



International ACGME Accredited Fellowship Programs

Prepared By:

**Office of International Medicine Programs
School of Medicine and Health Sciences**

The George Washington University

DEPARTMENT OF MEDICINE

Cardiology Fellowship

Cardiology fellowship features three years one-on-one teaching in which fellows are paired with faculty mentors on a daily basis. The division prides itself on flexible scheduling in which each fellow meets with the program director to design a schedule that meets their specific needs. The clinical rotations at GW include time in the cardiac catheterization laboratory, the arrhythmia service, cardiac consultations, coronary care unit and multi-modality imaging including echocardiography, nuclear cardiology, cardiac MRI and cardiac CT. There is a new vascular medicine rotation as well. Fellows will also rotate at INOVA Fairfax Hospital for rotations in acute decompensated heart failure, cardiac transplantation, adult congenital heart disease and cardiac rehabilitation. Fellows will also spend one half day per week at the ambulatory care center at GW in their own ambulatory continuity clinic. The robust conference schedule includes a weekly cardiac catheterization conference, fellow's didactic conference, journal club, non-invasive conference, arrhythmia conference, heart failure conference, cardiology board Review and cardiology grand rounds.

Clinical Cardiac Electrophysiology Fellowship

The clinical cardiac electrophysiology fellowship is a two-year subspecialty fellowship program within the division of cardiology. This fellowship provides outstanding preparation in the study of clinical cardiac electrophysiology (EP). Specifically, fellows are trained in advanced arrhythmia therapies including diagnostic EP testing; arrhythmia mapping and atrial and ventricular ablations; pacemaker, ICD, cardiac resynchronization devices and loop recorder implantations and management; lead extractions as well as noninvasive testing and cardioversions. Throughout the training, fellows are given increasing responsibility in invasive procedures in the EP laboratory. Fellows spend most of their times at GW Hospital, but also have rotations at the Washington VA Medical Center in Washington, D.C. and the Washington Adventist Hospital in Takoma Park, Maryland. Fellows participate in inpatient activities at the three hospitals and in the outpatient device clinic at the Washington VA Medical Center. While primarily a clinical program, involvement in research or quality improvement projects is encouraged and most fellows participate in presentations and/or publications.

Endocrinology Fellowship Training

The Endocrinology, Diabetes and Metabolism Training Program at George Washington University School of Medicine and Health Sciences provides fellowship to physicians who have completed their Internal Medicine residency. The two-year training program provides opportunities for trainees to develop the clinical competence and procedural skills to practice independently in the field of endocrinology, whether in clinical or academic practice. Satisfactory completion of the training program is acceptable for entrance to the certifying exam in Endocrinology, Diabetes and Metabolism administered by the American Board of Internal Medicine. During the 1st year, fellows spend 10 months divided between the Washington DC Veteran's Administration Medical Center (VA) and George Washington University (GWU) inpatient and outpatient rotations. They have 2 weeks of elective and 2 weeks of research time. One month vacation is provided in each year. During the second year, comes progressive responsibility to the point of independence by graduation. 2nd year fellows spend 7 months between the VA and GWU. They have two months of elective/research, 1 month at Children's National Medical Center, and 1 month at the National Institutes of Health (NIH). Subspecialty clinics include transgender and andrology, high-risk pregnancy clinic, thyroid ultrasound/FNA clinic, and lipid clinic. Both research and quality improvement projects are required and are overseen by a faculty mentor. Research interests amongst faculty are varied and include topics such as diabetes and obesity intervention in underserved populations, adipocyte and stem cell changes in type DM2, transgender medicine, osteoporosis, amongst many others. Fellows are expected to

present at national meetings. Electives are pursued in consultation with the program director. All recent fellows have rotated in podiatry, ophthalmology/retina, and bariatric surgery clinic as 1st years. In the 2nd year, a two week elective in reproductive endocrinology is pursued. Additional elective training in advanced thyroid cancer clinic, urologic andrology, and others has been popular.

