# WashU Medicine



Department of Pathology and Immunology Awards Ceremony

October 3, 2024 4:00 pm - 5:00 pm EPNEC Auditorium The Department of Pathology & Immunology has a long and rich history of excellence in research, teaching, and clinical service. Achieving departmental excellence is not a solitary act, it involves the efforts of many, many dedicated individuals. This year, we are especially grateful to come together in person to celebrate the achievements of faculty and staff who have made outstanding contributions to our department.



The Office of Faculty Development is appreciative of the many individuals who submitted high-quality nominations and to the Awards Committee who had the very difficult job of selecting the award winners.

Please join us in congratulating the 2024 awardees for their dedication and commitment to excellence.

Mark Watson, MD, PhD Vice-Chair of Faculty Development

### **Awards Committee**

Jenny Adams, Co-Chair

Kathleen Byrnes, Co-Chair

Christopher Farnsworth, PhD

Julie Gutierrez

Jasmin Herz, PhD

Katherine Schwetye, MD, PhD

Mark Watson, MD, PhD

## **Awards Ceremony Program**

Welcome
Staff Shining Star Awards
Outstanding Achievements in Leadership and Professionalism Award
Outstanding Achievements in Quality Improvement
Excellence in Faculty Mentoring Award
Outstanding Contributions to Education
Outstanding Contributions to Diversity, Equity, and Inclusion
Outstanding Faculty Papers of the Year Award
Department Head's Special Recognition Awards
Special Announcement
Milestone Years of Service

Promotions

### **Billie Charlton**

# **Shining Star Award**

Billie Charlton is the Administrative Professional in Anatomic & Molecular Pathology supporting the division chief, Dr. Joseph Gaut, and is honored as a shining star in Pathology and Immunology.

Bille has been her position for seven years. She excels in her daily performance, is adept and learns on the go. She is tireless, staying late, arriving early, and working through illness from home. No job is too large or too small, serving as the linchpin for complex tasks of academic medicine. When emergencies



arise, she assists with enthusiasm and commitment. When Neuropathology unexpectedly needed administrative support, despite the demand of her own job, she took on these additional responsibilities, learned new skills, and trained a fresh staff member.

She continuously seeks more responsibility. She has become more knowledgeable of the overall picture of our department which enables her to be effective.

Billie's efforts provide dedicated support to our faculty, handling details unbeknownst to those she supports. Her hard work allows faculty to concentrate on their clinical, teaching, and research endeavors.

Billie Charlton is a huge asset to our department and is incredibly deserving of the Shining Star Award and its recognition.

## Meagan Corliss, MS, CGC

## **Shining Star Award**

Meagan Corliss, MS, CGC, is the manager of the Clinical Genomics Laboratory -Sequencing in the Division of Genomic and Molecular Pathology and is honored as a shining star in Pathology & Immunology.

A genetic counselor by training, Meagan always centers the welfare of the patients we serve. We benefit tremendously from having her as our primary point of contact for clients because they love and trust her.



She has extraordinary capacity to track simultaneous processes, ensuring that test results are reported as quickly and accurately as possible. She is heavily involved in quality processes. Her expertise and proactive nature contribute to the continuous improvement of laboratory processes, enhancing overall efficiency and quality. It does not matter what issue may arise; she takes ownership of issues, collaborating with colleagues to find effective solutions. She always goes beyond expectations to ensure that laboratory results are high quality and accurate, and that patients and ordering providers are well-served.

Meagan plays a key educational role for the lab. She teaches trainees on complex processes that are part of the next-Generation Sequencing constitutional service particularly the Disorders of Somatic Mosaicism assay. In August, she celebrated her ten year anniversary in the Department of Pathology and she also welcomed her fourth class for Wash U's Graduate Program in Genetic Counseling in the Department of Pediatrics where she is the course director for the Laboratory Genetic Counseling class. Short of cloning her, having her training the next generation of the genetic counseling workforce is the next best thing!

Her contributions are far more than described here. Everyone in the Clinical Genomics Laboratory relies on Meagan's wealth of knowledge, sound judgement, and incredible efficiency. She is an amazing collaborator who contributes to an incredibly positive work environment and is our shining star.

