, Surgical Pathology, July 1, 2022

*Aidan Kerr, MD*, Assistant Professor, Clinician Educator, OMI, August 1, 2022

*John Scariano, PhD*, Principal Lecturer III, Medical Laboratory Sciences, August 1, 2022

**DISTINGUISHED PROFESSOR AWARDS**

Each year, a select number of faculty are awarded the highest distinction in recognition of outstanding achievements at UNM, as well as for their national and international renown as scholars. Two Pathology faculty were recognized this year: *Drs. Angela Wandinger-Ness and Cosette Wheeler*. Congratulations!

**FACULTY PROMOTIONS**

*Lauren Dvorscak, MD*, from Assistant Professor to Associate Professor Clinician Educator

*Clarissa Krinsky, MD*, from Assistant Professor to Associate Professor Clinician Educator

*David Martin, MD*, from Assistant Professor to Associate Professor Clinician Educator

*Angela Wandinger-Ness, PhD*, from Professor to Distinguished Professor

*Cosette Wheeler, PhD*, from Professor to Distinguished Professor

**NEW TRICORE CMO: DR. ARAND PIERCE**

In March 2022, we welcomed TriCore’s new Chief Medical Officer (CMO), Dr. Arand Pierce! As a former member of Pathology Associates of Albuquerque (PAA), Dr. Pierce has served as Medical Director of Presbyterian Infusion Services, working closely with other health care systems and the NM Department of Health to coordinate COVID treatment options for all New Mexicans. He also served as Medical Director of Presbyterian’s transfusion medicine service and has provided clinical pathology services for Lovelace, numerous regional hospitals, and TriCore (including TriCore’s Special Coagulation Laboratory). Dr. Pierce is also a Clinical Associate Professor in UNM Pathology, where he actively participates in medical student, resident, and fellow education.

Dr. Nancy Joste is now the permanent Pathology Department Chair! We are grateful to have her skill, dedication, and leadership as Professor, Vice-Chair, Interim Chair, and now Department Chair. Her work at UNM has combined clinical service through diagnostic general surgical pathology and cytopathology, education of medical students, pathology residents and fellows, and research, with a focus largely in gynecologic malignancies.

She is a board-certified anatomic and clinical pathologist with subspecialty boards in cytopathology and a subspecialty fellowship in gynecologic pathology. She has a broad expertise in most areas of surgical pathology, having practiced as a general surgical pathologist for more than 20 years. She was recruited to the Department of Pathology in 1995 and has been on the faculty since that time. For the past 17 years, she has served as the director of Anatomic Pathology, overseeing all aspects of surgical pathology and cytopathology.

Dr. Joste also has an enduring interest in global health and has provided pathology services and education to underserved populations in Central and South America, Africa, and Central Asia. Her numerous accolades include the Department of Pathology’s Outstanding Professional award and the UNM School of Medicine’s 2017 Leonard M. Napoliello, PhD, award. She was also a 2017 Fulbright Scholar to Peru.

Dr. Michael Richards, Interim Dean of the School of Medicine, commented “I want to congratulate Dr. Joste as she embarks on this next adventure in her career and thank her for her incredible service and devotion to our state, our mission, our patients and our learners.”

**NEW TRICORE CMO: DR. ARAND PIERCE continued**

Congratulations, Dr. Joste!

**FACULTY NEWS**

**DR. NANCY JOSTE, NAMED CHAIR OF PATHOLOGY**

Dr. Nancy Joste is now the permanent Pathology Department Chair! We are grateful to have her skill, dedication, and leadership as Professor, Vice-Chair, Interim Chair, and now Department Chair. Her work at UNM has combined clinical service through diagnostic general surgical pathology and cytopathology, education of medical students, pathology residents and fellows, and research, with a focus largely in gynecologic malignancies.

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Congratulations, Dr. Joste!
FACULTY NEWS

DR. AARON NEUMANN AWARDED PATENT

A patent was issued for invention, “Rapid Culture Free Pathogen Detection via Optical Spectroscopy.” The patent, maintained at UNM Rainforest Innovations, describes a method for photoinductive deposition of noble metal plasmonic nanosensors in and on pathogens in medical specimens. This method targets rapid detection of microbial pathogens in such samples using Surface Enhanced Raman Spectroscopy (SERS). U.S. Patent #11275028, March 15, 2022.

