

2020-2021

Neurology Residency Program



Our mission:

To Serve.
To Heal.
To Educate.

Cooper
University Health Care



Cooper Medical School
of Rowan University

Welcome From the Program Director



Joseph V. Campellone, MD, FAAN

As Program Director, I take great pride in the Neurology Residency Program at Cooper University Hospital. Since our program started with our first three residents ten years ago, our reputation as an excellent training ground has spread throughout the country through our graduates, who are highly regarded in the job market and have secured esteemed fellowships and clinical positions. More importantly, several of our graduates have returned to Cooper, a testament to the clinical opportunities and work environment here.

The diversity of our patients is the backbone of the educational experience. Exposure to patients representing a broad spectrum of both common and uncommon neurological disorders, as well as to patients with varied socioeconomic backgrounds, reinforces a robust didactic curriculum. Residents assume greater responsibility as they progress through training, always with the support and supervision of enthusiastic faculty with broad clinical interests. There is a very strong support for our academic mission, including comprehensive electronic resources, support from library staff, and a dedicated research institute. The learning environment is further enriched by Cooper Medical School of Rowan University, which offers many teaching opportunities to trainees. There is abundant interaction between numerous academic programs to foster a multi-disciplinary approach to patient care and scholarly activity. Departmental and institutional support, including an annual poster competition, further creates an environment conducive for research. Past and current residents have produced topnotch research— publishing numerous manuscripts (nine as first author!), as well as dozens of abstracts and presentations at national and international meetings.

Under the direction of Dr. Warren Goldman, Cooper has established a regional reputation as South Jersey's only Joint Commission-Certified Comprehensive Stroke Center and a leader in the neurosciences. The recent addition of Dr. Tudor Jovin as Chief of Neurology and Director of the Cooper Neurological Institute demonstrates Cooper's continued commitment to excellence. Under his leadership, the development of other programs such as tele-stroke services will continue to enhance patient care while offering cutting edge educational experiences to our trainees.

This is truly a great environment for future neurologists to train and a very exciting time to be in the Cooper family. The unique atmosphere provides a strong emphasis on clinical neurology, yet also provides abundant exposure to clinical research and basic science enabling the graduating resident to explore careers in academics, research, and clinical practice or to continue into subspecialty fellowship training. We encourage you to apply to our program so that you may visit us and see firsthand the exciting opportunities we offer.

Joseph V. Campellone, MD, FAAN

Program Director, Neurology Residency
Professor of Neurology

Greetings From the Department Chair



Tudor G. Jovin, MD

Dear Applicants,

Welcome to the Neurology Residency Program at Cooper University Hospital. We are delighted that you are interested in learning more about our hospital and its superb training opportunities. Cooper has a long history of excellence in education. Our residency graduates have been exceptionally well trained and are ready to take on any clinical or educational challenge.

Many of our faculty are national and international experts in several subspecialty areas, including cerebrovascular disease, endovascular/interventional neurology, epilepsy, multiple sclerosis, neuromuscular and movement disorders.

Our faculty represents a wonderful mix of seasoned experts at all stages in their careers. We recently expanded our services with additional clinicians who all share a real passion for teaching and provide broad clinical and educational experiences while enhancing delivery of care. We are committed to your development as a person, a physician and as a leader in the medical community. Our program's size and structure make it an ideal choice for learning the "art and science" of neurology. Our residents cover only one hospital under the supervision of committed faculty, which provides opportunity for much more individualized instruction than possible at other programs. The program benefits further from our collaboration with Cooper Medical School of Rowan University, providing resident trainees the opportunity to share their knowledge with enthusiastic medical students. This collaboration encourages an environment conducive to team-focused patient care, safety, research and education. Our residents also benefit from neuroanatomy labs, pathology reviews, and SIM lab experiences made possible through our affiliation with CMSRU.

Please consider applying to our program if your goal is to be an excellent neurologist functioning at the highest level of knowledge and experience after residency. This is one of the most exciting times in your professional career and we look forward to helping you achieve your professional and personal goals, while having a little fun along the way.

Following graduation, there are opportunities to pursue fellowship training in several subspecialties including stroke and interventional neurology. As our department continues to grow, fellowship training in other neurological subspecialties will become possible.

Tudor G. Jovin, MD

Chair and Chief, Department of Neurology,
Director of Cooper Neurological Institute, Cooper University Health Care,
Professor of Neurology, Cooper Medical School of Rowan University

About the Neurology Residency Program



Advanced Certification for Comprehensive Stroke Centers

In 2017, Cooper University Health Care earned The Joint Commission's Gold Seal of Approval® and the American Heart Association/American Stroke Association's Heart-Check mark for Advanced Certification for Comprehensive Stroke Centers. The Gold Seal of Approval® and the Heart-Check mark represent hospitals with the highest level of stroke care and are symbols of quality from their respective organizations.

Cooper is one of only seven hospitals in New Jersey and the first in South Jersey to achieve this significant certification. With this certification, Cooper joins an elite group of health care organizations focused on highly specialized stroke care.

The Neurology Residency Program at Cooper University Hospital is a four-year categorical program offering three resident positions for each year of training, which includes one year of preliminary internal medicine and three years of neurology training. The program reinforces clinical patient care and scholarly pursuits through our most valuable resource—our patients with diverse neurological disorders and backgrounds.

Our state-of-the-art hospital provides training facilities for numerous residency programs and medical fellowships. House officers have primary patient care responsibility, while faculty serve to supervise and teach. This philosophy allows trainees to become self-sufficient and to develop the confidence needed post-training.

A testament to outstanding patient care, Cooper received recognition from The Joint Commission as a Comprehensive Stroke Center. Our integration into a multi-disciplinary, patient-centered Cooper Neurological Institute (CNI) facilitates a team approach to improving patients' experience and outcomes. This is a very exciting time for our department. Changes in leadership and expansion of faculty with diverse interests will continue to improve the educational opportunities for residents and the care of our patients. Our residency program will provide exposure to innovative patient care such as our tele-neurology service, which will give residents the skills and experience needed in a competitive work force they will encounter post-graduation.

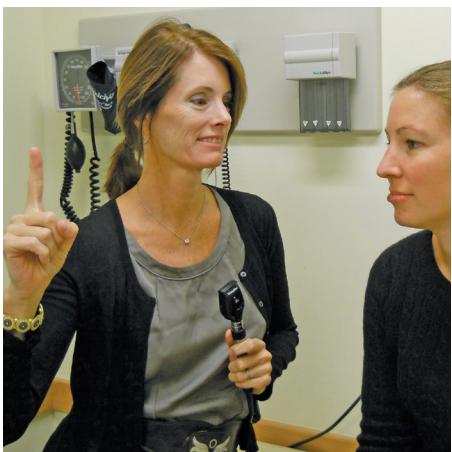
Here's what makes Cooper a great place to train:

- All of our neurology inpatients are cared for by attending faculty neurologists. This ensures close supervision and interaction of attending physicians and house staff and excellent bedside teaching.
- Accessible, full-time faculty dedicated to teaching and patient care.
- Emphasis on ambulatory care and the office practice of neurology. Our residents spend significant time in ambulatory settings, which prepares them for life after residency.
- An excellent, balanced mix of patients. Cooper is the only tertiary care hospital in southern New Jersey, hence receives a large number of tertiary referral patients. There is great diversity of neurological disorders as well as socio-economic status to ensure graduates of our program are enabled to manage any situation.
- On-site biostatisticians and librarians to support research projects.
- Online access to thousands of journals and medical texts, available 24 hours a day.
- A well-equipped conference room.
- Digital radiology accessible from all hospital workstations as well as remotely.
- EPIC electronic medical record system.



American Heart Association
American Stroke Association
CERTIFICATION
Meets standards for
Comprehensive Stroke Center

Neurology Residency Program *continued*



Required Rotations

- Inpatient neurology service
- Consult service
- General outpatient neurology
- Child neurology
- Psychiatry

Electives

- Neuromuscular/
electromyography
- Neurocognitive disorders
- Neuro-rehabilitation
- Neurosurgery
- Epilepsy/EEG
- Neuro-critical care
- Pain management/headache
- Movement disorders
- Neuro-radiology
- Tele-Neurology
- Research

- Web-based procedure logging, duty hours documentation, and evaluation.

House officers on the stroke service cover the stroke unit and other patients with cerebrovascular disorders in various settings throughout the hospital. Rotations in neuro-critical care provide an environment in which residents gain in an intense learning environment, caring for complex, critically-ill patients. These experiences are why our graduates feel competent and confident when they embark on their careers.

On the general neurology service, residents evaluate patients for non-vascular consultations as well as manage patients admitted to the neurology unit, including a four-bed epilepsy monitoring unit. Residents get significant exposure to outpatient neurology through designated monthly rotations in general neurology and subspecialty electives. This is supplemented by a continuity clinic in which residents acquire and follow their own recurrent patients throughout the three years of their training.

Much of the PGY-2 year is spent taking care of patients on the neurology service and performing consultations in the inpatient setting. The remaining time as PGY-2 consists of rotations in general outpatient neurology and psychiatry.

Senior neurology residents have great flexibility rotating through a wide variety of subspecialty experiences including neuromuscular disease, movement disorders, epilepsy, and others. Senior residents also assume more responsibility directing and teaching junior residents and medical students.