### **Amanda Martsolf**

### **Shining Star Award**

Amanda Martsolf is the manager of Third-Party Reimbursement for the department and is honored as a shining star in Pathology & Immunology.

Since 2016, Amanda has become an essential member of the department, consistently taking on additional responsibilities. Her exceptional performance and dedication have distinguished her in every role she has undertaken.



She began her journey with us as an Insurance Billing

& Collections Assistant on our revenue cycle team and quickly advanced to Billing Supervisor, where she significantly enhanced our client billing services. Currently, as the Manager of Third-Party Reimbursement, she has completely overhauled our Accounts Receivable operations, leading to notable improvements in processes and a reduction in outstanding accounts.

Amanda contributes at multiple levels within the department, including credentialing and professional liability, among others. She has also built valuable relationships with other departments, such as Pediatric Genetics, Cosmetic Surgery, and Neurology, which have strengthened our overall operations. As a leader, Amanda is both supportive and empathetic, always acting as her employees' biggest advocate. Her generosity, helpfulness, and kindness make her an exemplary representative for the Department of Pathology and a true shining star.

### **Beth Obertino-Norwood**

### **Shining Star Award**

Beth Obertino-Norwood is the Education Pathologist Assistant (PA) in the division of Anatomic & Molecular Pathology.

Although Beth has been with us for a relatively short time, she has already proven to be an invaluable asset to our trainees. Her kindness, patience, diligence, and thoughtfulness make her an exceptional teacher. She has revitalized our grossing education and onboarding processes for new trainees and has been instrumental in launching several new initiatives in the gross room. These



include developing additional curriculum such as specimen prep, reviving gross conferences, and leading the grossing education committee.

Beth updated a Gross Room Boot Camp for incoming residents, which significantly improves their preparedness and reduces their initial confusion during the flood of information at the start of residency. She effectively leveraged feedback from previous first-year residents to design the 2024 New Resident Bootcamp. Her goal was to create an orientation that was straightforward and engaging, without being overwhelming, while still covering essential topics-mission accomplished!

Additionally, Beth established a weekly specimen orientation and prep session where she instructs residents on how to approach and triage fresh tissue, offering valuable exposure to specimens they might encounter during frozen sections. She also engages in monthly resident education meetings with attendings and Chief Residents to address any concerns and refine grossing rotations. As residents transition into new services, she continues providing them with essential information for handling various specimens. Her dedication makes her a trusted resource, and residents know they can rely on her for guidance.

Beth has also developed continuing education for the PA team with an attending lead monthly slide review and frequent in-service talks. There are frequent requests for PA shadowing which Beth also provides.

Beth is a stellar educational resource and ambassador for gross pathology and very deserving of the shining star award.

### **Lauri Thienes**

### Outstanding Achievements in Leadership and Professionalism

Lauri Thienes is the Director of Billing Operations and Clinical Revenue Cycle and is honored for her outstanding contributions in leadership and professionalism.

Over the past year, Lauri has not only fulfilled her daily responsibilities but has also exemplified exceptional leadership. She manages an exceptionally large and complex team that supports clinical operations and the revenue cycle. Under her guidance, she has mentored team



members into leadership roles, equipping them with the tools needed for success.

Lauri consistently goes above and beyond in supporting the department's strategic vision and goals. This past year, she was selected for the inaugural cohort of the Institute for Leadership Excellence (ILE) Coaching Program. This prestigious program is designed to refine coaching principles and competencies, and it has enhanced Lauri's skills in leading and mentoring others. Her engagement with peers across the University has further sharpened these abilities, and we are eager to see her apply these skills within our department.

In addition to her current achievements, Lauri has recently been appointed as the Associate Director of Diversity, Equity, and Inclusion. Her enthusiasm for this role reflects her commitment to fostering an inclusive and equitable environment, and she is excited to drive these important initiatives forward.

Lauri is highly respected by her peers across the University and stands out as an inspiring role model for us all. Her embodiment of leadership and professionalism makes her truly deserving of this award.

## Joseph P. Gaut, MD, PhD

### Outstanding Achievements in Leadership and Development

Joseph P. Gaut, MD, PhD, Professor of Pathology & Immunology in the Division of Anatomic and Molecular Medicine, is honored for his outstanding achievement in leadership and development.

