The Pathology Report
2018
Duke Pathology Annual Report

Honoring the Legacy
Half a Century of Service

Paying It Forward
A Duke “Lifer” Recounts His Mentors
3 Letter From Our Chairman

4 PROFILE
Paying It Forward
A Duke “lifer” recounts his mentors and passes it on

8 FEATURE
Honoring the Legacy of Half a Century of Service
Training future generations of pathologists

10 Innovative Programs and Investigators
Research and grants in action

14 Meet Our New Faculty
Additions to our Clinical and Research Staff

18 Count and Amount
An illustrated guide to the numbers

22 Current Faculty and Administration

24 Around the Department

26 Development News
DEAR FRIENDS:

I AM VERY PLEASED TO PRESENT OUR FIRST EVER ANNUAL REPORT.

This report will introduce you to the talented new faculty who have recently joined us, and give you a glimpse into some of our incredible achievements. Over the past three years, the department has experienced transformative changes and made significant progress in our missions of clinical care, research and education. The number of anatomic pathology faculty has increased by ~50%, and all of our subspecialties have enjoyed significant growth. A number of research faculty have joined, and our wet research lab space will grow by 10,000 square feet by this summer.

Our grant portfolio has also been significantly expanded, and department members have published numerous important papers. The educational programs including the residency program, the PhD program and the PA program, have attracted top-notch candidates and we have graduated many outstanding alumni.

We have received very strong support from our faculty and alumni in the form of philanthropic giving, totaling nearly $10M in recent fiscal years. For the first time ever, we now have endowed chair positions in our department. Through the generosity of our faculty and alumni, we have received commitments to endow the William W. Johnston and Charles R. West Professorship, the Fred and Janet Sanfilippo Professorship Fund, and the Rollie Assistant/Associate Professor of Correlative Pathology Fund (generously established by a long-time faculty couple who are active in research and clinical service). Additionally, Fred and Janet Sanfilippo have endowed a distinguished lectureship as well as a fellowship in surgical pathology. William Johnston and Charles West’s legacy will also include several endowed fellowships. Alumni Todd Brady and Andrea Darling have also made a commitment to fund educational experiences for the department’s trainees. All of these will help the department recruit and retain top talents working at the cutting edge of science and medicine. I am extremely grateful to these individuals and the many donors who support our mission!

Finally, some interesting statistics are included. A fun fact is that if placed flat, the glass slides produced in 2018 could cover Cameron Indoor Stadium’s court more than twice (2.39 times, to be exact), and our clinical labs have performed 10 million tests.

This is an exciting time for the department, and I hope our alumni will share in our excitement. We invite your feedback on what you would like to see in future issues. If you like many of the fancy features, the rich content and the historical pictures in the current issue, Susan Reeves, whom many of you have worked with while you were here, deserves the credit. As always, we invite you to visit the department if you are in the area. We would love to hear and share your stories.

Jiaoti Huang MD PhD
Distinguished University Professor
Johnston and West Endowed Chair
Chairman, Department of Pathology
Encouraged by mentors throughout his career, Duke Pathology’s David Howell does the same for new generations of pathologists to keep our field strong.

Paying it forward

**David N. Howell T’76 MD ‘84 PhD ’82**

is an excellent mentor should come as no surprise. After all, he learned from the best. “One of the things that set the tone in my career was having outstanding mentors who helped me figure out the next thing to do,” Dr. Howell says. “That’s a major reason I’ve stayed at Duke for over 46 years, and something I’ve tried to make a major feature of my own work as a faculty member.”

Dr. Howell refers to himself as a Duke “lifer.” He grew up in eastern North Carolina, raised by parents who were both academics. At East Carolina University, his father rose from department chair, to dean, provost, vice chancellor, and ultimately, ECU chancellor. The senior Howell was his son’s first and most formative role model and mentor for teaching and administration.

Dr. Howell first set foot on the Duke campus as an undergraduate in 1972 and has been here ever since. He completed medical school and Duke’s prestigious MD/PhD program, then joined the pathology residency program and, in 1988, the Duke Pathology faculty.

His choice of specialty involved mentors, as well. As a first-year medical student, he had taken the required pathology course. “One of the things the Pathology Department did very effectively then, and now, is exposing medical students very early on to faculty members who are very enthusiastic, dedicated teachers. I had a chance to see these mentors up close and personal, and it led me to a career in pathology.”

One of those mentors, Dr. John Shelburne, was the longtime chief of the Pathology and Laboratory Medicine Service (P&LMS) at the Durham VA Medical Center. Dr. Shelburne took Dr. Howell under his wing, and when the senior physician eventually stepped down as chief of P&LMS, he encouraged his protégé to apply. Dr. Howell would go on to lead the P&LMS for 13 years.

A multifaceted career

For Dr. Howell, pathology has presented an opportunity to combine diagnostic work, teaching, and research. His clinical practice has focused primarily on kidney pathology and transplant pathology, two areas where the puzzles are often complex and require the use of several diagnostic methods to arrive at an answer. Much of his clinical research has been on improving diagnosis of infectious complications of transplantation.

