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# UNIVERSITY OF PITTSBURGH

Pittsburgh, PA

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## PROGRAMS OFFERED

We provide in-depth, protected anatomic and clinical pathology subspecialty training to prepare candidates for academic, community, and independently funded research careers. We recruit across all ACGME accredited **tracks** including single track anatomic or clinical pathology or combined track anatomic and clinical pathology. Single track is encouraged for candidates who know they want to pursue a tertiary care, academic or independently funded research career. **Residency in-depth subspecialty training** is provided through distinct anatomic and clinical pathology core rotations. On all anatomical pathology rotations residents are supported by and work closely with a team of well trained and experienced pathology assistants and clinical fellows. The subspecialty resident training is enhanced by **integration with our numerous subspecialty fellowships** to which many of our residents are recruited. The department offers fellowships (24 total positions) in Surgical Pathology (1), Cytopathology (2), Neuropathology (2), Hematopathology (2), Pediatric Pathology (1), Gynecologic and Breast Pathology (3), Bone and Soft Tissue Pathology (1), Thoracic Pathology (1), Transplant Pathology (1), Gastrointestinal Pathology (2), Genitourinary Pathology (1), Transfusion Medicine (1), Molecular Genetic Pathology (2), Head and Neck Pathology (1), Pathology Informatics (1), and Dermatopathology (2). Residents also train in renal/electron microscopy, autopsy pathology, and forensic pathology. Clinical pathology core training includes Chemistry, Toxicology, Hematology, Transfusion Medicine and Blood Banking, Immunopathology, Tissue Typing, Microbiology and Virology, and Informatics. Molecular Pathology training includes Molecular Genetics, Molecular Hematopathology, Molecular Anatomic Pathology, Molecular Microbiology, and Cytogenetics. On all clinical pathology rotations, residents work closely with a team of laboratory medicine technologists and supervisors – many with specific assignments to teach residents. The core training in CP also includes four weeks of adult laboratory management training as a Junior Laboratory Director. Across all areas of training residents are exposed to state-of-the-art technology innovation, digital imaging, molecular diagnostics, genomics, quality improvement and patient safety, informatics, and research opportunities. We are an early adopter of the **PIER** (Pathology Informatics Essentials for Residents) program. A robust **electives program** enables residents to “tailor” their overall training experience to focus on subspecialty training, research pursuits, preparation for community practice or commercial laboratory practice. The research opportunities are enhanced by close cooperation between researchers within the department engaging in basic and clinical research. Our residents are strongly encouraged to participate in research and submit abstracts and publications of their work to national meetings and journals. Resident training is enriched by a multi-academic hospital experience, including adult, pediatric, and women’s health specialty hospitals, driven by the location of clinical programs as part of the UPMC Center of Excellence patient care model. Candidates interested in an independently funded research career are considered for our **research track** through our PIRRT (Pathologist Investigator Residency/Research Training) program where at least one additional year of funded training is provided. The research track is particularly well suited to MD PhD candidates.

UPMC has received national recognition as one of America's Best Hospitals.

The UPMC Pathology residency program has an excellent track record for the American Board of Pathology first-time takers board pass rate - 98% AP and 100% CP for the last seven years.

Full information on the Department of Pathology at UPMC can be found on the Department’s website at <http://path.upmc.edu>.

## TYPES AND NUMBERS OF APPOINTMENTS

Currently we are accredited by the ACGME for thirty-three positions. Over the past few years we have on average been staffed with 28 residents. Most residents enter at the PGY1 level; higher-level resident positions are rarely available. Under the ACGME accreditation system, we have been approved each year for accreditation with commendation and no citations.

## FACILITIES

The University of Pittsburgh Medical Center (UPMC), located adjacent to the University of Pittsburgh in the Oakland section of Pittsburgh, is the major academic medical center serving central and western Pennsylvania, northern West Virginia and eastern Ohio. An outstanding volume and breadth of experience is obtained through training in five core general and subspecialty hospitals with a total bed capacity of approximately 2,000. **UPMC Presbyterian University Hospital**, the home of many national and internationally recognized programs, is the major academic hospital and houses many subspecialty areas and research programs in the Department. **UPMC Shadyside Hospital**, adjacent to the NCI-funded comprehensive Hillman Cancer Center offers excellent exposure to the diversity of material and demands associated with a hospital combining academic medicine and premier community practice as well as outstanding subspecialty training in several areas. **Magee-Womens Hospital of UPMC** offers an unparalleled experience in cytopathology, gynecologic, breast and perinatal pathology. The