Dr. Gaut is an invaluable asset to our department, and we are incredibly fortunate to have him as the AMP division chief. His dedication to the department and hard work are evident in everything he does. Dr. Gaut is exceptionally organized and committed to continually learning and



implementing best practices to manage all aspects of the division with both efficiency and effectiveness. His positive energy and personal touch bring a unique warmth to our department.

He exemplifies true professionalism and is deeply invested in delivering exceptional quality work. He seamlessly integrates a broad understanding of our school and department's strategic goals with meticulous attention to detail. His commitment to excellence often sees him going beyond what is expected.

Dr. Gaut effortlessly builds and nurtures relationships with faculty, staff, trainees, students, and guests. He excels at welcoming new faculty members and trainees, making them feel valued and supported from the start. He invests in the current faculty and trainees continuing this support throughout their careers.

His ability to remain calm and composed in all situations is admirable. His professionalism, patience, and compassion are truly commendable. Motivated and positively engaged, Dr. Gaut serves as a true inspiration, setting a high standard for leadership that others aspire to follow.

# Rebekah E. Dumm, PhD, D(ABMM) Mark A. Zaydman, MD, PhD

### **Outstanding Achievements in Quality Improvement Award**

Rebekah Dumm, PhD, Assistant Professor and Mark Zaydman, MD, PhD, Assistant Professor in

Pathology & Immunology are honored for Outstanding Achievements in Quality Improvement.

In this project, Debbie Alspaugh, MLS (ASCP) and Jynelle Moyer, MLS(ASCP)<sup>CM</sup>, supervisors in the BJH Clinical Microbiology laboratory were key collaborators. Their contributions were substantial and vital to the project's success. Specifically, they contributed to conceptualizing, refining, and validating the novel Antibiogram process. Their expertise in clinical microbiology and antimicrobial susceptibility testing was invaluable in troubleshooting issues and designing a workflow and procedure aligned with CLSI and best practice standards.

Antibiograms represent the antimicrobial susceptibility profile for a specific microorganism to a battery of antimicrobial drugs. They are important tools for health care professionals and can guide the prescription of empiric antibiotics for suspected bacterial infections. Currently BJH publishes 16 antibiograms annually for 6 individual hospitals and 2 regional hospitals spanning bothgram positive and gram negative bacteria). Historically, this has been a manual and time-consuming process. This year, Drs. Rebekah Dumm and Mark Zaydman worked together with laboratory partners and key stakeholders to



automate and improve this process. In addition to removing the manual labor needed to generate the antibiograms, they introduced additional functionality including systematic grouping of organisms and better notation of intrinsic resistance. This automated process has improved accuracy by reducing the number of accidental double charting of results and a new feature has been added which allows differentiation by inpatient versus outpatient location. In addition, the automation will enable the team to publish these antibiograms earlier in the year, providing more timely results to clinicians. Links to antibiograms are also now available in EPIC.

BJC Antimicrobial Stewardship Coordinator, Helen Newland, commented that "By incorporating the ability to note intrinsic resistance in organisms, they have empowered providers to more accurately determine appropriate empiric antibiotic therapy, thus improving patient care. Serving seven BJC hospitals and accounting for over 100,000 inpatient admissions and nearly 340,000 ED visits annually, along with numerous outpatient practices, the BJH Micro Lab team's contributions are crucial to the health and well-being of our entire community."

# Xiuli Liu, MD, PhD Excellence in Faculty Mentoring

Xiuli Liu, MD, PhD, Professor of Pathology & Immunology in the division of Anatomic and Molecular Pathology is honored for her excellence in faculty mentoring.

It is our great honor to recognize Dr. Liu's exceptional commitment to faculty mentoring as the section head of the GI service. Dr. Liu exemplifies professionalism and collegiality, striving to make the GI section a model of excellence where everyone—from junior faculty to senior attendings—feels a keen sense of belonging. She provides a safe space to ask questions and candidly express concerns. Her mentees feel valued as both a colleague and a mentee.