One of the things he has enjoyed most is teaching residents, especially at the microscope. “I have, for more than 30 years, taught people how to diagnose renal diseases and complications of transplants. And I am very proud that some of the people I’ve mentored in those activities have gone on and made

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1 As a Duke undergrad pre-med major, Dr. Howell got a summer job working in the laboratory of renowned immunologist (and new mentor) Dr. Bernard Amos. That experience led him to pursue his PhD in immunology, under the auspices of one of Dr. Amos’s protégés, Dr. Peter Cresswell.
it a focus of their own professional lives."

In addition to teaching residents about diagnostics, Dr. Howell passes along his wisdom on how to be an effective administrator. And always, he mentors. When he decided it was time to step down as P&LMS chief, he was succeeded by Dr. Elizabeth Boswell, with whom he had worked extensively during her pathology residency at Duke. "In one of the more perceptive things I did when I was the chief there, I recruited Beth as a staff pathologist. So she went from being one of my pathologists to being my boss in the span of about a day!"

**When the student becomes the master**

"One important thing about mentorship is that you pay it forward," Dr. Howell believes. "Another is that, particularly as you get more senior, you end up turning over the leadership reins to somebody you might have trained. And if you're lucky, they can not only do what you do, but do it even better."

An example of that is Dr. Howell's diagnostic work in transplant pathology.

"When I started on the faculty, it was fairly typical to have people who looked at biopsies for just about any type of transplanted organ. Many, like me, started off as kidney pathologists, because the kidney was the first organ that was successfully transplanted. Then, lungs, hearts, and livers started being transplanted. The specialists in those areas had never seen a transplant biopsy, so they came down the hall to the kidney pathologists! So, along with two other mentors, Drs. Fred Sanfilippo and Robert Jennings, I became sort of a pathologist for lung, heart, and liver as a sideline! I did that for a couple of decades, and then started training younger colleagues who actually were heart and liver and lung pathologists. Those folks have now taken that over to a large extent, and have gotten at least as good, maybe better than me, in those diagnostic areas."

You can also trace those patterns of mentorship through one of his research endeavors, on a disease called focal segmental glomerulosclerosis (FSGS) that causes renal failure.

"Over 20 years ago, I had a young faculty colleague, Dr. Peter Conlon, who was one of the first people to recognize that FSGS ran in families. Together, we collected a large group of families with FSGS and wrote some papers characterizing the clinical side. Then a young trainee working with Peter, an internal medicine doctor named Dr. Michelle Winn, discovered a new genetic mutation linked to the disease. She published a landmark paper in the journal Science. And then Michelle trained Dr. Rasheed Gbadegesin, a pediatric nephrologist, who has since..."
discovered more genes that cause this disease. And he is training another young person in his laboratory, Dr. Gentzon Hall, who will be the next to take it over,” Dr. Howell says, proudly tracking the generations of discovery.

Mentor-in-chief

In 2015, when Dr. Sal Pizzo stepped down as chair of the Department of Pathology, Dean Nancy Andrews asked Dr. Howell to serve as interim chair. “When I left my position at the VA, I assumed that was going to be my swan song as an administrator,” he laughs. “So it was a bit of a shock!”

Dr. Howell kept the department running smoothly for the year, and when Dr. Jiaoti Huang became chair, he asked Dr. Howell to serve as senior vice chair and chair of the Appointments, Promotion, and Tenure Committee. It’s a position that leverages the longtime faculty member’s strengths and continues his legacy.

“It’s all about mentorship: Identifying which faculty are ready for a promotion or going up for tenure and helping them through that process. Some of the people coming up recently are those I have worked with directly as a mentor and co-author, so it’s natural that I would take on that responsibility.”

These days, Dr. Howell juggles administrative responsibilities with diagnostic duties and resident teaching. But the biggest testament to his enduring commitment to mentorship might be in that pathology laboratory course for first-year medical students—the one where teachers like John Shelburne and Sal Pizzo inspired him to pursue a career in pathology in the first place.

“I am now one of the laboratory teachers, so what goes around, comes around!” he smiles.

“We spend a good amount of time brainstorming about how to snag the brightest and best medical students and get them to become pathologists!”

“One of the reasons I vectored into pathology was role models. So I hope I’m doing the same thing for first-year medical students that John Shelburne did for me 40 years ago.”

He is certainly doing just that.

Dr. Howell has many other talents, including as a musician, and he has a reputation as a wordsmith. He once declared our annual department caroling group “The Pathological Lyres”—and buttons now proudly proclaim our moniker.

He is shown here with his wife Dr. Sara Miller while caroling in 2012.
HONORING THE LEGACY OF HALF A CENTURY OF SERVICE

by MARA SHURGOT

TOGETHER, WILLIAM W. JOHNSTON MD'59 AND CHARLES R. WEST HAVE MORE THAN HALF A CENTURY OF COMBINED SERVICE TO DUKE UNIVERSITY. TO BE IN THEIR PRESENCE IS TO BE REGALED BY ONE ASTONISHING AND OFTEN HILARIOUS STORY AFTER ANOTHER.