Gastroenterology and Liver Diseases (GI)

The division offers a three years fellowship program designed to train fellows in both clinical gastroenterology, and hepatology and research. The program provides detailed instruction in clinical gastroenterology and hepatology. Fellows conduct research under the supervision of faculty from the Division of Gastroenterology and Hepatology. The consultative service of the division provides the house staff with the opportunity to review patients with gastroenterologic and hepatic disorders who are referred for evaluation. House staff are active in both the inpatient and outpatient consultative services. The house staff also participate in all educational nutrition conferences.

Geriatric Medicine Fellowship

The one-year geriatric medicine fellowship provides training and experience in an unsurpassed range of clinical settings. It promotes physician leaders with particular expertise in teaching, quality improvement and interdisciplinary team-building. Training settings include geriatrics clinics, memory disorders clinic, home care programs, inpatient rehabilitation, acute care hospital, hospice, assisted living and skilled nursing facilities. Weekly core conferences, quality improvement projects and personal mentoring prepare fellows to be expert clinicians, master teachers and medical directors. Fellows work and learn in basic and advanced settings, assuming increased levels of responsibility over the Fellowship year through clinical rotations and weekly interactive conferences.

Hematology/Oncology Fellowship Program

The three-year hematology/oncology fellowship training program has been developed with the Washington Veterans Administration Medical Center and an ongoing research training affiliation with the National Institutes of Health years ago. GW and the Washington Veterans Administration Medical Center are the sites of clinical training for both hematology and medical oncology, and fellows have the option for research training and program electives at the National Institutes of Health. The fellowship program consists of educational programs and extensive clinical and basic science research, along with the GW Hospital and its large ambulatory care facility. The Washington Veterans Administration Medical Center is the major teaching affiliate of GW, with internal medicine and fellowship training rotations in all subspecialties. The Division of Hematology and Oncology at GW and the Washington Veterans Administration Medical Center have an integrated training program with equal time rotations of fellows in years one and two of hematology and oncology training. The GW-VAMC program has an affiliation agreement for hematology/oncology fellowship research training with National Institutes of Health. This program is based in the National Institute of Diabetes and Digestive and Kidney diseases. For areas of research not available at GW or Washington Veterans Administration Medical Center, fellows are offered the opportunity to work with specific National Institutes of Health investigators and may elect to do their research year(s) at the National Institutes of Health. In addition, fellows in research year(s) return to GW-VAMC for one or two months of further clinical/ward experience in oncology or hematology.

Hospice and Palliative Care Medicine Fellowship

The fellowship-training program offers a one-year training in palliative medicine and hospice. Elective training is provided in integrative medicine. This program is designed to train fellows in clinical palliative medicine and hospice, with special focus on developing clinical leaders and clinician educators. All fellows

pursue a quality improvement project of their choice, under the guidance of one or more faculty members. The research and clinical interests of divisional members include graduate medical education, safe transitions of care, advance care planning, ethics, integrative medicine, and physician/patient communication. The division actively cooperates with other clinical disciplines within the medical center including hospital medicine, pulmonary/critical care, trauma services, emergency medicine, and integrative medicine.

Infectious Disease

The two years program consists of 13 to 14 months of clinical experience, including basic training in epidemiology and microbiology, and 10 to 11 months of research. Areas of research range from basic bench research to epidemiologic investigations. Fellows can choose subspecialty electives in such areas as pediatric infectious diseases, geographic medicine, and trauma. Each fellow selects a faculty member who serves as a research preceptor and helps the fellow to develop his or her research project. Faculty research interests are in the areas of: clinical and basic science aspects of HIV infection, the role of cytokines in disease progression; metabolic complications of anti-retroviral therapy; role of statins in infectious disease; new antiretroviral agents and new approaches to the treatment of opportunistic infections; septic shock; staphylococcal infections; phagocyte function; anaerobic infections; pathogenesis of intestinal protozoal infections; tuberculosis; antibiotic resistance; and clinical trials.