Cooper's position as the only tertiary referral center in South Jersey provides residents exposure to patients with diverse and unusual problems that offer exceptional educational experiences in the various subspecialties. Our epilepsy, neuromuscular, and movement disorder programs enable residents to participate in the care of patients with complex disorders, as well as large volumes of more 'typical' neurological conditions. Cooper's deep brain stimulator and botulinum toxin programs, stroke program, and epilepsy monitoring unit attract referrals from many local providers and hospitals.

Of course, the highlight of the program is the residents' unique interaction with our teaching faculty. Our program's size and structure permit much more personalized supervision and feedback beyond those of many other programs. Faculty covering teaching services are provided dedicated time to provide residents continuous guidance and instruction, demonstrating our commitment to the educational missions of our program.

Neurology Didactics



There are a variety of daily conferences providing essential basic science and clinical instruction. The didactic curriculum is very flexible and topics are adjusted frequently in response to the needs and interest of the residents. As a group, our residents consistently perform above average on service exams and feel confident and well-prepared to take their board exam. Bioethics, finances of medicine, and other contemporary subjects are integrated into the curriculum to provide residents additional interesting, relevant, and useful information which also includes:

- Basic science discussion
- Clinical topic lectures
- Journal club
- Case presentation
- Neurology grand rounds
- Clinical pearls
- Epilepsy surgery conference
- Stroke performance improvement
- Stroke boards
- Neurovascular case conference
- EMG conference
- Contemporary issues in Neurology
(Bioethics, medico-legal matters, etc.)

Pediatric Neurology Faculty

Michael H. Goodman, MD

Chairman and Chief,
Department of Pediatrics

Michael J. Colis, PhD

Thomas P. Drake, MD

Caroline Eggerding, MD

Evelyn M. Gonzalez, MD

Tresa D. McSween, MD, MBA

Amir Pshytycky, MD

Nora J. Vizzachero, RN, APN

Pediatric Neurology at Cooper

The Division of Pediatric Neurology at Cooper University Health Care is one of many excellent specialties available at Children's Regional Hospital at Cooper. Pediatric neurologists at Cooper care for inpatients and outpatients with a broad array of conditions including Tourette syndrome, autism, ADHD, pediatric epilepsy, congenital neurological disorders, neurocutaneous syndromes, and many others. Residents rotating on the service will be exposed to many common pediatric neurology disorders as well as managing uncommon disorders and critical illnesses. The service is complemented by experienced geneticists, who provide cutting-edge diagnostic and therapeutic advances to patients with hereditary disorders across their lifespans, including enzyme replacement therapy programs. Pediatric neurology faculty members are on-site at Cooper, so residents do not have to travel for this experience and therefore do not miss out on didactics or other program activities.

Resident Career Paths



Electromyography

Cooper University
Health Care is one of
the largest academic
medical centers
and the only Level I
Trauma Center in
southern New Jersey.

Our neurology residents have secured prestigious fellowship positions including:

Cedars-Sinai	Neuro-critical care
Cleveland Clinic	Neuro-critical care
Drexel/Hahnemann	Clinical neurophysiology
Duke	Neuro-critical care Vascular neurology
Hershey Medical Center	Clinical neurophysiology Neuromuscular / Electromyography
Medical College of Wisconsin	Clinical neurophysiology
NYU	Movement disorders
Rush University Medical Center	Neuro-critical care
University of California SD	Vascular Neurology
University of Florida	Movement disorders
University of Maryland	Movement disorders Clinical neurophysiology
University of Miami	Neuro-critical care
UNC School of Medicine	Vascular Neurology
University of Pennsylvania	Epilepsy
Vanderbilt	Clinical neurophysiology

to serve

Essential Job Functions and Requirements

Observation

- Accurately observe a patient, take a history and perform a physical examination.
- Acquire information through written documents such as patient medical records, either in print or in electronic format.
- Visualize images from paper, films, slides or video.
- Observe student and peers' knowledge, skills, and attitude for feedback and evaluation.

Communication

- Communicate with verbal, written and reading skills effectively, efficiently, and sensitively with patient, families and other members of the health care team.
- Perform documentation procedures, such as chart dictation and written / electronic documentation in a timely fashion.
- Demonstrate timely, consistent, and reliable follow-up on patient care issues, such as laboratory results, patient phone calls, or other requests.
- Input and retrieve computer data through a keyboard and read a computer screen.
- Read charts and monitors.
- Present well-organized case presentations to other physicians or supervisors.
- Dictate procedure and progress notes and consults.
- Communicate through email and able to document data on electronic system.

Motor

- Palpate, percuss, auscultate, and perform diagnostic maneuvers.
- Administer injections and obtain blood samples.
- Execute motor movements reasonably required to provide general and emergency medical care such as airway management, placement of intravenous catheters, cardiopulmonary resuscitation, lumbar puncture.
- Perform cardiopulmonary resuscitation.
- Move throughout the hospital and clinics to address routine

- and emergent patient care needs.
- Provide services in remote locations assigned.
- Mobilize into patient care areas (such as hospital inpatient rooms, emergency department, ICU, outpatient clinic areas and similar) and remain in such rooms for sufficient time to appropriately obtain history, perform exam and provide treatment.
- Apply and wear protective equipment mandated by regulation or hospital policy.
- Perform lumbar puncture.
- Use an ophthalmoscope, reflex hammer and other equipment as necessary to perform appropriate neurological examination.
- Use a computer, telephone and pager.

Intellectual-Conceptual, Integrative and Quantitative Abilities

- Interpret x-ray and other graphic images and digital or analog representations of physiologic phenomenon (such as EEGs).
- Measure, calculate, reason, analyze, and synthesize.
- Comprehend three dimensional relationships and understanding spatial relationships of structure.
- Manage multiple patient care duties at the same time.
- Make judgments and decisions regarding complicated, undifferentiated disease presentations in a timely fashion in emergency, ambulatory, and hospital settings.
- Demonstrate organizational skills required to care for 10 or more patients per half day.
- Must be able to organize and communicate (verbally and in writing) appropriate sign out.
- Must design, perform, and present a research project.
- Demonstrate ability to document and code for patient billing for visits and procedures indicated.
- Access and assimilate medical information from appropriate medical texts, journals and on-line (electronic) sources.

Essential Job Functions and Requirements continued

- Understand and apply all ethical and moral principle for patient care.
- Apply and follow all ethical and legal standard for human research.

Behavioral and Social Attributes

- Demonstrate emotional health required for full utilization of their intellectual abilities, the exercise of good judgment, the prompt completion of all responsibilities attendant to the diagnosis and care of patients and the development of mature, sensitive, and effective relationships with patients.
- Tolerate physically taxing work loads and function effectively under stress.
- Adapt to changing environments, display flexibility and function in the face of uncertainties, inherent in the clinical problems of patients.
- Teach peers and subordinates.
- Complete all required documentation including medical records, enter statistics and patient logs, and duty hours for bookkeeping.
- Appropriately prioritize patient care with other obligation.
- When off duty, take necessary measures to ensure preparedness, physically and mentally, for high-paced patient care.
- Be responsive to needs of patients and other healthcare providers by being readily available to respond to calls, pages and requests for consultation.
- Function as a member and eventually a leader of the health care team.
- Demonstrate time management skills.
- Graciously accept and incorporate feedback from peers, faculty, other health-care team members and students.
- Demonstrate professional work habits including arrival at assignments on time, properly attired, and remain at the assigned location for the assigned period.

Miscellaneous

- Make rounds and provide patient care in the hospital or outpatient settings for up to 12 consecutive hours.
- Take in-hospital call which requires inpatient work stretches of up to 28 hours.
- Participate in and satisfactorily complete all required rotations in the curriculum.
- Return to hospital within 30 minutes in order to take at-home (beeper) call.
- Must wear masks, flexible fitting goggles with sideshields, gloves, gowns, and boots as required in the OR and during procedures, as indicated.
- Lead group education sessions.

to heal

Adult Neurology Faculty

Our faculty represent experience across a wide array of neurological subspecialties and, more importantly, enthusiastic and experienced educators.



Donald A. Barone, DO, MBA, received his B.A. in Biological Sciences from Rutgers College and his DO from Philadelphia College of Osteopathic Medicine. He served as a neurology resident at the University of Vermont College of Medicine, trained by Dr. Charles Poser and Dr. George Schumacher, two of the pioneers in Multiple Sclerosis research and clinical care. Following residency, he was awarded a Muscular Dystrophy Association (MDA)-funded fellowship in Neuromuscular Diseases under the tutelage of Dr. Lewis Rowland, Chair of Neurology at Columbia University College of Physicians and Surgeons, Columbia-Presbyterian Medical Center. Some of his early research involved microphysiological and electron microscopic study of the neuromuscular junction in the sternothyroid muscle from the animal model of Myasthenia Gravis.

Dr. Barone directed a grant-funded MDA clinic for over 30 years. His focus on Clinical Neuro-Immunology/Multiple Sclerosis evolved over the last 25 years, coinciding with the evolution of immunotherapies for Multiple Sclerosis and related disorders. He is a well-recognized expert in the clinical care and clinical research of Multiple Sclerosis and related-disorder patients. He has published and presented research findings at multiple domestic and international venues. He has been a medical educator his whole career, coming to Cooper from Rowan University SOM, where he was Professor and Chief, Division of Neurology. He earned his MBA in 2018 from Temple University Fox School of Business. He has cultivated an interest in health care

business operational and financial models, especially as they evolve to accommodate the expected future changes in health care economic and re-imbursement models.