Dr. Liu's dedication extends far beyond routine responsibilities. She actively supports and sponsors her faculty by facilitating invitations for them to speak at national and international conferences, providing research support, and mentoring them in developing projects and ideas. She also plays a key role in promoting faculty within the department and professional societies, including inviting them to contribute to book chapters and review articles.

Her remarkable networking skills, both within the school and beyond, enable her to leverage her extensive career connections to support and advance the careers of junior faculty. The GI Invited Lectures she organizes have been a tremendous success, attracting significant attendance from pathologists and trainees across services. The success of the GI fellowship program further attests to the strength of her leadership, with even the youngest pathologists recognizing and benefiting from her support.

We are incredibly fortunate to have Dr. Liu in our department. Her inspirational accomplishments, generosity, and mentorship elevate everyone around her, fostering an environment of growth and excellence.

# Suzanne R. Thibodeaux, MD, PhD Outstanding Contributions to Education

Suzanne Thibodeaux, MD, PhD, Associate Professor of Pathology and Immunology in the Division of Laboratory and Genomic Medicine, is honored for her outstanding contributions to education.

Dr. Thibodeaux has significantly advanced the field of laboratory medicine, transfusion medicine, and cellular therapy throughout all levels of medical training. Her unwavering dedication to laboratory medicine led to her initial role as a content expert in the preclinical phase evolving into a comprehensive laboratory medicine thread leader across the entire medical school curriculum. She advocated successfully for creation of an



Advanced Clinical Rotation in Pathology and Laboratory Medicine, a sub-internship rotation where medical students act as PGY-1 pathology trainees to experience the reality of anatomic and clinical pathology during medical school.

Her passion for teaching pathology trainees is evident in her efforts to develop and improve curricular experiences, ranging from addressing day-to-day issues that arise to the creation of two new resident rotations, culminating in her current roles as Rotation Director for the Transfusion Medicine Rotation and Associate Program Director for Clinical Pathology Residency. Dr. Thibodeaux also imparts her expertise in transfusion medicine to other departments, including internal medicine residents, anesthesiology residents and hematology/oncology fellows, with plans to expand to additional specialties.

Since joining the Wash U faculty, Dr. Thibodeaux has consistently contributed to major transfusion medicine meetings every year by speaking and or chairing educational sessions. She is actively involved in developing new educational materials for cellular therapy, including serving as a major content contributor for the first Certification for Advanced Biotherapies Professionals examination. Recently, she took on the role of Transfusion Medicine Fellowship Director, where she is enthusiastic about guiding future colleagues in the field to achieve their full potential.

Dr. Thibodeaux has made substantial contributions to our department, achieving a transformative impact on our educational programs. Her dedication and innovation in laboratory medicine, transfusion medicine, and cellular therapy make her a deserving candidate for the Outstanding Contribution to Education Award.

## Anjum Hassan, MD

### Outstanding Contributions to Diversity, Equity and Inclusion

Anjum Hassan, MD, Professor of Pathology and Immunology in the Division of Anatomic and Molecular Medicine, is honored for her outstanding contributions to diversity, equity and inclusion.

Dr. Hassan has been an unwavering pillar of support within our department. As a follower of Islamic faith, she openly embraces her identity as a devout practicing Muslim. Those fortunate enough to hear her reflections on religion find a message of love and respect woven into her beliefs—one that not only aligns with but also reinforces our department's DEI values.



This year, our campus, like many others across the country, faced significant challenges, particularly affecting those who follow muslim faith and traditions. During these turbulent times, Dr. Hassan went above and beyond by opening her office and home to our medical students and trainees. These spaces became a sanctuary where people felt genuinely heard and supported. In keeping with her Islamic tradition, she has consistently extended her generosity by distributing gifts to individuals of all faiths, conveying messages of peace, generosity, and reconciliation and when possible, held special gatherings of reflection and muslim celebrations at her home.

Dr. Hassan's actions—more than just words—demonstrate a profound commitment to diversity, inclusion, and belonging. She genuinely considers WASHU as her second home and considers the trainees and medical students as her extended family. Her role as a supportive colleague and a role model has had a meaningful impact on colleagues and students alike, and her very presence in our department is a testimony to our efforts in honoring such individuals in critical times of unjustified race and minority driven conflicts nationwide.