Interventional Cardiology

The interventional cardiology program consists of one year of robust coverage of coronary and peripheral interventions, with additional programs in percutaneous atrial and ventricular septal defect closures, new short-term ventricular support devices, and percutaneous valve placement. The heart rhythm services are distinguished nationally by their focus on complex ablative procedures and implantable cardiac devices. The non-invasive cardiac laboratory consists of state-of-the-art echocardiography, nuclear cardiology, cardiac MRI and cardiac CT. The clinical program in heart failure, transplantation, and pulmonary hypertension is one of the largest and most successful in the region with internationally recognized faculty in the field.

Nephrology Fellowship

The adult nephrology fellowship program is a two-year clinical fellowship with an optional 3rd year extension. In general, the fellow participates primarily in the clinical services the first year, and both clinical and research activities the second year. The principal clinical training centers are at GW and the Veterans Affairs Medical Centers. Additional clinical experiences are obtained at the INOVA Fairfax Hospital and Children's National Health Services. The planned experiences include inpatient rotations, transplant surgery service, outpatient hemodialysis and peritoneal dialysis clinic, specialty ambulatory clinics (renal sonography clinic, glomerular diseases clinic and kidney stone clinic) and research. All fellows will also be trained on therapeutic apheresis and renal biopsy of the native and allograft kidneys.

The program exists to provide opportunities for trainees to develop clinical competence to practice independently in the field of nephrology, the ultimate goal of the program. By the completion of the second year, trainees will learn to independently evaluate and manage patients with renal disease and/or hypertension. They will learn to critically evaluate the scientific literature and learn the fundamentals of research. The fellowship program is structured such that learning medical knowledge, and skills pertaining to metabolic and renal diseases, hypertension, end stage renal disease, and renal transplantation are acquired through supervised clinical experiences and formal education.

Pulmonary and Critical Care Medicine

The pulmonary and critical care medicine fellowship training program prepares internists for a career in clinical or academic pulmonary and critical care medicine. The educational program provides the physicians with the basic science and clinical knowledge to become respected consultants in pulmonary and critical care medicine and to perform the appropriate invasive procedures expected of a pulmonary and critical care specialist. Furthermore, the program encourages each trainee to pursue research projects with faculty supervision. The fellowship duration is three years consisting of rotations at GW Hospital, Washington Hospital Center, and Veterans Affairs Medical Center. Fellows are expected to initiate clinical research protocols and are expected to give conferences to respiratory therapists and pulmonary function laboratory personnel. One month is spent at the Armed Forces Institute of Pathology and one month at the INOVA Lung Transplant Service. Over the 3-year period, 12 months will be devoted to critical care experience with rotations through the intensive care units. Fellows are also involved with research programs and teaching activities.

Rheumatology Fellowship Training

The division of rheumatology offers a two-year advanced medical training program. The fellowship provides an active teaching program covering the clinical, diagnostic laboratory, and research aspects of rheumatology. House officers are closely supervised by attending faculty, and trainees learn how to clinically assess and manage patients with musculoskeletal complaints. The division has didactic seminars including journal club, clinical conference, research conference, radiology conference and interdepartmental conferences with orthopedics, pathology, and rehabilitation. In addition, there are citywide clinical rheumatology conferences.

DEPARTMENT OF ANESTHESIOLOGY

Critical Care Fellowship

The goal of the one-year critical care fellowship program is to provide fellows with the knowledge base and clinical experience to successfully evaluate and treat medical and surgical conditions that require admission to the critical care unit. Commonly encountered conditions include sepsis, acute and chronic respiratory failure, acute renal failure, hemodynamic instability, overdoses and poisonings, acute neurologic insults, electrolyte and endocrine emergencies, coagulation disorders, and post-operative complications. As a mixed medical/surgical unit, the ICU fellow will also develop expertise in the management of patients with trauma, neurosurgical emergencies, cardiac, and critical obstetric and gynecologic disorders. Both the faculty and the sponsoring institution are fully committed to provide the educational program, resources, and facilities to meet these goals