Jessica Bryson, PA-C, received her undergraduate degree in biology from Stockton University in Pomona, New Jersey, and her master's degree in Medical Science in Physician Assistant Studies from Salus University in Pennsylvania. In the outpatient clinic, she cares for patients suffering from stroke and general neurologic conditions. Working closely with Dr. Syrow, she also has a special interest in headaches and migraines, and is integral to Group Visits through the Cooper Advanced Care Center where she helps treat patients suffering from migraines

Evren Burakgazi-Dalkilic, MD, received her medical degree from Istanbul University School of Medicine. She completed her residency in neurology at George Washington University School of Medicine where she was recognized as Resident of the Year. After completing a fellowship in Clinical Neurophysiology and Epilepsy at the University of Pennsylvania School of Medicine, Dr. Burakgazi-Dalkilic was co-director of the Epilepsy Monitoring Unit and an assistant professor of neurology at Virginia Commonwealth University Medical Center – MCV Campus in Richmond, Virginia, before coming to Cooper.

Dr. Burakgazi-Dalkilic specializes in the diagnosis and treatment of epilepsy, pre-surgical evaluation, and intracranial epilepsy monitoring. Special interests include the role of hormones in epilepsy, cardiac aspects of status epilepticus and refractory epilepsy, pharmacokinetics of antiepileptic drugs and their interactions with other drugs.

Dr. Burakgazi-Dalkilic has been principal investigator or sub-investigator on a number of external grants and is a contributor to numerous journals and abstracts. She is also a member of several scientific, honorary, and professional societies: American Academy of Neurology, American Epilepsy Society, and American Clinical and Neurophysiology Society (ACNS). She also serves as a member of the AAN Anti-Epileptic Drugs Efficacy and Safety Guideline Committee.

Faculty *continued*

Merin F. Campbell, PsyD, earned her doctoral degree in psychology and certificate in clinical neuropsychology at Widener University's Institute for Graduate Clinical Psychology. She completed a post-doctoral fellowship in neuropsychology within the department of neurology at the Hospital of the University of Pennsylvania. She conducts comprehensive outpatient neuropsychological evaluations, inpatient consultations, and individual psychotherapy sessions. Although Dr. Campbell primarily sees adults and older adults with neurological conditions such as dementia, movement disorders, epilepsy, TBI, tumor, stroke, and MS, she is also a certified school psychologist and experienced with pediatrics and adolescents. She is particularly interested in the role of neuropsychology in neuro-interventional and neurosurgical procedures such as Wada and intraoperative brain mapping.

Joseph V. Campellone, MD, is the Program Director for the Neurology Residency Program. He has been with Cooper University Health Care since 1996. He is medical director of the Electromyography Laboratory, and is board-certified in neurology, neuromuscular disease, and electrodiagnostic medicine.

As a professor of neurology at Cooper Medical School of Rowan University (CMSRU), Dr. Campellone has great interest in education. He was previously the director of the neurology clerkship for Robert Wood Johnson Medical School and for CMSRU. He was a recipient of the UMDNJ Foundation "Excellence in Teaching" award. He is a small group facilitator for Scholar's workshop and M3 Director at CMSRU.

Dr. Campellone has authored numerous manuscripts, presented at national and local meetings, and has reviewed for several medical journals. A member of the American Academy of Neurology, Dr. Campellone has served on several committees for the American Association of Electrodiagnostic and Neuromuscular Medicine. Dr. Campellone has a particular interest in myasthenia gravis, neuropathy, and other neuromuscular diseases, as well as electrodiagnosis.

Melissa A. Carran, MD, is a graduate of University of Cincinnati College of Medicine. She completed her neurology residency and subsequent fellowship in epilepsy

at Thomas Jefferson Hospital. She is an assistant professor of neurology at CMSRU. Dr. Carran is board-certified in neurology and clinical neurophysiology, with more than 15 years of experience as an attending neurologist and epileptologist. She has also been an examiner for the American Board of Psychiatry and Neurology and is a member of the Recertification Committee.

Dr. Carran's practice includes treating and managing epilepsy, including women's health, developmental issues, and evaluations for epilepsy surgery. She also participates in several studies of investigational treatments for epilepsy

Andrea J. Casher, PsyD, ABPP, is a board-certified clinical neuropsychologist. After earning her doctorate from Hahnemann University in clinical psychology with a specialty in neuropsychology, she has practiced for over twenty years, evaluating individuals with a wide variety of neurologically-based cognitive disorders, including dementia, multiple sclerosis, traumatic brain injury, stroke, brain tumors, and epilepsy. Dr. Casher maintains an active role training neuropsychologists in the New Jersey and Philadelphia area, and working with professional societies and patient advocacy groups. Her expertise is critical to the multi-discipline approach to several Cooper neuroscience programs, including neurosurgical interventions in patients with epilepsy. Dr. Casher also participates in clinical research projects.

Amy Colcher, MD, joined Cooper University Health Care as director of the Cooper Neurological Institute Movement Disorders division after 15 years at the University of Pennsylvania. She earned her medical degree from Jefferson Medical College, completed her neurology residency training at Georgetown University, and did her fellowship in movement disorders at the University of Pennsylvania. A well-known authority in movement disorders, Dr. Colcher has authored numerous articles and book chapters.

A diplomate of the American Board of Psychiatry and Neurology, Dr. Colcher serves on the board of the Eastern Pennsylvania chapter of the Huntington's Disease Society of America. She is involved in clinical research and conducts trials on Huntington's disease, Parkinson's disease, and other movement disorders. She treats patients

Faculty *continued*

with dystonia, and has expertise in the use of Botulinum toxins. She sees patients with Parkinson's disease, Multiple System Atrophy, Progressive Supranuclear Palsy, essential tremor, ataxia, and Huntington's disease and other movement disorders. Dr. Colcher also enjoys teaching trainees and in addition to providing clinical instruction to neurology residents, Dr. Colcher is active as a small group leader at CMSRU and precepts several medical students.

Michael J. Gallagher, DO grew up in suburban Philadelphia and studied mechanical engineering at Drexel University. After a short career as an engineer, he decided to pursue medicine at Touro College of Osteopathic Medicine in New York City. He then completed his Neurology residency at Cooper University Hospital and fellowship in neuromuscular diseases and electromyography at the University of Maryland in Baltimore. In his free time, he enjoys fishing, kayaking, and hockey.

Bradley P. Grayum, MD, is a graduate of Hahnemann Medical School and the NYU/Bellevue neurology residency program, and completed a fellowship in neuromuscular disease at Downstate Medical Center. He is board-certified, with added qualifications in vascular neurology, and is certified in electrodiagnostic medicine through the American Board of Electrodiagnostic Medicine.

With an active practice focusing on neuromuscular disease, Dr. Grayum also served as director of the stroke program during a long career at Crozer Chester Medical Center, participating in many clinical stroke trials. Since recently coming to Cooper, he maintains an interest in both stroke and neuromuscular disease and has been acknowledged as "Top Doc" several times by various local publications, including Philadelphia Magazine.

Dr. Grayum brings enthusiasm and experience as an instructor to our residents. He was named Educator of the Year at Crozer Chester Medical Center in 2012 and received a teaching award from Drexel University in 2014

Tudor Jovin, MD, is an expert in interventional and non-interventional treatment for the entire spectrum of stroke and cerebrovascular disorders. He was one of the nation's first interventional neurologists, a medical subspecialty that uses minimally invasive technologies applied from

within the vessels to diagnose and treat diseases of the arteries and veins of the head, neck, and spine such as acute stroke, carotid stenosis, intracranial aneurysm, and arteriovenous malformations.

In addition to his clinical experience, Dr. Jovin is known internationally for his research activities. He has served as principal investigator for several international clinical studies including REVASCAT, a randomized trial of endovascular therapy versus medical therapy for acute stroke within eight hours of symptoms onset conducted in Spain, and DAWN, a multicenter, international, randomized trial of endovascular therapy versus medical therapy in the beyond eight-hour time window. Both studies are considered landmark studies in the development of treatments for acute stroke and have been published in the New England Journal of Medicine. He is a member of the executive or steering committees for several multicenter national and international trials, and has participated as site principal investigator or co-investigator in multiple national and international trials.

Additionally, he serves as editorial board member for numerous medical journals. Dr. Jovin has published more than 300 articles in peer-reviewed journals or book chapters. The consequential nature of his research is evidenced by recently published studies that have identified Dr. Jovin as the highest impact author in the neuro-interventional field.

Prior to joining Cooper, Dr. Jovin was a professor of neurology and neurosurgery at the University of Pittsburgh School of Medicine and director of the Center for Neuroendovascular Therapy at the University of Pittsburgh Medical Center (UPMC). At UPMC, he also served as the director of UPMC's Stroke Institute, one of the leading centers for stroke care, education, and research in the world.

Tapan R. Kavi, MD, completed his medical education at Pramukh Swami Medical College, India, his neurology residency at Cooper, and neurocritical care fellowship at Cedars-Sinai Medical Center. Dr. Kavi's return to Cooper continues the tradition of providing excellent training to neurology residents and medical students. He is very enthusiastic about adding to the neurocritical care aspect of Cooper's intensive care services. Dr. Kavi is passionate

Faculty *continued*

about providing care to patients during the acute phase of neurologic injury with special interests in cerebral autoregulation, anoxic brain injury and subarachnoid hemorrhage.