In addition, as a co-founder and board member of two St Louis based Non-Profit Organization's aiming to facilitate affordability of higher education in muslim youth and women, Dr. Hassan's exemplary contributions embody the very essence of excellence in Diversity, Equity, and Inclusion.

## Ta-Chiang Liu, M.D., Ph.D., AGAF

# Outstanding Paper of the Year Award for Anatomic and Molecular Pathology or Neuropathology

Ta-Chiang Liu, MD, PhD, Associate Professor of Pathology & Immunology is honored for his outstanding paper of the year for AMP/NP.

Dr. Liu's outstanding paper, NAD+ precursors and bile acid sequestration treat preclinical refractory environmental enteric dysfunction, is published in Science Transitional Medicine.



Environmental enteric dysfunction (EED) is an acquired condition of the small intestine that is associated with inflammation, poor nutrient absorption, and stunted growth in children in low- and mid-income countries. This study examined a cohort of children with EED and found pathophysiological changes in the cellular composition of the small bowel (shortened villi, decreased Paneth cells) as well as increased serum bile acids and decreased nicotinamide adenine dinucleotide (NAD+). They identified that polymorphisms in genes encoding NAD+ biosynthesis enzymes are associated with refractory EED. In parallel, work in a mouse model of EED suggested that increased dietary protein and NAD+ as well as reduction of bile acids should be further investigated as potential therapeutic avenues for this disorder.

Malique A, Sun S, Chandwe K, Amadi B, Haritunians T, Jain U, Muegge BD, Frein J, Sasaki Y, Foster A, Storer CE, Mengesha E, Kern J, McGovern DPB, Head RD, Kelly P, Liu TC. NAD+ precursors and bile acid sequestration treat preclinical refractory environmental enteric dysfunction. Sci Transl Med. 2024 Jan 3;16(728):eabq4145. doi: 10.1126/scitranslmed.abq4145. Epub 2024 Jan 3. PMID: 38170788.

### Steven Van Dyken, PhD

### Outstanding Paper of the Year for Immunobiology

Steven Van Dyken, PhD, Assistant Professor in Pathology & Immunology in the Division of Immunobiology is honored for his outstanding paper of the year.

In his paper, A type 2 immune circuit in the stomach controls mammalian adaptation to dietary chitin, published in Science he describes a new immune pathway induced by dietary fiber intake, which is well-known to lower the risk of heart disease, stroke, and obesity. Although many dietary fibers are exclusively digested by gut microbes, chitin, one of the most abundant dietary polysaccharides on earth, is



digested by chitinases produced by the stomach epithelium. This work describes an immunological axis triggered by mechanical stretch, neuropeptide production, and activation of tuft cells and group 2 innate lymphoid cells (ILC2s), cells that normally participate in type 2 immune responses. This type 2 immune triggering drives increased chitinase production by stomach chief cells, thereby enabling chitin digestion. Chitinase-deficient mice fed a chitin-enriched diet exhibit prolonged gastric distension and unresolved ILC2 triggering, leading to sustained gastrointestinal remodeling and systemic metabolic effects evident in adipose tissues. Finally, this study showed that modulating chitin digestion promotes metabolic health and resistance to high fat diet-induced obesity, suggesting further potential relevance to human metabolic diseases.

This paper represents a conceptual advance in how we think about the different ways in which the immune system participates in mammalian homeostasis; in this case, by mediating aspects of digestion and nutrient extraction. This paper also represents a true team effort and synergy among members of the Department of Pathology & Immunology; all authors on the paper (except one) are from various Divisions within the Department.

A type 2 immune circuit in the stomach controls mammalian adaptation to dietary chitin. Kim DH, Wang Y, Jung H, Field RL, Zhang X, Liu TC, Ma C, Fraser JS, Brestoff JR, Van Dyken SJ. Science. 2023 Sep 8;381(6662):1092-1098. doi: 10.1126/science.add5649. Epub 2023 Sep 7. PMID: 37676935

# Daniel M. Webber, MD, PhD Matthew C. Hibberd, PhD

Outstanding Paper of the Year for Laboratory & Genomic Medicine

Daniel M. Webber, MD, PhD, Instructor and Matthew C. Hibberd, PhD, Assistant Professor in Pathology & Immunology in the Division of Laboratory and Genomic Medicine are being honored for their outstanding paper of the year.