**Veterans Affairs Medical Center** and the **Children's Hospital of Pittsburgh of UPMC** provide excellent exposure to geriatric and pediatric pathology. Over 100 faculty at these sites are members of the Department. UPMC has been repeatedly judged among the 'best of the best' hospitals in America in U.S. News and World Report. The University and Medical Center as well as the Department rank among the top four sites for NIH-funded research with active programs in basic and transplant immunology, cardiovascular biology, neurosciences, cancer biology and genetics, gene therapy, and many other fields. Over 100,000 surgical specimens, 160,000 cytology specimens, 400 autopsies, and 8,000,000 clinical tests were evaluated in primary residency training sites. Residents receive training in forensic pathology at the Allegheny County Medical Examiner's Office.

### **COMMUNITY**

Hailed repeatedly in surveys as one of America's most livable cities, Pittsburgh no longer produces steel but has transitioned into a center with a diverse service economy featuring a large number of major corporate headquarters. It has become a city with a vibrant young professional community. Western Pennsylvanians are gracious and friendly, even when cheering professional sports franchises in baseball, football and hockey or college teams. Among the most beautiful and affordable cities in the United States, Pittsburgh offers an interesting blend of rivers, bridges, skyscrapers, hills, tunnels, distinctive public buildings, and affordable and safe neighborhoods. Recreational opportunities lie close by including excellent skiing, hiking, fishing, camping, boating, kayaking and white-water rafting; very few areas can boast as interesting or challenging a diversity of private and public golf courses. A rich array of cultural opportunities includes the Carnegie Museums and Library, vigorous theater programs, and the world-class Pittsburgh Symphony and Pops Orchestras.

### **STIPENDS AND MAINTENANCE**

The 2020-2021 schedule of remuneration for graduate medical trainees at UPMC is anticipated to be: PGY1-\$59,727, PGY2-\$61,823, PGY3-\$63,672, PGY4-\$65,900. Health, life, disability, and professional liability insurance are provided along with parking, surgical scrub outfits, and lab coats. All residents receive a laptop computer, which they take with them upon graduation. A \$1,000 fund is provided annually to each resident for books, dues, conference travel, and other purposes. Attendance at national meetings is also supported for residents presenting investigative results. Trainees are reimbursed for application fees and expenses to take the American Board of Pathology Certification examinations following the final year. Maternity leave is covered under short-term disability.

### **STAFF**

A complete roster of Department of Pathology faculty, listed alphabetically or by Division, can be found at <http://path.upmc.edu/Personnel/Faculty/faculty.htm>

### **PROFESSORS**

**George Michalopoulos** MD, PhD Chairman; hepatic pathology, growth factors and liver regeneration; **R. Marshall Austin** MD gynecologic pathology, cytopathology; **Sheldon Bastacky** MD nephropathology, genitourinary pathology; **Michael Becich** MD, PhD informatics; **Rohit Bhargava** MBBS gynecologic pathology; **Harry Blair** MD bone physiology/pathology; **Charleen Chu** MD, PhD neuropathology, ophthalmic pathology; **Sanja Dacic** MD, PhD pulmonary, molecular anatomic pathology; **Marie DeFrances** MD, PhD hepatic, molecular pathology; **Anthony Demetris** MD transplant, liver pathology; **Rajiv Dhir** MD genitourinary pathology, tissue banking; **Ronald Jaffe** MD pediatric pathology; **Mirka Jones** MD gynecologic pathology; **Scott Kulich** MD, PhD neuropathology; **Joseph Locker** MD molecular anatomic pathology; **Jianhua Luo** MD, PhD experimental, molecular, cellular and anatomic molecular pathology; **Michael Nalesnik** MD transplant pathology, lymphoproliferative disorders; **Yuri Nikiforov** MD, PhD molecular anatomic pathology; **Marina Nikiforova** MD molecular anatomic pathology; **N. Paul Otori** MD cytopathology, fine needle aspiration; **Tim Oury** MD, PhD molecular diagnostics, oxidative injury; **Liron Pantanowitz** MD cytopathology, AIDS; **A. William Pasculle** ScD medical microbiology; **Parmjeet Randhawa** MD transplant pathology; **Miguel Reyes-Mugica** MD pediatric pathology; **Charles R. Rinaldo, Jr.** PhD viral immunology, AIDS; **Karen Schoedel** MD bone and soft tissue pathology; **Raja Seethala** MD head and neck pathology; **Michael Shurin** MD, PhD immunopathology; **Steven Swerdlow** MD hematopathology; **Darrell Triulzi** MD transfusion medicine, coagulation; **Alan Wells** MD, DMS clinical pathology, cell motility, cancer biology; **Clayton Wiley** MD, PhD neuropathology; **Mark Yazer** MD transfusion medicine, coagulation; **Samuel Yousem** MD pulmonary, mediastinal pathology; **Abdolreza Zarnegar** PhD cellular and molecular pathology; **Adriana Zeevi** PhD immunopathology; **Chengquan Zhao** MD gynecologic pathology.