And yet they say their most recent undertaking—establishing an estate gift that will endow a professorship and multiple fellowships in the Duke University Department of Pathology—is by far the most fun.

“It took us years to make a decision, but this is one of the happiest things we have ever done,” says Johnston. “To see how we can make a difference in the department is a true joy.”

Johnston joined the Department of Pathology after completing medical school and residency at Duke. At the time, the department was small and had limited resources. “Unlike surgery or medicine, pathology is a department without grateful patients,” says Johnston. “Yet it is vital. All of medicine is buttressed by pathology.”

Over the course of a distinguished career, Johnston worked tirelessly to improve the department’s diagnostic, teaching, and research capacities. Among other things, he lobbied to create the Division of Cytology and then became the first director of the division, a position he held for 25 years.

Johnston established the first formal training for residents in cytology in the United States. To address the backlog of residents with no training in the field, Johnston taught in the evenings, starting at 8 p.m. He also lobbied for grant funding to establish the first fellowship in the Department of Pathology.

Johnston co-authored five books, 23 book chapters, and 135 peer-reviewed papers. Among many accolades, he received the American Society of Cytopathology’s highest honor, the Papanicolaou Award.

“Dr. Johnston is a superb pathologist, an accomplished researcher, and a dedicated teacher,” says Jiaoti Huang MD PhD, chair of the Department of Pathology. “His generous estate gift demonstrates his continued commitment to the department and will be another highlight of his legacy.”

On the other side of campus, West spent 27 years as director of corporate payroll services, instilling in his team an ethos of pride and service. In an era before computers—initially, they didn’t even have an adding machine—he and his team handled the distribution of nearly 25,000 checks every two weeks from their cramped office on the third floor of the Allen Building.

Their work was sometimes unexpectedly intrepid. In 1969, they were inside the Allen Building when student protesters occupied it. “We could hear the hammering of nails through the doors,” says West. There was concern the building would be set on fire. “I turned to my team and I said, ‘We have a payroll to get out. Do your thing!’”

The staff divvied up financial records for safekeeping and hustled out of the building—and made sure everybody got paid.

West was a beloved figure on campus, known to staff in nearly every department. Upon his retirement, he received the Duke University Award for Merit for his exemplary service.

Today, West and Johnston have time to indulge in their passions for music, traveling, gardening, and ice skating. But even in retirement, they serve. Their estate gift will continue the legacy to which Johnston devoted his career: training future generations of pathologists.
We hope you will enjoy these memories of Dr. Johnston’s tenure in Pathology from our archive.


*Dr. Johnston is at the back center, next to Dr. Gordon Klintworth, and the two chairmen, Wiley Forbus MD and Thomas Kinney MD, are front center. For all the names, see https://pathology.duke.edu/newsletter-archive.
**Soman Abraham PhD** works with PhD student **Byron Hayes**. Dr. Abraham’s Lab has published important articles about immune system mechanisms, involving mast cells triggering anaphylactic shock.

**Yiping He PhD**, left, helps **Rui Yang PhD**, Senior Research Associate, edit a manuscript. Dr. He’s Lab researches glioblastomas and oligodendrogliomas, using genetic and epigenetic approaches to identify unique features and vulnerabilities that brain tumor cells possess, and to exploit them for developing novel therapeutics.

### 2018 GRANTS

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<td>Federal Grants</td>
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<td><strong>Grand Total</strong></td>
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<td><strong>$8,219,235</strong></td>
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Combining teaching, research, and clinical work: Laura Hale MD PhD presents her research on bromelain and inflammatory mechanisms at a Grand Rounds. Highly regarded for her teaching pathology to graduate and medical students, Dr. Hale also does research on the thymus, and is an attending on the thymus transplant and autopsy service.

Heng Liu pulls specimens of cancer cell lines from the liquid nitrogen freezer. A PhD student in Hai Yan’s Lab, Heng is focusing on the biological function of mutations in gliomas and ways to target them for therapeutics.
Matthew Waitkus PhD prepares tissue culture specimens for his research. Dr. Waitkus joined Duke faculty in 2016 and works with the Yan Lab on projects related to gliomas. Also pictured is PhD student Casey Moure.

Hai Yan MD PhD presents a Grand Rounds conference in the South Amphitheater about “Molecular Classification of Malignant Gliomas.” The Yan Lab has contributed numerous papers to journals such as Acta Neuropathologica, Nature Communications, and Cancer Cell in the past year.
PhD student Risa Gearhart-Serna runs a gel in Dr. Gayathri Devi’s Cell Death Lab. She is a joint student in both Pathology and in the Nicholas School of the Environment’s program in environmental health and toxicology, researching mechanisms of breast tumor progression and treatment resistance.