Kristi Kehoe, PA-C, received her undergraduate Bachelor of Science degree in Biology at Temple University in Philadelphia, Pennsylvania. She earned a Master of Medical Science in Physician Assistant Studies at Salus University in Elkins Park, Pennsylvania. Her previous experience is in pre-hospital emergency medicine as well as general outpatient neurology. She currently serves as an inpatient consultant on the general neurology service at Cooper. Kristi is trained in the use of Vagal Nerve Stimulation for the treatment of refractory epilepsy and is a peer reviewer for the Cooper Rowan Medical Journal as well as a member of the American Academy of Neurology.

Sandrine Martin, PA-C, received her undergraduate degree in biology from Montclair State University in Montclair, New Jersey, and her master's degree in medical science from Yale University Physician Associate Program in Connecticut. In the outpatient clinic she has a special interest in patients suffering from headache, migraines, and seizures.

Andrew McGarry, MD, is an alumnus of UMDNJ and Cooper University Health Care for medical school clerkships and completed his neurology residency at the University of Rochester. He subsequently completed a fellowship in movement disorders and experimental therapeutics at Rochester. He is board-certified in neurology and belongs to the American Academy of Neurology, Alpha Omega Alpha Medical Society, Parkinson's Study Group, Huntington's Study Group, and Movement Disorder Society. He serves on the HSG Clinical Trial Science and Ethics Review Committee.

Dr. McGarry's interests include Parkinson's disease, Huntington's disease, spinocerebellar ataxias, and novel treatments for rare movement disorders. His clinical involvement includes delivery of botulinum toxin, deep brain stimulation management, resident education, and medical treatment of tremor, chorea, dystonia, tics, and myoclonus of varying etiologies. Dr. McGarry has interest in cellular mechanisms of neurodegeneration and

the development and implementation of clinical trials in movement disorders. He has published numerous abstracts, papers, and book chapters in movement disorder research. He was voted "Top Doc" in South Jersey Magazine's 2014 patient poll.

Bethann Mercanti, PA-C, received her undergraduate degree in biology from Rutgers University in Camden, New Jersey, and her Medical Science master's degree in Physician Assistant Studies from Salus University in Pennsylvania. She has past experience in family medicine and neurology, and currently is the stroke coordinator for Cooper Neurological Institute. She has an outpatient clinic for patients suffering from stroke and general neurological conditions. Her areas of interest include vascular neurology, teaching, and outreach. She has played an essential role in spreading awareness for stroke prevention and management to both the community and health care professionals.

Thomas R. Mirsen, MD, is associate professor of neurology at CMSRU and has been with Cooper University Health Care since 1990. Dr. Mirsen is fellowship trained in dementia and cerebrovascular disease, and is board-certified in vascular neurology. Dr. Mirsen is a consistent participant in stroke trials, is active in stroke research, and serves on the Stroke Advisory Panel of the Department of Health of New Jersey. He has served as associate division head of neurology at Cooper. He has repeatedly been named a "Top Doc" in neurology both in New Jersey and in the Philadelphia area. His practice embraces a wide range of neurologic pathologies in addition to his specialty of stroke.

Rajiv Narula, MD, specializes in the fields of neurology, stroke (vascular) neurology, and telestroke. He earned his medical degree from American University of Antigua and completed one year of internal medicine residency at Drexel University. An alumnus of Cooper's neurology residency program, Dr. Narula returns to Cooper after a vascular neurology fellowship at University of California San Diego.

Given his passion for using technology to improve patient care, he was involved clinically and operationally with the implementation of UCSD's telestroke program and

Faculty **continued**

received his telemedicine certification from Dr. Brett C. Meyer, author of the STRokEDOC trial and founder of one of the nation's first telestroke programs. As Director of Teleneuroscience at Cooper Neurological Institute, his mission is to improve quality and access to stroke care across South Jersey.

He is a strong advocate for his patients and finds inspiration from his patients and their journeys through their recovery process. Dr. Narula has also organized charitable initiatives to see patients internationally that have no access to medical care. He is a member of the American Academy of Neurology, American Heart/American Stroke Association, and American Telemedicine Association.

Tomer Noff, MD, completed a dual undergraduate program of rabbinics and medicine at the Ner Israel Rabbinical College and Towson University. He was ordained by Israel's Chief Rabbi and continued to earn his medical degree at the Technion American Medical School in Haifa, Israel. Dr. Noff completed his neurology and clinical neurophysiology training at the Indiana University School of Medicine.

Dr. Noff sees general neurology patients with a special interest in electromyography, neuropathy, neuromuscular disease, and headache. He performs electromyography as well as onobotulinum injections and auricular acupuncture. Dr. Noff serves on the American Academy of Neuromuscular and Electrodiganotic Medicine's assessment examination committee.

Mark A. Rader, PhD, is a licensed clinical neuropsychologist who has been in active practice for over thirty years. He has been with Cooper University Health Care since 2005, where he conducts neuropsychological evaluations, sees patients for individual psychotherapy, and is on the inpatient consultation service.

Currently an assistant professor of neurology at the CMSRU, he is actively involved in the training and supervision of pre- and post-doctoral students in neuropsychology and medical students. His experience includes inpatient and outpatient rehabilitation with a special focus on the diagnosis and treatment of traumatic brain injuries (TBI) and emotional disorders arising from

them. He has published and presented on many topics related to TBI and has also volunteered his time leading a support group since 2001.

Jim Siegler, MD, is a new recruit from the Hospital of the University of Pennsylvania, where he recently completed his adult neurology residency, and clinical and research fellowships in vascular neurology. Although he is active in a number of ongoing research projects and clinical trials, Dr. Siegler is more widely known as the Senior Producer of BrainWaves: A Neurology Podcast. Since its inception in 2013, the BrainWaves Podcast has been played nearly half a million times in the US and around the globe. Dr. Siegler also serves on the Editorial Board of Neurology®, is an Assistant Producer of the AAN's NeuroBytes video-based educational curriculum, and is the senior producer and editor of the Neurocritical Care Society Podcast. When he is not in his recording studio, you can probably find him watching senseless action movies from the 90s or riding his bike out to Valley Forge.

Larisa Syrow, MD, completed her undergraduate studies at SUNY Binghamton and subsequently received her medical degree from SUNY Upstate Medical University. She completed residency in neurology at Albert Einstein/Montefiore Medical Center, followed by fellowship training in clinical neurophysiology at Hahnemann/Drexel Medical Center. She subsequently received board certification in headache medicine. She sees general neurology patients and has a special interest in patients with headaches and migraines, with expertise in delivering Botox injections. Additionally she performs EMG testing and interprets EEGs.

Dr. Syrow is the director for the CMSRU Neurology clerkship and has played an active role in teaching neurology to medical students and residents for which she has won many awards. She speaks Russian and Spanish, and is passionate about delivering health care to the Spanish-speaking population.

Ryna K. Then, MD, earned her medical degree from Instituto Tecnologico De Santo Domingo, Dominican Republic, and joined Cooper University Health Care after a vascular neurology fellowship at Albert Einstein College of Medicine/Montefiore Medical Center. As director

Faculty *continued*

of the inpatient stroke unit, she has a great clinical interest in treating critically ill patients who have various challenging neurological disorders, particularly those with complicated strokes.

Dr. Then's enthusiasm for teaching has been acknowledged through awards for outstanding achievement in teaching medical students. Fluent in Spanish, Dr. Then is a dedicated advocate for her patients and works tirelessly to provide outstanding and compassionate care to people in great need. Dr. Then is active in frequent outreach projects throughout southern New Jersey, with a focus on promoting stroke awareness and prevention in the community. This enthusiasm resulted in her receiving the "Outstanding Hispanic Woman" award in 2015, granted by El Diario, to women who have made a difference in the Hispanic community, as well as the "Outstanding Professional Dominican Women Award" in 2019 in recognition of her achievements in science and medicine.

Jesse Thon, MD, joins the Cooper faculty following completion of a vascular neurology fellowship at the Hospital of the University of Pennsylvania. He received his medical degree from Columbia University, followed by neurology residency at the Harvard-Partners program at Massachusetts General Hospital and Brigham and Women's Hospital in Boston. He also completed a fellowship in Advanced General and Autoimmune Neurology at Massachusetts General Hospital. He is board-certified in neurology and a member of the AAN.

Dr. Thon's clinical interests are in acute neurologic disorders and inpatient neurology. With his background in vascular neurology and autoimmune neurology, he has a particular interest in neuro-immunologic conditions that affect the cerebral vasculature, including primary and secondary CNS vasculitis, inflammatory CAA, and neurosarcoidosis. He is passionate about medical education and greatly enjoys teaching residents and medical students. He believes in patient-based learning and uses rounding as an opportunity for high-yield teaching, making it a rewarding experience for trainees while improving patient care.

Michael Weston, MD, joins the neurology faculty after completing his residency at Cooper University Health Care. Dr. Weston graduated from the University of Pennsylvania with a degree in cognitive science, and attended Windsor Medical School. He has presented research posters at the AAN annual meeting. Dr. Weston's focus is on general neurology with an emphasis on multiple sclerosis. Dr. Weston has received accolades from medical students and junior residents for his compassionate teaching abilities and mentorship, further complementing our robust educational resources.

to educate

Cooper Neurology Research



Our vast diversity of patients and passionate faculty foster an environment that has led to numerous scholarly works by our residents. Academic pursuits are encouraged through special stipends for publication and presentation as well as availability of a research elective. Our residents have an admirable track record of disseminating scientific observations.

(**residents=red**; **faculty=blue**; **neuropsychology fellow=green**;
*=CMSRU medical student).