Pediatric Anesthesia Fellowship

The pediatric anesthesiology fellowship program trains pediatric anesthesia fellows in pediatric anesthesia and pain management for 1 year. Rotations include anesthesia for neonatal surgery, general surgery, cardiovascular surgery, orthopedic surgery, ENT surgery, pediatric intensive care unit, pain management, post-anesthesia care unit, etc. The division of anesthesiology and pain medicine at Children's National Health Services provides comprehensive clinical anesthesia services for infants and children undergoing a full range of pediatric surgical procedures. Children's National Health Services is the only institution in the area that guarantees anesthesia administered by a fellowship-trained pediatric anesthesiologist. A complete spectrum of surgical anesthesia services are provided, including anesthesia for pediatric congenital heart disease, heart transplantation, craniofacial reconstruction, neurosurgery, reconstruction of the larynx and trachea, and complex pediatric surgery. Regional anesthesia and patient-controlled analgesia are available as well, and the team will consult on malignant hyperthermia, pulmonary insufficiency and pain management. Pre-operative consultation from referring physicians is welcomed and encouraged. Pre-anesthesia preparation of the child and parents is stressed.

DEPARTMENT OF RADIOLOGY

Interventional Radiology

The division of interventional radiology at GW is committed to providing the highest quality image guided therapy in the United States. In an atmosphere that nurtures problem solving and professional growth with support and teamwork, residents learn the clinical, academic, research and interpersonal skills that will be necessary for healthcare providers in the twenty-first century. This one year fellowship is spent entirely at GW department of radiology, division of interventional radiology. During this time, the fellow will be the primary physician triaging patients that are referred to the interventional service. Conditions the fellow will be routinely exposed to include, peripheral arterial disease, aneurysm therapy, advanced oncologic intervention, management of venous thromboembolic events and deep venous thrombosis, women's health conditions (symptomatic fibroids, infertility, pelvic venous incompetence), complex genitourinary, hepatobiliary and gastrointestinal procedures will also be performed on a routine basis. The fellow will be the primary operator on many of these cases. Additionally, the fellow will be exposed to cardiovascular imaging, clinic, and if he/she wishes the opportunity to rotate at Children's National Health Services.

DEPARTMENT OF NEUROLOGY

Epilepsy Fellowship Program

The one year epilepsy fellowship program is an intensive epilepsy training program that combines outpatient epilepsy care with inpatient epilepsy monitoring and surgical evaluation of intractable epilepsy, in addition to opportunities to participate in clinical and laboratory research. The GW Epilepsy Center has been given the highest designation as a level 4 center by the National Association of Epilepsy Centers (NAEC). The epilepsy fellowship curriculum will include, among other topics, an introduction to EEG electronics, adult and pediatric EEG interpretation, seizure semiology, anti-epileptic medications, and women's issues. There are daily reading and interpretation of routine EEG and video-EEG studies. In addition, the internationally acclaimed GW epilepsy grand rounds consists of monthly talks by renowned speakers from all over the world. The fellow will also have the opportunity to attend the annual epilepsy board review course and the annual cherry blossom neuro-modulation symposium, both organized by the GW Epilepsy Center.

DEPARTMENT OF EMERGENCY MEDICINE

Medical Toxicology

The Department of Emergency Medicine, in conjunction with the National Capital Poison Center, offers a two-year fellowship in medical toxicology. The fellowship seeks to foster the basis for a complete understanding of the many facets of toxicology, so that the fellow will be able to find the niche that is most suited to their future practice in medicine. The curriculum is a blend of conference-style didactic learning, course work, hands-on bedside (intensive care unit, emergency department, floor patients) and clinic consultations, poison center based phone consultations, and research.

The department of emergency medicine has several unaccredited fellowship programs as follows:

- **Simulation Fellowship**
- **Telemedicine Fellowship**
- **Medical Education Fellowship**
- **Leadership & Operations Fellowship**
- **Emergency Ultrasound Fellowship**

American Board Examination

Fellows who successfully complete GW ACGME accredited fellowships are eligible to sit for the American Board Exam of their sub-specialty.