PhD student Ben Andress is studying meniscus mechanotransduction in Dr. Amy McNulty’s Lab. The research involves measuring the mechanical properties of cell-seeded hydrogels with a high-precision load frame, shown here. Dr. McNulty is a 2005 graduate of Pathology’s PhD program.
Dr. Rami Al-Rohil obtained his undergraduate and medical school training at the Jordan University of Science and Technology in Irbid, Jordan. After a year of medical internship and a year of anatomic pathology in Jordan, he came to the U.S. for a pathology residency at Albany Medical Center where he was named Chief Resident. He then pursued fellowship training in both surgical pathology and dermatopathology at MD Anderson. In 2016 he joined the faculty at Vanderbilt University where he won their Anatomic Pathology teaching award. Dr. Al-Rohil joins us at Duke as an Assistant Professor. His responsibilities are primarily in dermatopathology, but he is also rotating through the bone and soft tissue service.

Dr. Laura Barisoni, an internationally recognized expert in renal pathology, joined the faculty of the Department of Pathology on October 1, 2018. She is the President of the Renal Pathology Society, where she previously served for several years on the Board of Directors. Dr. Barisoni is actively involved in NIH-sponsored grants on podocytopathies, glomerular diseases, and Kidney Precision Medicine, and in clinical trials on Nephrotic Syndrome and Fabry's disease. Dr. Barisoni is an established leader in the area of digital nephropathology and the use of digital image recognition as a diagnostic tool, particularly for glomerular diseases. She has developed national and international collaborations utilizing digital pathology platforms for standardization of the renal biopsy interpretation across consortia and continents. Dr. Barisoni has remarkable teaching experience of numerous national and international courses in renal pathology and she is the co-founder of the International Summer School of Renal Pathology. Though her primary appointment is in our department, she also has a joint appointment in the Department of Medicine, where she already has collaborative ties with colleagues in the Division of Nephrology.

Dr. John Carney received his undergraduate degree in chemistry from Creighton University in Omaha, Nebraska. He continued his training in Omaha, graduating in 2013 from Creighton University School of Medicine. After this, he came to Duke where he completed his residency in Anatomic and Clinical Pathology. Dr. Carney served as Chief Resident during his third year of residency. He continued his training at Duke and completed a Thoracic Pathology Fellowship under the guidance of Dr. Victor Roggli, Dr. Tom Sporn, and Dr. Elizabeth Pavlisko. We are very pleased Dr. Carney stayed with us, joining us as Assistant Professor. His areas of interest include pulmonary pathology, including diseases of the pleura and mediastinum, as well as cardiac and post-mortem pathology. Aside from his clinical responsibilities, Dr. Carney enjoys teaching and interacting with residents and fellows and is actively involved in medical student teaching.

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<th>Name</th>
<th>Title</th>
<th>Institution</th>
<th>Background and Experience</th>
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<tr>
<td>Rami Al-Rohil MBBS</td>
<td>Assistant Professor</td>
<td>Wilson Medical Center</td>
<td>Obtained his undergraduate and medical school training at the Jordan University of Science and Technology in Irbid, Jordan. After a year of medical internship and a year of anatomic pathology in Jordan, he came to the U.S. for a pathology residency at Albany Medical Center where he was named Chief Resident. He then pursued fellowship training in both surgical pathology and dermatopathology at MD Anderson. In 2016 he joined the faculty at Vanderbilt University where he won their Anatomic Pathology teaching award. Dr. Al-Rohil joins us at Duke as an Assistant Professor. His responsibilities are primarily in dermatopathology, but he is also rotating through the bone and soft tissue service.</td>
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<td>Professor</td>
<td>Duke University</td>
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Dr. Ming Chen earned his PhD in the Department of Pathology and Urology at the University of Rochester. He recently completed his postdoctoral training in the Department of Medicine and Pathology at Beth Israel Deaconess Medical Center, Harvard Medical School under the supervision of Dr. Pier Paolo Pandolfi. Dr. Chen’s research focuses on understanding the molecular and genetic events underlying cancer progression and metastasis using in vivo mouse models. He is a recipient of the DoD PCRP Postdoctoral Fellowship Award and the Lung Cancer Research Foundation Grant Award.

Dr. Zhong Chen was appointed Assistant Professor in Pathology on December 1, 2017. Dr. Chen received his MD in 2008 from the Chinese Academy of Medical Sciences and Peking Union Medical College, Beijing, China. He subsequently moved to the Ohio State University, where he held positions as Postdoctoral Fellow (2008–2012), Research Scientist (2012–2016), and Senior Research Scientist (2016–2017). Dr. Chen studies transcriptional regulation using both in vitro and in vivo systems to identify potential molecular therapeutic targets required for the growth and progression of multiple cancers.

Dr. Carolyn Glass obtained her MD at the University of Texas and then trained in Vascular Surgery at the University of Rochester. After earning a PhD (also at the University of Rochester) focusing on genomics and epigenetics, she completed a residency in Anatomic Pathology at Harvard Medical School/Brigham and Women’s Hospital. She subsequently did a fellowship in cardiovascular and pulmonary pathology at the Brigham, followed by a thoracic fellowship with emphasis in transplant at UT Southwestern in Dallas. Dr. Glass joins us as an Assistant Professor. Her responsibilities include cardiac, thoracic and autopsy sign-outs along with administrative duties as Director of the Autopsy Service.
We welcomed Dr. Giselle López to the Department of Pathology in December 2018. Dr. López is a graduate of the University of Maryland, where she double majored in Physiology & Neurobiology and Spanish Language & Literature. She then came to Duke where she obtained an MD/PhD, earning her PhD in the laboratory of Dr. Hai Yan in our department. After completing medical school, she moved to University of California, San Francisco, where she did a residency in anatomic pathology and a fellowship in neuropathology. Dr. López returns to Duke as an Assistant Professor, where she joins our outstanding diagnostic Neuropathology service.