Manuscript Publications and Book Chapters

- Rincon F, Morino T, Behrens D, **Akbar U**, Schorr C, Lee E, Gerber D, Parrillo J, Mirsen T. Association between out-of-hospital emergency department transfer and poor hospital outcome in critically ill stroke patients. *J Crit Care* 2011;26:620-5.
- Hassan AE, Chaudhry SA, Zacharatos H, Khatri R, **Akbar U**, Suri MF, Qureshi AI. Increased rate of aspiration pneumonia and poor discharge outcome among acute ischemic stroke patients following intubation for endovascular treatment. *Neurocrit Care* 2012;16:246-50.
- **Akbar U**, Rincon F, **Carran M**, **Campellone JV**, Milcarek B, **Burakgazi E**. Increased prevalence of temporary cardiac pacing in people with epilepsy. *Seizure* 2012;20:518-21.
- **Then R**, Dominguez F. Paroxysmal sneezing heralding posterior circulation ischemia. *Journal of American Geriatric Society (JAGS)*. 2012
- **Dham BS**, **Campellone JV**. Post-partum paraparesis from spinal neurofibroma. *Spine J* 2012;12(7):e5-8.
- **Burakgazi E**, **Akbar U**, Kelly J. Subclinical rhythmic electrographic discharges of adults in a patient with migraine. *Clin EEG Neurosci* 2012;43:165-8
- **Assadi M**, Zerafati GM, **Dham B**, Contreras L, **Akbar U**, Zayas L, Leone P. The prevalence, burden and cognizance of migraine among adolescent girls. *J Ped Neurol* 2012;10:29-34
- **Kavi T**, **Moghal U**, **Popescu A**. Multiple sclerosis 'phenotype switch' to Balo's concentric sclerosis: Resistance to steroids, typical MRI findings and treatment with plasmapheresis. *J Neuroimaging* 2013; 23(2): 270-271
- **Kavi T**. Neurocysticercosis affecting multiple spinal segments: diagnosed with MRI and treated with surgical and pharmacological measures. *J Neuroimaging* 2013; 23(2): 270
- **Burakgazi E**, Dalkilic A, **Moghal U**, **Shah U**, **Carran M**. A case of atypical absence seizure after electroconvulsive treatment in a patient with treatment-resistant depression. *Clin EEG and Neurosci*. 2013;44(1):62-9

Neurology Resident Research *continued*



- Pollard JR, Eidelberg O, Mueller GP, Dalgard CL, Crino PB, Anderson CT, Brand EJ, [Burakgazi E](#), Ivaturi SK, Pollard HB. The TARC/sICAM5 ratio in patient plasma is a candidate biomarker for drug resistant epilepsy. *Front Neurol.* 2013;3:181
- [Shah U](#), Morrison T. A review of the symptomatic management of malignant gliomas in adults. *J Natl Compr Canc Netw* 2013;11(4):424-9
- [Assadi M](#), Zerafati G, [Velazquez-Rodriguez Y](#), Echevarria L, Leone P. Do genetic influences determine the phenotypic severity of migraine? *J Ped Neurol* 2013; 11, 1-7.
- Dababneh H, [Shikhman A](#), Moussavi M, Guerrero WR, Panza S, Kirmani JF. Teaching NeuroImages: Comatose patient with bilateral thalamic infarct due to internal carotid artery occlusion. *Neurology*. 2013 Apr 23;80(17)
- [Burakgazi E](#), [Moghal U](#), Hughes D, [Caran M](#). Does ictal whistling help to lateralize. *Seizure*. 2013 Nov 28. pii: S1059-1311(13)00320-8.
- [Burakgazi E](#), Bashir S, Doss V, Pellock J. The safety and tolerability of different intravenous administrations of levetiracetam, bolus versus infusion, in intensive care unit patients. *Clin EEG Neurosci*. 2013 Dec 19.
- [Campellone JV](#). Hereditary sensory and motor neuropathy with proximal predominance. *J Clin Neuromusc Dis*. 2013;14(4):180-183
- Schneider JS, Gollomp SM, Sendek S, [Colcher A](#), Cambi F, Du W. A randomized, controlled, delayed start trial of GM1 ganglioside in treated Parkinson's disease patients. *J Neurol Sci*. 2013 Jan 15;324(1-2):140-8.
- Chahine LM, Daley J, Hom S, [Colcher A](#), Hurtig H, Cantor C, Dahodwala N. Questionnaire-based diagnosis of REM sleep behavior disorder in Parkinson's disease. *Mov Disord*. 2013;28:1146-9.
- Chahine LM, Qiang J, Ashbridge E, Minger J, Yearout D, Hom S, [Colcher A](#), Hurtig HI, et al. Clinical and biochemical differences in patients having Parkinson's disease with vs. without GBA mutations. *JAMA Neurol*. 2013;70:852-8.
- Chahine LM, Daley J, Horn S, Duda JE, [Colcher A](#), Hurtig H, Cantor C, Dahodwala N. Association between dopaminergic medications and nocturnal sleep in early stage Parkinson's disease. *Parkinsonism Relat Disord*. 2013
- Kieburtz, K, [McGarry A](#), McDermott M, Marder K, Kayser E, Walker, F, and The Huntington's study group investigators. A randomized, double-blind, placebo controlled trial of pridopidine in Huntington's disease. *Mov Disord* 2013;28:1407-15
- [McGarry A](#), Biglan K. Imaging in Huntington's disease and other choreas. *Neuroimaging of Movement Disorders*. New York; Springer Science and Business Media, 2013.

Neurology Resident Research *continued*



What our graduates are saying ...

"A graduate of this program would be well equipped to go directly into practice or be prepared for a fellowship of their choice."



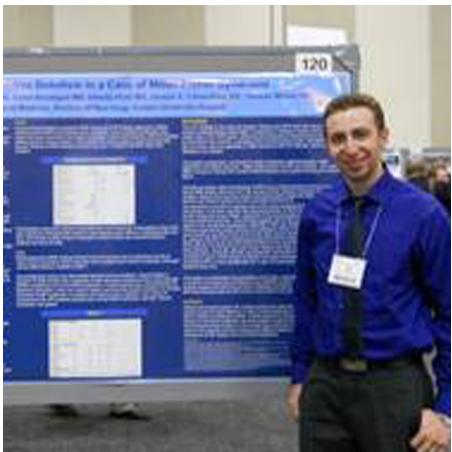
Umer Akbar, MD
Class of 2012

Director,
Movement Disorders
Program

Assistant Professor,
Brown University/Rhode
Island Hospital

- Cudkowicz M, McDermott M, Kieburtz K, McGarry A, de Blieck E, and the 2CARE Investigators and Coordinators of the Huntington Study Group. Recruitment and retention challenges in 2CARE, a long-term therapeutic clinical trial of coenzyme Q10 in Huntington's disease. *Neurotherapeutics* 2013; 10(1): 177-8.
- McGarry A, Biglan K. Improvement of freezing of gait with amantadine in a patient with oculopharyngeal muscular dystrophy and parkinsonism. *Parkinsonism Relat Disord.* 2013 Jun;19:643-4.
- Burakgazi E, Bashir S, Doss V, Pellock J. The safety and tolerability of different intravenous administrations of levetiracetam, bolus versus infusion, in intensive care unit patients. *Clin EEG Neurosci.* 2014 Apr;45(2):89-91.
- Burakgazi E, Moghal U, Hughes D, Carran M. Does ictal whistling help to lateralise. *Seizure.* 2014 Apr;23(4):314-7.
- Bodofsky E, Campellone JV, Cohen JS, Caten H*, Schindleheim A. Contraction induced H-reflexes in the diagnosis of cervical radiculopathy. *J Clin Neurophys* 2015;32:244-6.
- Zeylikman Y, Shah V, Shah U, Mirsen TR, Campellone JV. False-positive serum botulism bioassay in Miller–Fisher syndrome. *J Clin Neuromusc Dis* 2015;17:27-9.
- McGarry A, Biglan A, Marshall F. Huntington Disease. In: Rosenberg RN, Pascual JM, editors. *Rosenberg's Molecular and Genetic Basis of Neurological and Psychiatric Disease* (Fifth Edition). Elsevier 2015.
- Burakgazi E, French JA. Treatment of epilepsy in adults. *Epileptic Disord* 2016;18:228-39.
- Burakgazi E. Neurostimulation devices used in treatment of epilepsy. *Curr Treat Options Neurol.* 2017;19(2):7.
- McGarry A, McDermott M, Kieburtz K et al. A randomized, double-blind, placebo-controlled trial of coenzyme Q10 in Huntington disease. *Neurology* 2017; 88: 152-159.
- Ngo, L. Sperling MR, Skidmore C, Mintzer S, Nei M. Absolute spike frequency as a predictor of surgical outcome in temporal lobe epilepsy. *Seizure* 2017;47:83-86.
- Lahiri S, Schlick K, Kavi T, et al. Optimizing Outcomes for Mechanically Ventilated Patients in an Era of Endovascular Acute Ischemic Stroke Therapy. *J Intensive Care Med.* 2017 Sep;32(8):467-472 PMID: 27543141
- Suero-Abreu GA, Cheng JZ, Then RK. Multiple recurrent ischemic strokes in a cancer patient: is there a role for the initiation of anticoagulation therapy for secondary stroke prevention? *BMJ Case Rep* 2017 PMID 28578306