Inventors: Aaron K Neumann (Albuquerque, NM), Anatoliy O Pinchuk (Colorado Springs, CO), Ke Jiang (Colorado Springs, CO)

DR. JAY RAVAL AWARDED PILOT GRANT

This year the Pathology Pilot Grant funding was awarded to Dr. Jay Raval for his proposal entitled: Therapeutic plasma exchange in severely injured trauma patients with trauma induced coagulopathy and multiple organ dysfunction. Dr. Raval’s co-investigators are Dr. Jennifer Gillette (Pathology), Dr. Marian Rollins-Raval (Pathology), Dr. Richard Mariar (Pathology), Dr. Sarah Moore (Surgery), Dr. Jasmeet Paul (Surgery).

DR. TAE-HYUNG KIM’S TRANSDISCIPLINARY RESEARCH

Dr. Tae-Hyung Kim was selected to participate in the Transdisciplinary Research on Energetics and Cancer (TREC) Training Workshop at Yale School of Public Health this year. The TREC Training Workshop is designed for individuals in early careers who want to pursue transdisciplinary research in energy balance and cancer. This workshop places strong emphasis on mentoring, developing and applying transdisciplinary competencies, with a curriculum specifically focused on energetics and cancer. Dr. Kim will represent the UNM community and the Department of Pathology at this in-person workshop in Westbrook, CT.

DR. JOSEPH GRIGGS AND THE SRMC TRAUMA CENTER

The UNM Sandoval Regional Medical Center (SRMC) obtained a Level III Trauma Center designation from the NM Department of Health in March 2022. Level III designation means that SRMC will be able to significantly rebalance the load for the UNM Health System by seeing lower-level and a few of the higher-level traumas at SRMC. Thanks to Dr. Joseph Griggs, who has directed the TriCore Pathology team at SRMC over the past three years to manage our Blood Bank and maintain cogent protocols.

MEDICAL LABORATORY SCIENCES PROGRAM 2022 GRADUATION

Congratulations to our Medical Laboratory Sciences Spring 2022 graduates! Our department is extremely proud of our graduates, the MLS program, and their mission to serve New Mexicans through medical laboratory sciences. Pictured are the Spring 2022 MLS graduates and faculty mentors. We wish them the best in their future careers!

From the Program Director, Dr. Barbara Masten: "The Medical Laboratory Sciences Program proudly graduated nine students on May 13, 2022, with a Bachelor of Science in Medical Laboratory Sciences. Five of the nine students accepted local clinical laboratory job offers prior to graduation. Of the remaining four graduates, three are currently in the interview process at local clinical laboratories and one is continuing their education as a graduate student at UNM.”

DEPARTMENT NEWS

RESIDENT RECOGNITION

DR. MARY TORREZ SELECTED AS A 2022 APC SOCIETY OF ’67 KINNEY SCHOLAR

The Association of Pathology Chairs’ (APC) Society of ’67 Board announced the selection of UNM Pathology 4th Year Resident Mary Torrez, MD, as one of their 2022 Kinney Scholars! Dr. Torrez attended the 2022 APC Meeting in Chicago to receive her honored designation. The Society of ’67 Board was impressed by the quality of the many applications they received this year. The process was very selective, so receiving this award is a true honor. Congratulations, Dr. Torrez!
CONGRATULATIONS TO OUR 2022 PATHOLOGY STAFF AWARD WINNERS!

(Alphabetical by 1st name) Amalia Estanisla, Amber Vaidez, Angie Miller, Cathy Martinez, DeeAnna Chavez, James Chavez, Kristen Broesder, Ruth Kief, Teresa Quintana, and Yuki Yafuso

THE ANNUAL GEORGE D. MONTOYA SCHOLARSHIP AWARD

The Annual Pathology Research Day and George D. Montoya Award Ceremony was held on Thursday, May 12, 2022. The event represented research from different divisions and specialties and provided an opportunity to collaborate.

Congratulations to this year’s award recipients of the 2022 George D. Montoya Scholarship:

- Biomedical Sciences Graduate Student, Sebastian Restrepo Cruz, who is pursuing his Ph.D. in the laboratory of Dr. Jennifer Gillette, focusing on the regulation of Epidermal Growth Factor Signaling by the membrane scaffold protein CD82.
- Undergraduate student in Mechanical Engineering, Daisy Belmares-Ortega, who is pursuing her BSME and working in Dr. Rama Gullapalli’s lab.