Dr. Everardo Macias earned his PhD at North Carolina State University, followed by fellowships at the University of North Carolina at Chapel Hill and the University of Texas at Austin. He was at Duke from 2013–2015 as a Research Scientist, prior to accepting a Faculty Research Scientist position at Cedars-Sinai Medical Center, Los Angeles, CA. Dr. Macias was recruited by the Department of Pathology at Duke in early 2018 as an Assistant Professor. His funding sources include a Prostate Cancer Foundation Young Investigator Award, an NIH/NCI K22 Award and an NIH/NCI R21. Dr. Macias has expertise in the link between obesity and worse prostate cancer outcomes. He serves on the Pathology Graduate Program Executive Committee, the Duke SROP, IACUC and the Basic Science Faculty Steering Committee.

Dr. Christopher Pirozzi was born in Brooklyn, New York and received his BA from Rutgers University (Genetics and Philosophy, 2007). Dr. Pirozzi obtained his PhD from Duke in Dr. Hai Yan’s lab in the Department of Pathology (2009–2014). He was the recipient of the Robert and Barbara Bell Basic Science Cancer Research award and is a Hope Funds for Cancer Research Fellow (2015–2018). Dr. Pirozzi was promoted to Medical Instructor within the Department of Pathology where he will be investigating the effects of mutations on the tumor-immune microenvironment and how they can be exploited for novel therapies.
Christopher R. Polage MD MAS
Associate Professor

Dr. Christopher Polage joined our faculty in January 2018 as Associate Professor of Pathology and Medical Director of the Clinical Microbiology Laboratory. Dr. Polage received his BS (1992) and MD (2000) from the University of New Mexico. After an Internship in Internal Medicine at the University of Colorado, he completed Residency in Anatomic and Clinical Pathology (2001–2005) and a Medical Microbiology Fellowship (2005–2007) at the University of Utah/ARUP Laboratories. He joined the faculty of the University of California, Davis as Assistant Professor of Pathology and Medical Director of the Clinical Microbiology Laboratory in 2007. During his time at UC Davis, he completed a Masters of Advanced Studies in Clinical Research and a KL2 mentored career development award leading to his promotion to Associate Professor in 2015. He currently serves on the editorial board for the *Journal of Clinical Microbiology* and has active projects related to the diagnosis and prevention of *Clostridioides difficile* infection. Outside work, he is married with three daughters; his wife is a pediatrician also here at Duke.

Qianben Wang MD PhD
Professor

Dr. Qianben Wang earned his PhD at the University of Maryland School of Medicine followed by postdoctoral training at Dana-Farber Cancer Institute, Harvard Medical School. He started his faculty career as a tenure-track Assistant Professor at Ohio State University in 2008. Dr. Wang’s productivity as a faculty member at OSU earned him a promotion to the rank of Associate Professor with tenure in 2013. Dr. Wang joined the Department of Pathology at Duke University School of Medicine as a Professor with tenure in December, 2017. Dr. Wang has an excellent research funding record and is currently the PI of multiple NIH R01 and U54 awards and a DoD award. He is an expert in the genomic function of transcription factors in the development and progression of prostate cancer. He also serves the scientific community by membership on grant review panels for the National Science Foundation, The NIH, and the DoD. Dr. Wang is also an experienced research mentor and has quickly provided service to our Department as a member of the Pathology Research Division Junior Faculty Mentoring Committee.

Shih-Hsiu Wang MD PhD
Assistant Professor

Dr. Shih-Hsiu “Jerry” Wang joined the Department of Pathology as an Assistant Professor. Dr. Wang obtained his MD from the National Taiwan University and earned a PhD in neuroscience from Johns Hopkins. He then went on to a residency in anatomic pathology at Columbia University, followed by a fellowship in neuropathology, also at Columbia. He joined the Columbia faculty as Instructor in 2016, before coming to Duke as an Assistant Professor. Dr. Wang is rotating through the surgical neuropath service, and is also an attending on the muscle, eye, and autopsy services.
Avani Pendse MD PhD explains the fine needle aspirate (FNA) procedure to a patient in the Cancer Center Clinic.

Number of FNAs: 3,556

Cytology Cases: 41,480

Total number of Anatomic Pathology Cases: 115,232
Windy Riley MHS PA(ASCP), a graduate of our PA program, shows tissue dissections to Taylor Forns MD (PGY1). The staff PAs perform autopsies and teach autopsy procedures to the residents and PA students.

Electron microscopy specialist Henry Estrada BSMT EM(ASCP), who is in his fiftieth year of working in the department, reviews a kidney case at one of the electron microscopes. EM continues to be key in the diagnosis of multiple medical disorders and in viral infections.