Neurology Resident Research *continued*



- Roberts B, [Kavi T](#), Trzeciak S. Cardiac Arrest. In: Parillo J, Dellinger P, editors. *Critical Care Medicine: Principles of Diagnosis and Management in the adult*, 5E. (In press)
- [Taneja R](#), Hunter K, [Burakgazi-Dalkilic E](#), Carran M. Effect of sleep patterns on levetiracetam induced mood changes. *Epilepsy Behav* 2017;75:237-240. PMID: 28827040
- [Nagele EP](#), Ross A, [Then RK](#), [Kavi T](#). Interhemispheric subdural and subarachnoid haemorrhage in a patient with amphetamine-induced vasculitis. *BMJ Case Rep* 2017 Dec 7, 2017. PMID: 29222209
- [Noto J](#), Nahra R, [Kavi T](#). Disseminated coccidiomycosis related cervical intramedullary lesion causing quadriplegia in an immunocompetent host. *BMJ Case Reports* Dec 13, 2017. PMID: 29237660
- Unger M, Georges J, [Shaikh H](#), [Kavi T](#). Moyamoya tipping point: Fatal bilateral MCA territory infarction following cocaine abuse. *BMJ Case Rep* 2018; PMID: 29351941
- [Kavi T](#), Madan N, et al. Angioinvasive aspergillus associated stroke in an immunocompetent host following cardiac surgery and ECMO. *Neurologist* 2017;22:92-94. PMID: 28471899
- Weaver MD, Dayoub H, Damuth E, [Kavi T](#). Diffuse cerebral oedema from sickle cell vaso-occlusive crisis. *BMJ Case Rep* 2017; PMID: 28798247
- [McGarry A](#), Biglan KM. Preclinical motor manifestations of Huntington disease. *Handb Clin Neurol* 2017;144:93-98. PMID: 28947128
- [McGarry A](#), Kieburtz K, Abler V, et al. Safety and exploratory efficacy at 36 months in open-HART, an open-label extension study of pridopidine in Huntington's disease. *J Huntingtons Dis* 2017;6:189-199. PMID: 28826192
- Frank S, Stampler D, Kayson E, Claassen DO, [Colcher A](#), et al. Safety of converting from tetrabenazine to deutetrabenazine for the treatment of chorea. *JAMA Neurol* 2017;74:977-982. PMID: 28692723
- Kanner AM, Ashman E, Gloss D, Harden C, Bourgeois B, Bautista JF, Abou-Khalil B, [Burakgazi-Dalkilic E](#), et al. Practice guideline update summary: Efficacy and tolerability of the new antiepileptic drugs I: Treatment of new-onset epilepsy. *Neurology* 2018;91(2):74-81. PMID: 29898971
- Kanner AM, Ashman E, Gloss D, Harden C, Bourgeois B, Bautista JF, Abou-Khalil B, [Burakgazi-Dalkilic E](#), et al. Practice guideline update summary: Efficacy and tolerability of the new antiepileptic drugs II: Treatment-resistant epilepsy. *Neurology* 2018;91(2):82-90. PMID: 29898974
- Yu W, [Kavi T](#), Majic T, et al. Outcome of patients with aneurysmal subarachnoid hemorrhage at a Comprehensive Stroke Center. *Front Neurol*. 2018 Mar 15;9:152 PMID: 29599745

Neurology Resident Research *continued*

What our graduates are saying ...

"The diversity of disorders encountered, the opportunity to treat patients from various ethnic and socio-economical backgrounds, combined with the perfect balance of autonomy and supervision, provided me with the ideal foundation to become a well rounded neurologist."



**Yadira Velazquez-Rodriguez,
MD**

Medical Director,
Electrodiagnostic Medicine
Laboratory
Christiana Care Neurology
Specialists

Poster and Platform Presentations

- Dham B. Prevalence and risk factors associated with acute ischemic stroke among HIV positive individuals: Preliminary analysis from a large administrative database. European Stroke Conference, Barcelona, Spain. May 2010
- Dham B. Epidemiology and cognizance of migraines in teenagers. 53rd Annual American Headache Society (AHS) Conference, June 2011
- Akbar U, Rincon F. Asystole after right insular ischemic stroke: understanding the heart and brain connection. AAN annual meeting 2011
- Akbar U. Does epilepsy increase the risk for pacemaker placement? AAN annual meeting 2011
- Akbar U, Shah U, Zeylikman Y, Rincon F, Burakgazi, E, Carran, M. Determinants of refractory status epilepticus and effect on hospital outcome: A single-center experience. Neurocritical Care annual meeting, September 2011
- Akbar U, Dham B, Carran M. Benign-histology meningioma with extracranial metastasis. ANA annual meeting, September 2011
- Akbar U, Burakgazi E, Kelly JJ. Valproate-responsive subclinical rhythmic electrographic discharges (SREDA) in a migraineur. ANA annual meeting, September 2011
- Shah U, Akbar U, Wang C. Periodic lateralizing epileptiform discharges (PLEDs) causing persistent magnetic resonance imaging (MRI) changes in ipsilateral thalamus. Poster presentation; ANA annual meeting, September 2011
- Assadi M, Dham B, Zerafati G, Veloski J, Leone P. Motor asymmetry in SCAs. ANA annual meeting, September 2011
- Velazquez Y, Akbar U, Burakgazi-Dalkilic E. Fatal dysautonomia associated with acute bacterial meningitis. ANA annual meeting, September 2011
- Dham B. Benign-histology meningioma with extracranial metastasis. Poster presentation; ANA annual meeting, September 2011
- Dham B, Assadi M. Motor asymmetry in SCAs. Poster presentation; ANA annual meeting, September 2011
- Burakgazi E, Zayas L, Shah U. APACHE II and SAPS II scales in predicting phenytoin levels in critically ill patients. American Epilepsy Society annual meeting, December 2011.
- Shikhman A, Mohammad M, Dababneh H, Korya D, Kirmani J. Lipids: What is good for ischemic stroke is bad for intracerebral hemorrhage. Society of Vascular and Interventional Neurology annual meeting, October 2012.
- Dham B. The epidemiology of status epilepticus in the United States. Platform presentation, AAN annual meeting; April 2012. (Research selected among "top 5 %")

Neurology Resident Research *continued*



- **Shah U, Carran M.** Neurosarcoidosis with granulomatous necrosis. AAN annual meeting; April, 2012
- **Shah U, Burakgazi E, Mogul U.** Electroconvulsive therapy induced atypical status epilepticus. Annual ANA meeting, Boston, MA, October, 2012.
- **Kavi T, Velazquez-Rodriguez Y, Mirsen T, Campellone J.** Effects of physiologic derangements on outcome of acute ischemic stroke patients after intravenous thrombolysis. 10th Annual Neurocritical Care Society Meeting, October 2012.
- **Kavi T, Moussavi M, Kirmani J, et al.** UCSF ICH grading system is a better prognostic tool for spontaneous intracerebral hemorrhage when assessed at 24 hours after the event. 5th Society of Vascular and Interventional Neurology annual meeting, October 2012.
- **Moghal U, Dham B, Shah U.** A fulminant case of atypical posterior reversible encephalopathy syndrome & status epilepticus. ANA annual meeting, 2012.
- **Zeylikman Y, Akbar U, Shah U, Burakgazi E, Caran M.** Determinants of refractory status epilepticus on hospital outcome. Neurocritical care annual meeting 2012
- **Akbar U.** Disparities in outcome of patients transferred from referring hospital emergency department with intracerebral hemorrhage versus another medical-surgical illness: a case-control study. AAN annual meeting, April 2013
- **Kavi T, Moghal U, Popescu A.** Multiple sclerosis 'phenotype switch' to Balo's concentric sclerosis: Resistance to steroids, typical MRI findings and treatment with plasmapheresis. 36th Annual Meeting of the American Society of Neuroimaging, January 2013.
- **Kavi T.** Neurocysticercosis affecting multiple spinal segments: diagnosed with MRI and treated with surgical and pharmacological measures. American Society of Neuroimaging annual meeting, January 2013.
- **Shah R, Kavi T, Wang C.** Timing of EEG in correlation to prognosis in post-cardiac arrest patients treated with therapeutic hypothermia. Platform Presentation, AAN annual meeting, March 2013
- **Alam S, Then R.** Successful thrombolysis and thrombectomy in a patient with extensive cerebral venous thrombosis. AAN annual meeting, March 2013
- **Zeylikman Y, Shah V, Shah U, Burakgazi E, Campellone J, Mirsen T.** Serum false positive botulism assay in a case of Miller-Fisher syndrome. AAN 2013 annual meeting.
- **Kavi T, Moghal U, Popescu A.** A case of Balo's concentric sclerosis. American Society of Neuroimaging. Abstract accepted for annual conference. Las Vegas, NV (2013)