Their work in the Gordon lab built on studies of the role of the gut microbiota in the etiology and treatment of acute childhood malnutrition in LMICs and the development of microbiota-directed complementary food (MDCF) therapies. Drs. Webber and Hibberd led a multi-disciplinary effort in partnership with collaborators in the United States, Bangladesh, Denmark and France to identify 'structure-function' relationships between gut bacteria and polysaccharide components of a lead MDCF that may underpin its clinical effects. Their impactful work, "Bioactive glycans in a microbiome-directed food for children with malnutrition" is published in Nature.

The manuscript describes the development of a bioinformatics pipeline to assemble Metagenome-Assembled Genomes (MAGs) from DNA sequencing data generated from fecal samples collected





longitudinally during a clinical study of MDCF-2 and subsequent expression analysis of genes in these MAGs. These datasets were integrated with mass spectrometry-based characterization of MDCF polysaccharides and the products of their microbial metabolism in the gut. These efforts resulted in the identification of organisms (including *Prevotella copri*) and gene expression patterns associated with recovery from acute malnutrition and the possible 'bioactive' glycans these organisms consume. These structure-function relationships were subsequently confirmed *in vitro* using *P. copri* isolated from trial participants. This work provides an important foundation for developing of structurally defined prebiotics matched to the nutrient preferences of growth-associated bacteria in children from different geographies, with the potential to deliver superior efficacy and/or generalizability.

Hibberd MC, Webber DM, Rodionov DA, Henrissat S, Chen RY, Zhou C, Lynn HM, Wang Y, Chang HW, Lee EM, Lelwala-Guruge J, Kazanov MD, Arzamasov AA, Leyn SA, Lombard V, Terrapon N, Henrissat B, Castillo JJ, Couture G, Bacalzo NP Jr, Chen Y, Lebrilla CB, Mostafa I, Das S, Mahfuz M, Barratt MJ, Osterman AL, Ahmed T, Gordon JI. Bioactive glycans in a microbiome-directed food for children with malnutrition. Nature. 2024 Jan;625(7993):157-165. doi: 10.1038/s41586-023-06838-3. Epub 2023 Dec 13. PMID: 38093016; PMCID: PMC10764277.

# Celebrating Milestone Years of Service in Pathology & Immunology in FY2024

Forty Years
Erika Crouch, MD, PhD

Thirty-Five Years

Cora Arthur

John Pfeifer, MD, PhD

<u>Thirty Years</u> Mike White

**Twenty Years** 

Amy Brink Anjum Hassan, MD Wei Zou, MD, PhD

Fifteen Years

Bijoy George
Tom Hannan, DVM, PhD
Nathaniel McNulty
Janis Hardin
Jason Kerr
Richard Perrin, MD, PhD

Ten Years

Vanessa Alexander Aisha Clark Ian Hagemann, MD, PhD Tracey Hammontree Nidhi Rohatgi Susan Sample Xiaoxiao Wan, MD, PhD

### FY2024 – Promotions

### **Anatomic and Molecular Pathology**

Kathleen Byrnes, MD
Leigh Anne Compton, MD, PhD
Associate Professor
Yi-Shan Lee, MD, PhD
Associate Professor
Mena Mansour, MD
Associate Professor
Associate Professor
Associate Professor
Cody Weimholt, DO
Associate Professor

### **Genomic and Molecular Pathology**

Yang Cao, PhD Associate Professor

Julie Ann Neidich, MD Professor

Molly Schroeder, MD Associate Professor

### **Immunobiology**

Ali Ellebedy, PhD Professor

Eynav Klechevsky, PhD Associate Professor Cheryl Lichti, PhD Associate Professor

### **Laboratory and Genomic Medicine**

Michael Barratt, PhD Professor

Jiye Cheng, PhD Assistant Professor

Ronald Jackups, MD, PhD Professor

Bijal Parikh, MD, PhD Associate Professor Cara Shirai, PhD Assistant Professor