A special thanks to the Montoya family for their ongoing support of biomedical research, and to everyone who helps support the annual scholarship award event. Moreover, kudos to everyone involved in mentoring our research trainees and contributing to the success of our pathology research program.

ANNUAL PATHOLOGY STAFF AWARDS

Congratulations to our 2022 Pathology Staff Award winners!

Jain Zhou, M.D., received the Faculty Teaching Award for 2021-2022. Voted on by Residents, this award recognizes a faculty member that demonstrates excellence in teaching and mentoring, who goes above and beyond to stimulate intellectual curiosity, excelling in patient care and professionalism in the residents they supervise, and serves as a source of inspiration as a person and physician.

Jordan Redemann, M.D., received the Resident of the Year Award for 2021-2022. Voted on by Faculty and Fellows, this award recognizes a resident that demonstrates excellence in provision of high quality patient care, depth of medical knowledge, demonstration of practice-based learning, communication skills, professionalism, and systems-based practice.

Mary Torrez, M.D., received the Resident Educator Award for 2021-2022. Voted on by Residents, this award recognizes a resident who demonstrates excellence in teaching their peers and other learners, who goes above and beyond to support the educational mission of the program, and who is a wise mentor for colleagues and junior residents.

Arwyn Cunningham, D.O., received the Fellow Educator Award for 2021-2022. Voted on by Residents, this award recognizes a fellow who demonstrates excellence in teaching the residents, who goes above and beyond in spending time with all learners, excels in patient care and professionalism, and serves as a mentor and role model to residents.

DEPARTMENT NEWS continued

RESIDENT EDUCATION AWARDS

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MEDICAL STUDENT RECOGNIZED

Michaela Granados, formerly a UNM Pathology Post-Sophomore Fellow (PSF) in the 2020-2021 academic year, was named one of the ten winners of this year’s American Society for Clinical Pathology (ASCP) Medical Student Award! The ASCP Medical Student Award honors medical students who have achieved academic excellence, demonstrated leadership ability, and shown a strong interest in the pathology profession. Congratulations, Michaela, we are proud of your achievements!
GRADUATE STUDENT ACCOLADES

Congratulations to Sebastian Restrepo Cruz, Biomedical Sciences PhD student in the Gillette Laboratory, for his 1st place oral presentation at the UNM HSC Student Research Day! The title of Sebastian’s talk was “Tetraspanin CD82 Regulates Epidermal Growth Factor Receptor Signaling by Modulating Molecular Organization and Dynamics.” Congratulations to all students who presented their work. It was great seeing everyone in person this year!

Congratulations again for Sebastian Restrepo Cruz for receiving the Edmund J. & Thelma W. Evans Charitable Trust Scholarship. This opportunity is made possible by the generosity of Mr. and Mrs. Evans, who loved their community and gave generously to improve the lives of people living in New Mexico. The legacy of Thelma and Edmund Evans is carried on through research awards and scholarship opportunities awarded to talented students and fellows each year. Congratulations to Sebastian for this honor!

Congratulations to Taylor Uselman, Graduate Student Researcher in the Bearer Lab, for being awarded the American Society for Investigative Pathology (ASIP) 2022 Marion and Lawrence Muller Memorial Fund! This award recognizes Taylor for Excellence in Neurodegenerative Disease Research, and included a stipend to attend the ASIP meeting in Philadelphia from April 1-5, 2022. Taylor and Amir Nafchi (another graduate researcher in the Bearer Lab) were both selected to present on their work at the conference. Congratulations, and good luck, to both of you! Your recognition is hard-earned and well-deserved!

CY21 PATHOLOGY DEPARTMENT GRANTS & PUBLICATIONS

Total proposals: 89
Total awards: 67
Total funding received: $14,641,630
Total scholarly publications: 147
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 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. Montoya 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

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 University of New Mexico Department of Pathology funds as you generously give!
ACKNOWLEDGEMENTS

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Please share your news: HSC_PathAdmin@salud.unm.edu

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

https://hsc.unm.edu/medicine/departments/pathology/