Neurology Resident Research *continued*



- **Shah R, Shah U, Bosley TM.** Rhombencephalitis due to Listeria Monocytogens in immunocompetent patient. Poster presentation at ANA October 2013
- **Velazquez Y, Kaur D, Campellone JV.** A case of severe demyelinating polyneuropathy. 36th Annual Carrell-Krusen Neuromuscular Symposium. Dallas, TX, Feb 2014.
- Fischer BD, Buono RJ, Cagande CC, **Carran MA.** Case-based active learning as a method of introducing the neurosciences within a medical school curriculum. Annual meeting of the Society for Neuroscience: Washington, DC, 2014.
- Bodofsky E, Cohen JS, Schindleheim A, **Campellone JV, Caten H.** Contraction induced H-reflexes in the diagnosis of cervical radiculopathy. AANEM Annual Meeting, October 2014.
- **Klinov V, Campellone JV.** Comparison of length of hospital stay between treatment with plasma exchange versus IVIg in mild Guillain-Barré syndrome. AAN Annual meeting, April 2015
- **Then R, Patel M.** Rare case of central nervous system invasion of mantle cell lymphoma with serial negative magnetic resonances: Case report and literature review. AAN annual meeting, April 2015.
- **Ko M, Cheng J, Then R.** Early recurrence of ischemic strokes in a patient with active cholangiocarcinoma. American Heart Association meeting, April 2015.
- **Taneja R, Campellone JV, Carran M, Then R.** Sustained hippocampus during electrographic status epilepticus and periodic lateralizing epileptiform discharges. Camden Scholar's forum, Cooper Research Institute, April 2015
- **Baek R, Hong D, Macone B, Rader M, Casher A.** Role of Green's dementia profile and embedded performance validity tests in differentiating suboptimal effort from genuine neurocognitive impairment. American Academy of Clinical Neuropsychology (AACN) 13th Annual Conference, June 2015.
- Hong D, **Baek R, Macone B, Rader M, Casher A.** Role of memory complaints inventory in distinguishing suboptimal neuropsychological performance from true cognitive impairment. American Academy of Clinical Neuropsychology (AACN) 13th Annual Conference, June 2015.
- **Taneja R, Syrow L.** Acute inflammatory demyelinating polyneuropathy with voltage gated calcium channel antibodies. AANEM annual meeting October 2015. (*Winner of AANEM Foundation for Research and Education Junior Member Recognition Award*).
- **Burakgazi-Dalkilic E, Strauman M, Kavi T, et al.** Soluble ICAM5 concentrations unaltered by status epilepticus in patients with anoxic brain injury. 69th Annual American Epilepsy Society Meeting, December 2015.

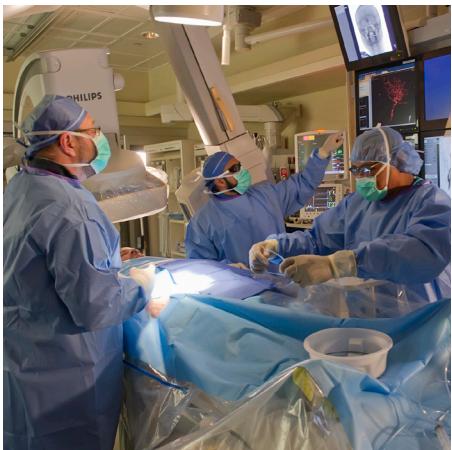
Neurology Resident Research *continued*



"Residents participating in Neurovascular Case Conference, one of the Neurology program's multi-disciplinary conferences".

- Baek R, Hong D, Graziano J, Macone B, Fatzinger A, Rader M, Casher A. Diagnostic group differences in embedded performance validity testing among patients who scored below word memory test or medical symptom validity test failure cutoff. International Neuropsychological Society 44nd Annual Meeting, 2016
- Cheng J, Suero G, Then R. Multiple recurrent ischemic stroke in a patient with cholangiocarcinoma and initiation of anticoagulation therapy for secondary stroke prevention. AAN annual meeting; April 2016
- Narula R, Masangkay N, Weston M, Patel A. Carcinomatous meningitis in linitus plastic. AAN annual meeting; April 2016
- Hong D, Baek R, Graziano J, Macone B, Fatzinger A, Rader M, Casher A. Sensitivity and specificity of the dementia profile of word memory test and medical symptom validity test among patients who failed the easy subtests. International Neuropsychological Society 44nd Annual Meeting, 2016
- Kieburtz K, Landwehrmeyer G, Reilmann R, Savola J, Eyal E, Grachev I, Borowsky B, McGarry A, Papapetropoulos S, Hayden M. Efficacy, safety, and tolerability of pridopidine in Huntington's disease: Results from the Phase II, double-blind, placebo-controlled, dose-ranging study, Pride-HD. AAN annual meeting; April 2017
- McGarry A, Abler V, Auinger P, et al. Effect of pridopidine on total functional capacity (TFC) in Huntington's disease (HD): A comparison of Open-HART subjects with historical placebo controls. AAN annual meeting; April 2017
- Veloso E*, Ganesh J, Lacomis D, Campellone JV. Late-onset Pompe disease due to known and novel variants in GAA gene with possible contribution of a dystrophinopathy carrier state in a female patient. AAN annual meeting; April 2017
- Gallagher M, Colcher A, McGarry A. Fentanyl induced chorea: A case report. 21st International Congress of Parkinson's Disease and Movement Disorders; June 2017.
- Kakadia B, Daci R, Suero-Abreu G, Then R. Would you use new oral anticoagulants (NOACs) for thromboprophylaxis in patients with an underlying hypercoagulable state? A literature review through a case report. AAN annual meeting; April 2018
- Little, D What day is today? A case of a patient who developed significant anterograde amnesia with abnormal signal intensity in the medial temporal lobes on brain magnetic resonance imaging (MRI) in the setting of substance abuse. AAN annual meeting; April 2018
- Yilmaz F, Patel A, Kavi T. Improving cytotoxic edema with cerebral fat embolism syndrome, from a nightmare to a shiny morning: Two cases presentation. AAN annual meeting; April 2018

Neurology Resident Research *continued*



- McClane J, Gaughan J, Bowen F, **Campellone JV**. Current perspectives of neurologists regarding approach to thymectomy in non-thymomatous myasthenia gravis. Accepted for presentation at the 2018 annual meeting of the AANEM, October 2018.
- **Yilmaz FM, Noto J, Little D, Nagele E, Cheng JZ, Hunter K, Schorr C, Kavi T.** Early Administration of Medications in Status Epilepticus Decreases Length of Stay in the Intensive Care Unit. Neurocritical Care Society Annual Meeting, 2018.
- **Teklemariam E, Kavi T; Prasanth R; Gupta A; Hunter K; Schreiber C; Shaikh H; Turtz A.** Optic Nerve Sheath Expansion is not specific for Elevated Intracranial Pressure. Neurocritical Care Society Annual Meeting, 2018.
- **Yilmaz FM, Kakadia B, Kouch B; Hunter K; Burakgazi-Dalkilic E; Kavi T.** Inter-predictability Of Neuroprognostic Modalities After Cardiac Arrest. Neurocritical Care Society Annual Meeting, 2018.
- Curran C, **Kavi T.** Sudden Death from Rupture of Cerebral Abscess into Subarachnoid Space. AAN annual meeting; May 2019.
- **Teklemariam E, Kavi T.** Incidence of Seizures with Fat Embolism Syndrome and Impact on Outcome: An Analysis of National Inpatient Sample Database. AAN annual meeting; May 2019.
- **Kakadia B, Kavi T.** Comparison of Lumbar and Ventricular Cerebrospinal Fluid for Diagnosis and Monitoring of Meningitis. AAN annual meeting; May 2019.

Published Abstracts

- **Velazquez-Rodriguez Y, Akbar U, Burakgazi-Dalkilic E.** Acute bacterial meningitis as a possible cause of severe dysautonomia leading to death. *Ann Neurol* 2011;70:S15. (Abstract M1205)
- **Akbar U, Burakgazi E, Kelly JJ.** Valproate-responsive subclinical rhythmic electrographic discharges (SREDA) in a migraineur. *Ann Neurol* 2011;70:S15. (Abstract T1620)
- **Akbar U, Dham B, Carran M.** Benign-histology meningioma with extracranial metastasis. *Ann Neurol* 2011;70:S15. (Abstract T1809)
- **Assadi M, Dham B, Zerafati G, Veloski J, Leone P.** Motor asymmetry in SCAs. *Ann Neurol* 2011;70:S15. (Abstract T1809)
- **Shah U, Akbar U, Wang C.** Persistent periodic lateralizing epileptiform discharges (PLEDs) causing persistent magnetic imaging (MRI) changes in ipsilateral thalamus. *Ann Neurol* 2011;70:S15. (Abstract S223)
- **Velazquez-Rodriguez Y, Akbar U, Campellone J, Mirsen T.** Physiologic markers and echocardiogram as outcome predictors in patients with acute ischemic stroke after receiving thrombolysis. *Neurocritical Care* (2012) 17:S1–S337