Electron Microscopy Cases: 508

Autopsies: 302

Paraffin Blocks: 218,258
The automated stainers for immuno slides are in the new Clinical Labs facility that opened in 2017.

**Immunohistochemical Stains:** 54,468

**Digital Whole Slide Scanners:** 4

*Stephen Granger BS HTL,* a Medical Laboratory Scientist in Clinical Labs, analyzes a HER2 quality control slide scanned with an Aperio AT2 Whole Slide Scanner and Image Scope Software.
Allison Hall MD PhD leads the Gynecologic Pathology team in the new sign-out room. (L-R: Kyle Strickland MD PhD, Lani Clinton MD PhD, fellow Viren Patel MD, Hall, Rex Bentley MD).

Microscopes in Anatomic Path: 103

Number of Laboratory Tests: 10 million

Glass Slides: 539,365
Faculty Leadership
Jiaoti Huang MD PhD  Chair, Department of Pathology
  Distinguished University Professor
  Johnston and West Endowed Chair
David Howell MD PhD  Sr. Vice Chair and AP&T Chair
Rex Bentley MD  Vice Chair and Director of Surgical Pathology; Director of PA Program
Thomas Cummings MD  Vice Chair and Director of Residency Program
Rajesh Dash MD  Vice Chair for Pathology Informatics
Michael Datto MD PhD  Vice Chair and Director of Clinical Pathology
Claudia Jones MD  Vice Chair for Faculty
Herman Staats PhD  Vice Chair for Research

Autopsy Pathology
Carolyn Glass MD PhD  Assistant Professor, Director
  Professor
Christine M. Hulette MD  Professor
John Carney MD  Assistant Professor
Louis R. DiBernardo MD  Assistant Professor
N. Lynn Ferguson MD  Assistant Professor
Laura Hale MD PhD  Professor
Elizabeth N. Pavlisko MD  Assistant Professor
Kyle Strickland MD PhD  Assistant Professor
Shih-Hsiu "Jerry" Wang MD PhD  Assistant Professor

Breast Pathology
Allison H.S. Hall MD PhD  Assistant Professor, Section Head
  Associate Professor
Sarah M. Bean MD  Professor
Rex Bentley MD  Professor
Rajesh Dash MD  Assistant Professor
Edgardo Parrilla MD  Assistant Professor

Cardiovascular Pathology
Louis R. DiBernardo MD  Assistant Professor, Section Head
  Professor
John Carney MD  Assistant Professor
Carolyn Glass MD PhD  Assistant Professor
Elizabeth N. Pavlisko MD  Assistant Professor

Cytopathology/FNA
Claudia K. Jones MD  Professor, Director; Director Cytopath Lab
  Assistant Professor, Associate Medical Director
Danielle Elliott Range MD  Assistant Professor, Associate Medical Director
Sarah M. Bean MD  Associate Professor
Raj C. Dash MD  Professor
Wen-Chi Foo MD  Assistant Professor
Xiaoyin "Sara" Jiang MD  Assistant Professor
Avani Pendse MD PhD  Assistant Professor
Kyle Strickland MD PhD  Assistant Professor

Dermatopathology
Maria Angelica Selim MD  Professor, Section Head
  Associate Professor
Rami Al-Rohil MBBS  Assistant Professor
Kenneth Ellington MD  Associate Professor

Gastrointestinal Pathology
Cynthia D. Guy MD  Professor, Section Head
  Associate Professor; Director IPT, Histology, Lab Services
Diana M. Cardona MD  Assistant Professor
Lani Clinton MD PhD  Assistant Professor
N. Lynn Ferguson MD  Assistant Professor
Shannon J. McCall MD  Associate Professor
Avani Pendse MD PhD  Assistant Professor

Genitourinary Pathology
Wen-Chi Foo MD  Assistant Professor, Section Head
  Professor
N. Lynn Ferguson MD  Assistant Professor
Jiaoti Huang MD PhD  Professor
John Madden MD PhD  Associate Professor
Avani Pendse MD PhD  Assistant Professor

Gynecologic Pathology
Rex Bentley MD  Professor, Section Head
Sarah M. Bean MD  Associate Professor
Allison H.S. Hall MD PhD  Assistant Professor
Kyle Strickland MD PhD  Assistant Professor

Head, Neck & Endocrine Pathology
Danielle Elliott Range MD  Assistant Professor, Section Head
  Professor
Xiaoyin "Sara" Jiang MD  Assistant Professor
John F. Madden MD PhD  Professor

Infectious Pathology
John Madden MD PhD  Associate Professor

Liver Pathology
Cynthia D. Guy MD  Professor, Section Head
  Associate Professor
Diana M. Cardona MD  Associate Professor
Lani Clinton MD PhD  Assistant Professor
Shannon J. McCall MD  Associate Professor
Avani Pendse MD PhD  Assistant Professor

Neuropathology
Thomas J. Cummings MD  Professor, Neuropath Director
  Associate Professor
Anne F. Buckley MD PhD  Professor
Christine M. Hulette MD  Assistant Professor
Giselle López MD PhD  Assistant Professor
Roger McLendon MD  Professor
Shih-Hsiu "Jerry" Wang MD PhD  Assistant Professor