### **ASSOCIATE PROFESSORS**

**Rajnikant Amin** MD community hospital pathology, gynecologic pathology; **Nathanael Bailey** MD hematopathology; **Gloria Carter** MD gynecologic pathology, cytopathology; **Simion Chiosea** MD head and neck pathology; **Beth Z Clark** MD gynecologic pathology, cytopathology; **Jon Davison** MD gastrointestinal pathology;

**Steven Dobrowolski** PhD clinical chemistry; **Esther Elishaev** MD gynecologic pathology; **Sarah Gibson** MD hematopathology; **Douglas Hartman** MD gastrointestinal pathology; **Stefan Kostadinov** MD perinatal pathology; **Shih-Fan Kuan** MD, PhD gastrointestinal pathology; **Peter Lucas** MD, PhD molecular genomic and experimental pathology; **Sara Monaco** MD cytopathology; **Sara Monaghan** MD hematopathology; **Geoffrey Murdoch** MD, PhD neuropathology; **Rateesh Pai** MD gastrointestinal pathology, cytopathology; **Robert Peel** MD endocrine pathology; **Tung Phan** MD, PhD microbiology; **Lirong Qu** MD, PhD transfusion medicine, coagulation; **Anupama Sharma** MD thoracic pathology; **Kenichi Tamama** MD, PhD clinical pathology; **Jing Yu** MD, PhD gynecologic pathology, cytopathology.

#### **ASSISTANT PROFESSORS**

**Nidhi Aggarwal** MD hematopathology; **Evan Baker** MD community hospital pathology; **Tanner Bartholow** MD autopsy pathology; **Grant Bullock** PhD hematopathology; **Irina Chibisov** MD transfusion medicine; **Miroslav Djokic** MD hematopathology; **Katherine Doeden** MD general pathology; **Jeffrey Fine** MD gynecologic pathology, informatics; **Roy Frye** MD, PhD cellular and molecular pathology; **Ana Marie Gomez** MD pediatric pathology; **Smiljana Istvanic** MD general pathology; **Ivy John** MD bone and soft tissue pathology; **Alesia Kaplan** MD transfusion medicine; **Alesia Kaplan** MD transfusion medicine; **Arivarasan Karunamurthy** MD molecular pathology, dermatopathology, bone and soft tissue pathology; **Julia K Kofler** MD neuropathology; **Scott Kulich** MD neuropathology; **Michael Landau** MD gastrointestinal pathology; **Agnes Liman** MD cytopathology, surgical pathology; **Yen Chun Liu** MD hematopathology; **Changqing Ma** MD, PhD gastrointestinal pathology; **Marta Minervini** MD transplant pathology; **Stephanie Mitchell** PhD microbiology; **Erika Moore** MD hematopathology; **Olga Navolotskaia** MD gynecologic pathology; **Octavia Palmer** PhD clinical chemistry; **Gabriela Quiroga-Garza** MD genitourinary pathology, cytopathology; **Bryan Rea** MD hematopathology; **Somak Roy** MD molecular genomic pathology; **Jansen Seheult** MD transfusion medicine; **Jagjit Singh** MD community hospital pathology; **Aatur Singhi** MD, PhD gastrointestinal pathology; **Humberto Trejo Bittar** MD thoracic pathology; **Sarah Wheeler** PhD immunopathology, chemistry; **Juan Xing** MD cytopathology; **Qingyong Xu** PhD tissue typing; **Svetlana Yatsenko** MD cytogenetics.

#### **APPLICATIONS**

Positions are offered to graduates of medical or osteopathic schools in the United States or Canada or international medical graduates with an ECFMG certificate holding permanent resident status or eligible for a J-1 visa in the USA. H1B visa sponsorship is considered for highly competitive candidates with a strong academic record. General application materials for the program year beginning in 2021 should be submitted through the AAMC Electronic Residency Application Service (ERAS). These are reviewed beginning in October. We prefer to receive applications through ERAS for upper level positions. Applications to start training in July of 2021 should be received by October 31, 2020; earlier application is strongly recommended. Interviews are by invitation in the Fall and are mandatory. Orientation for new trainees begins in July.

#### **Address inquiries to:**

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