Neurology Resident Research *continued*

- Burakgazi E, Akbar U, Kelly J. Subclinical rhythmic electrical discharges (SREDA) in a migraineur. *Clin Electrocenceph Neurosci* 2012;43:165-8. Epub 2012 Apr 16
- Carran M, Velazquez-Rodriguez Y. High lipoprotein (a) in postpartum epilepsy. *Epilepsy Currents* 2012;12 Supp
- Assadi M, G Zerafati, Velazquez-Rodriguez Y, L Echevarria, P Leone. Do genetic influences determine the phenotypic severity of migraine? *Neurology* 2013; 80:P06.155
- Assadi M, G Zerafati, Velazquez-Rodriguez Y, P Leone. Phenotypic differences between probable migraine and definite migraine. *Neurology* 2013; 80:P03.107
- Velazquez-Rodriguez Y, Assadi M, P Leone. Elevated cerebral lactate levels on multi-voxel magnetic resonance spectroscopy in metachromatic leukodystrophy. *Neurology* 2013;80:P03.016
- Zeylikman Y, Campellone JV, Mirsen TR. Serum false positive botulism in a case with Miller Fisher syndrome. *Neurology* 2013;80:7 Supp P01.120
- Klinov V, Campellone JV. Comparison of length of hospital stay between treatment with plasma exchange versus IVIg in mild Guillain-Barré syndrome. *Neurology* 2015;84:14 Supp P7.064
- Then R, Patel M. Rare case of central nervous system invasion of mantle cell lymphoma with serial negative magnetic resonances: Case report and literature review. *Neurology* 2015;84:14 Supp P3.146
- Cheng JZ, Then R. A case of multiple recurrent ischemic stroke in a patient with cholangiocarcinoma and initiation of anticoagulation therapy for secondary stroke prevention. *Neurology* 2016;86:16 Supp P4.342
- Veloso E*, Ganesh J, Lacomis D, Campellone JV. Late-onset Pompe disease due to known and novel variants in GAA gene with possible contribution of a dystrophinopathy carrier state in a female patient. *Neurology* 2017, 88:16 Supp P2.121; 1526-632
- Yilmaz FM, Noto J, Little D, Nagele E, Cheng JZ, Hunter K, Schorr C, Kavi T. Early Administration Of Medications In Status Epilepticus Decreases Length Of Stay In The Intensive Care Unit. *Neurocritical care* 2018.
- Teklemariam E, Kavi T; Prasanth R; Gupta A; Hunter K; Schreiber C; Shaikh H; Turtz A. Optic Nerve Sheath Expansion is not specific for Elevated Intracranial Pressure. *Neurocritical care* 2018.
- Yilmaz FM, Kakadia B, Kouch B; Hunter K; Burakgazi-Dalkilic E; Kavi T. Inter-predictability Of Neuroprognostic Modalities After Cardiac Arrest. *Neurocritical care* 2018.

Ongoing Research Activities

- Platelet Oriented Inhibition in New TIA Trial (POINT)
- Clobazam use in Epilepsia Partialis Continua - Pilot Study. A phase III, randomized, open label, single center, study on the effects of treatment of Epilepsia Partialis Continua with clobazam compared to treatment with or in addition to lorazepam and/or clonazepam.
- Enroll-HD:A Prospective Registry Study in a Global Huntington's Disease Cohort Unplanned Hospital Readmissions in Neurology Patients – (Neuro Readmit -1)
- Long term, prospective, multinational, parallel-cohort study monitoring safety in patients with MS newly started on fingolimod once daily or treated with another approved disease-modifying therapy (PASSAGE)
- Neuroimaging based calculation of Optic Nerve Sheath Diameter for non-invasive ICP measurement.
- Impact of timing of Anti-seizure Medications in Status Epilepticus.
- Exploratory Study of the Effects of Mindfulness Training on Behavior, Cognition, and Movement in Huntington's Disease
- Imaging Dementia - Evidence for Amyloid Scanning (IDEAS) Study: A coverage with Evidence Development Longitudinal Cohort Study
- An Open-Label Tolerability and Exploratory Efficacy Study of Zonisamide for Dyskinesias in Parkinson's Disease
- A Randomized, Double-Blind, Placebo Controlled Study of Droxidopa for Fatigue in Parkinson's Disease (PD)
- An Open-Label, Long Term Safety Study of SD-809 ER in Patients with Chorea Associated with Huntington's Disease. Alternatives for Reducing Chorea in Huntingtons Disease (ARC HD)
- Registry of Amyloid Positive Patients for Alzheimer's Disease Drug Research Trials (RAmP)

How to Apply



The Neurology Residency Program at Cooper University Hospital is a categorical program, including a PGY1 in preliminary Internal Medicine. This program provides future neurology residents a strong foundation, on which interns are exposed to diverse medical conditions that prepare them for a career in neurology. The innovative curriculum incorporates diverse learning experiences such as simulation lab and a variety of clinical rotations that allows trainees to develop the skills they will use in their future careers.

The neurology program has no specific minimum requirements for board scores, grades, etc. To consider which applicant is best suited for a career in neurology we evaluate the merits of each application based on a number of factors. Due to the competitive nature of our program, candidates with superior grades and scores are more likely to be invited to interview.

Unfortunately, visas other than J1 cannot be accommodated.

Our interview slots fill up quickly. We encourage interested candidates to apply as early as possible.

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The Cooper Campus and Surrounding Area



**The expansion project
at Cooper is a direct
reflection of the growth
in services that Cooper
has experienced over
the past several years.**



Cooper University Health Care is the leading academic health system in South Jersey. Since 1887, Cooper has been providing quality health care to the people of Camden County and South Jersey. When it comes to care, Cooper's experts treat minor problems, critical illnesses, and major traumas with the same level of excellence. These experts will train you – the medical professionals of the future – while together as colleagues providing our patients with comprehensive, compassionate care today. It's more than just medicine, it's our mission.

Located across the Delaware River from Philadelphia, Cooper University Health Care has more than 7,500 employees, including more than 1,250 nurses and 630 physicians in more than 75 specialties. As one of the most trusted health systems in the region, Cooper offers patients quality health care from primary care to specialty care in one or more of its premier Institutes and Centers of Excellence. In 2018, Cooper received 28,716 hospital admissions, 80,802 Emergency Department visits, 46,511 visits to our Urgent Care Centers, and more than 1.6 million outpatient visits. Our teams saw 23,110 surgical cases, 3,766 trauma cases, and more than 123,000 combined inpatient and outpatient cancer visits.

Cooper University Hospital is the center of a growing Camden Health Sciences Campus that includes MD Anderson Cancer Center at Cooper, Sheridan Pavilion at Three Cooper Plaza medical offices, Cooper Medical School of Rowan University (CMSRU), internationally acclaimed Coriell Institute for Medical Research, and the Ronald McDonald House of Southern New Jersey. Cooper is proud to be a catalyst working to transform our community for the better.

The hospital's 312,000-square-foot, 10-story Roberts Pavilion features technologically advanced operating room suites with hybrid imaging capabilities, an advanced laboratory automation facility, and the 25,000-square-foot Dr. Edward D. Viner Intensive Care Unit—featuring 30 private patient rooms equipped with the latest in advanced technology, and allowing 360-degree patient access. Five patient rooms are capable of negative pressure isolation, and five rooms have chambered isolation alcoves. In addition, an enlarged room with operating room-caliber lighting is outfitted to perform bedside exploratory laparotomy in patients considered too medically unstable for transport to the operating room. We are proud to be the first in the nation to provide advanced surgical trauma training to the United States Army Elite Forward Resuscitation Surgical Team.

As South Jersey's only Level 1 Trauma Center and Level II Pediatric Trauma Center, Cooper provides critically ill patients with life-saving care. Cooper's two medical transport helicopters have 24/7 access to a helipad with the latest lighting, snow-melting capabilities, and automatic drainage to prevent icing. Our recently-expanded Emergency Department includes state-of-the-art exam rooms and an iTrack system to improve the flow of patients through the ED, reducing patient wait times. Additionally, designated floors within the hospital serve specific patient populations, including those needing advanced surgical and heart care, along with South Jersey's only dedicated 30-bed inpatient cancer unit.

The Cooper Campus and Surrounding Area, continued



Cooper University Health Care and MD Anderson Cancer Center in Houston, Texas, partnered in 2013 to create MD Anderson Cancer Center at Cooper. Our partnership is a full clinical integration between the two programs. MD Anderson at Cooper physicians adhere to the same philosophy, protocols, and guidelines set by MD Anderson in Houston, and patients receive the same proven practice standards and treatment plans provided at MD Anderson. Today at MD Anderson at Cooper, patients have access to more clinical trials for more types of cancer than ever before, as well as a full range of supportive care services. Additionally, Cooper's Center for Special Diagnostics, located in our Education and Research Building, includes molecular pathology, flow cytometry, and cytogenetics, enhancing Cooper's ability to provide genomic testing for cancer patients at Cooper.

CMSRU's Medical Education Building is located on the Cooper Health Sciences Campus on South Broadway, between Benson and Washington Streets. The medical school, which opened in July 2012, was designed to support an innovative curriculum that integrates knowledge of basic science concepts, early clinical experience and patient care, self-directed learning, teamwork, and medical and non-medical activities for the greater community's benefit. It was featured in U.S. News and World Report's ranking of the 10 U.S. medical schools with the lowest acceptance rates in fall 2018. It received 6,708 applications and admitted only 203 students, for an acceptance rate of 3%. In 2019, 100% of medical students matched with a residency program.

The Cooper Health Sciences Campus is located in the heart of Camden's business district. The academic medical center campus is easily accessible by car or public transportation via the PATCO and bus terminal adjacent to the hospital. Public transportation options offer convenient access to Philadelphia's cultural, culinary, and historic venues, as well as a range of living and entertainment options in South Jersey, including walkable communities such as Haddonfield and Collingswood.

Cooper is a short walk or drive from the exciting Camden waterfront, which includes a magnificent waterfront park and marina; the Adventure Aquarium; and the BB&T Pavilion, which hosts nationally renowned entertainment throughout the year. Nearby are the 76ers Training Complex, L3 Communications complex, Rutgers University Camden Campus, Rowan University, and Camden County College. There are expected to be \$350M in transportation and infrastructure improvements within the next four to five years to handle the influx of thousands of new employees to the area and students at nearby growing academic campuses.

Cooper is proud to be part of the transformation of our community. Employment in the city of Camden has increased 24.7% in the past few years, with 55.4% of those jobs in the health care and education sectors. And our neighborhoods are safer: the crime rate is at a 50-year low, thanks to an aggressive community policing program.

Cooper University Health Care is growing and changing lives. We invite you to be part of our mission: To serve. To heal. To educate.

Cooper Camden Campus Map



The most up-to-date directions to Cooper University Hospital are available at:
CooperHealth.org/Locations



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