Nerve and Muscle Pathology
Anne F. Buckley MD PhD  Assistant Professor, Section Head; Director EMICL
  Professor
Thomas J. Cummings MD  Professor
Shih-Hsiu "Jerry" Wang MD PhD  Assistant Professor

Ophthalmic Pathology
Thomas J. Cummings MD  Professor, Section Head
  Associate Professor
Anne F. Buckley MD PhD  Professor
Alan D. Proia MD PhD  Assistant Professor
Shih-Hsiu "Jerry" Wang MD PhD  Associate Professor

Pulmonary/Thoracic Pathology
Thomas A. Sporn MD  Professor, Section Head
  Associate Professor
John Carney MD  Assistant Professor
Carolyn Glass MD PhD  Assistant Professor
Elizabeth N. Pavlisko MD  Assistant Professor
Victor Roggli MD  Associate Professor; Director Image Cytometry; Associate Director IPT
### Renal Pathology
- David N. Howell MD PhD, Professor, Section Head
- Laura Barisoni MD, Professor
- Anne F. Buckley MD PhD, Assistant Professor

### Soft Tissue & Bone Pathology
- Diana M. Cardona MD, Associate Professor, Section Head
- Rami Al-Rohil MBBS, Assistant Professor
- Rex Bentley MD, Professor
- Thomas J. Cummings MD, Professor

### Transplant Pathology
- David N. Howell MD PhD, Professor, Section Head
- Laura Barisoni MD, Professor
- Anne F. Buckley MD PhD, Assistant Professor
- Diana M. Cardona MD, Associate Professor
- John Carney MD, Assistant Professor
- Louis R. DiBernardo MD, Assistant Professor
- Carolyn Glass MD PhD, Assistant Professor
- Elizabeth N. Pavlisko MD, Assistant Professor

### Microbiology
- Christopher Polage MD, Associate Professor, Medical Director

### Transfusion
- Nicholas Bandarenko MD, Associate Professor, CLIA Director
- Jessica Poisson MD, Assistant Professor, Director

### Undergraduate Medical Education
- Andrea Deyrup MD PhD, Associate Professor, Director of Undergraduate Medical Education

### VA Faculty
- Elizabeth Boswell MD, Assistant Professor, Chief
- Christopher Alley MD, Assistant Professor
- Maureane Hoffman MD PhD, Professor
- David N. Howell MD PhD, Professor
- Amy Lark MD, Assistant Professor
- Chad M. McCaI MD PhD, Assistant Professor
- Robin Vollmer MD, Associate Professor

### Duke Regional Pathology
- Michael Waugh MD, Assistant Professor, Chief
- Maureen Bauer MD, Assistant Professor
- Richard Draffin MD, Associate Professor
- Kenneth Ellington MD, Associate Professor

### Duke Raleigh Pathology
- David M. Steinberg MD, Associate Professor, Chief
- Carol Filomena MD, Associate Professor
- Maggie Stoecker MD, Assistant Professor
- Huwien Bill Xie MD PhD, Assistant Professor

### Research Faculty
- Soman Abraham PhD, Grace Kerby Professor; Director of PhD Program
- Laura Barisoni MD, Professor
- Anne F. Buckley MD PhD, Assistant Professor
- Dongfeng Chen PhD, Associate Professor
- Ming Chen PhD, Assistant Professor
- Zhong Chen PhD, Assistant Professor
- Jeffrey Everitt DVM, Professor
- Udhayakumar Gopal PhD, Medical Instructor
- Laura Hale MD PhD, Professor
- Yiping He PhD, Associate Professor
- Maureane Hoffman MD PhD, Professor
- Hailiang Hu PhD, Assistant Professor
- Jiaoti Huang MD PhD, Distinguished University Professor
- Giselle Lopez MD PhD, Assistant Professor
- Everardo Macias PhD, Assistant Professor
- Sara Miller PhD, Professor
- John Norton PhD DVM, Professor
- Christopher Pirozzi PhD, Medical Instructor
- Salvatore Pizzo MD PhD, Distinguished Professor
- Stanley Robboy MD, Professor
- Herman Staats PhD, Professor
- Mary Sunday MD PhD, Professor
- Matthew Waitkus PhD, Medical Instructor
- Qianben Wang PhD, Professor
- Hai Yan MD PhD, Professor

### Professors
- Edward Bossen MD, Professor Emeritus
- William Bradford MD, Professor
- Patrick Buckley MD PhD, Professor

### Technical Directors
- Michael Datto MD PhD, Associate Vice President and Medical Director of DUHS Laboratories
- Dongfeng Chen PhD, Professor; Director CTIL
- Kristen Deak PhD, Associate Professor, Director Cytogenetics and Molecular Diagnostics
- Kevin Hazen PhD, Professor; Technical Director Clinical Microbiology
- Nancy Henshaw PhD, Assistant Professor, Associate Professor Clinical Microbiology
- Bruce Lobaugh PhD, Professor; Director Central Automated Lab; Reference Lab; POCT
- Ping Rao PhD, Assistant Professor; Assistant Director CTIL
- Sarah Rapisardo PhD, Assistant Professor; Director Cytogenetics and Molecular Diagnostics
- Catherine Rehder PhD, Assistant Professor; Director Cytogenetics, Associate Director Molecular Diagnostics
- Siby Sebastian PhD, Professor; Assoc. Dir. Molecular Diagnostics
- John Toffaletti PhD, Director, Dir. Blood Gas Lab, CHCL, CPED

### Administration
- Amy Orange BS CFM, Director of Finance
- Kelly Macklin BS, HR Manager
- Seth Stallings MBA, Operations Manager
- Pamela Harris MBA, Administrative Manager
- Debra Andersen C-TAGME, GME Coordinator, Residency/Fellowships
- Pamela Vollmer BHS PA(ASCP), Associate Director, PA Program
- Meg Atchison BA, Program Coordinator, PhD Program

### Services
- BioRepository & Precision Pathology
- Research Animal Services
- Research EM
- Research Immunohistology
- PhotoPath
- Shannon J. McCall MD, Director
- Jefrey Everitt DVM, Director
- Sara Miller PhD, Director
- Shannon J. McCall MD, Director
- Susan Reeves BA, Supervisor; Website Director
Shannon McCall MD and Aubrey Coulas BS discuss strategic initiatives for the BioRepository & Precision Pathology Center (BRPC). This shared resource has grown to house over 60,000 research samples from thousands of Duke patients. BRPC also serves as the scientific hub for tissue-based research, offering whole slide imaging, tissue microarray creation, laser capture microdissection, nucleic acid extraction and many other services.

Marcel Castor MD and Vanessa Smith MD, both second year residents, enjoy the marvelous spread at our Holiday Party.

Third year resident Siddhartha Sen MBBS and surgical pathology fellow Xin Liu MD sign out with Jiaoti Huang MD PhD.

Shannon McCall MD and Aubrey Coulas BS discuss strategic initiatives for the BioRepository & Precision Pathology Center (BRPC). This shared resource has grown to house over 60,000 research samples from thousands of Duke patients. BRPC also serves as the scientific hub for tissue-based research, offering whole slide imaging, tissue microarray creation, laser capture microdissection, nucleic acid extraction and many other services.
Meridith Hennessey MHS PA(ASCP) discusses the correct reassembly of brain sections with Kayla Wanek, First Year Pathologists’ Assistant student, during a practical exam in the Autopsy Room. First year students complete their basic sciences curriculum with the first year medical students, and begin practical rotations in the autopsy and surgical pathology laboratories.

Victor Roggli MD, renowned for his expertise with asbestos and pulmonary pathology, is visited by William Bradford MD, whose tenure as Residency Program Director was experienced by many of our alumni.

Poster sessions presented at national meetings are an important part of the resident experience. Bruce Leckey DO (PGY3) explains his research on pleuropulmonary blastoma to Catherine Luedke MD (PGY 4) at a Grand Rounds practice session before the CAP meeting.
In 1930, our founding chairman Wiley D. Forbus MD set the Department of Pathology on a course of excellence in patient care, education, and research. Today, the Department’s faculty, students, and staff remain deeply committed to our rich heritage. Uniquely positioned to become a global leader in the field of pathology, we are entering a period of rapid expansion to recruit outstanding investigators, clinicians, and physician-scientists. In such a competitive environment, endowed chair positions are critical to Duke’s ability to successfully attract and retain today’s most outstanding pathologists.

As such, we are thrilled and honored to announce the creation of three philanthropically-funded, endowed chairs within the Department of Pathology:

- **The William W. Johnston and Charles R. West Professorship**, established by William Johnston and Charles West under their benevolent estate plan;
- **The Rollie Assistant/Associate Professor of Correlative Pathology**, generously funded by a long-time, esteemed faculty couple; and
- **The Fred and Janet Sanfilippo Professorship**, supported through a thoughtful legacy commitment by Fred and Janet Sanfilippo.

At Duke, we believe educating the next generation of clinicians and scientists is both an obligation and an honor. To this end, we are grateful to the individuals who have made gifts in support of our educational and academic missions:

- **Todd Brady and Andrea Darling** will endow a pathology fellowship for PhD candidates through the Graduate School and will also create a fund to provide unique and inspiring educational experiences for the department’s learners;
- **William Johnston and Charles West** will endow post-doctoral fellowships through their legacy gift, enabling Duke to attract the best and the brightest trainees; and
- **Fred and Janet Sanfilippo** have established an endowed lectureship in pathology innovation and leadership as well as an endowed post-doctoral fellowship in the specialty of surgical pathology.

Giving is a driving force in the current success and future achievements of our department, and I sincerely thank each of you for your generosity and partnership.

With gratitude,

*Morgan P. Pope, Director of Development*  
Department of Pathology  
morgan.pope@duke.edu  
(919) 385-3121
Duke Pathology Staff in June 1989. Our two featured faculty are standing side by side, 30 years ago.

Curious about the names? See our website for the identifier outline:
https://pathology.duke.edu/newsletter-archive