



Hesham Masoud, MBBCh, Amar Swarnkar, MD, and Grahame Gould, MD, in the bi-plane angiography operating room at Upstate University Hospital. Its location, in the new intraoperative MRI surgical suite, enables surgeons to obtain MRIs during surgeries, improving patient outcomes.

UPSTATE WELCOMES GOULD, MASOUD TO REGION'S FIRST STROKE TEAM

Joining Central New York's first and only comprehensive stroke center are two physicians with expertise in interventional clot retrieval.

The addition of **Grahame Gould, MD**, and **Hesham Masoud, MBBCh**, strengthens the team of professionals who provide round-the-clock stroke care at Upstate University Hospital. They join **Amar Swarnkar, MD**, in providing endovascular neurosurgery, including mechanical thrombolysis. This is a crucial therapy for patients suffering ischemic strokes. Swiftly locating and removing a brain clot improves the patient's odds of survival and recovery.

Upstate's stroke team earned "Honor Roll - Elite" status in U.S. News & World Report's annual Best Hospitals publication for 2016. This designation is for hospitals whose door-to-needle time is less than an hour at least 75 percent of the time, for at least four consecutive quarters. Door-to-needle time refers to the time from a stroke patient's arrival at the Emergency Department until he or she receives tissue plasminogen activator, if appropriate.

Upstate's comprehensive stroke center, led by neurologist **Gene Latorre, MD**, includes:

- a multidisciplinary team of neurologists, neurosurgeons, interventional radiologists and rehabilitation therapists;
- the use of clot-busting tPA for ischemic strokes and catheter-based therapy for clot retrieval;
- state-of-the-art neurovascular and endovascular procedures for aneurysms and hemorrhagic strokes;
- stroke rehabilitation that begins during hospitalization;
- three levels of specialized care on a dedicated hospital floor, staffed by nurses with neuroscience expertise;
- telemedicine capabilities to treat stroke patients in rural hospitals; and
- active participation in multiple clinical research trials.



Steel doors open to move the surgical patient from the OR to the MRI, and back to the OR after imaging has been done.

continued on page A2

UPSTATE SIGNS GOULD, MASOUD continued from page A1

Grahame Gould, MD

Gould, a native of New Orleans, comes to Upstate from Thomas Jefferson Medical College in Philadelphia. He specializes in endovascular and cerebro-vascular neurosurgery.

His medical degree is from Yale University School of Medicine. He was chief resident in his seventh year of neurological surgery residency at Yale-New Haven Hospital in Connecticut, and then he completed a fellowship in endovascular neurosurgery at Thomas Jefferson.

Gould is the author of chapters in textbooks including “Operative Neurosurgical Techniques” and “The Comprehensive Treatment of the Aging Spine: Minimally Invasive and Advanced Techniques” and has been published in a variety of medical journals. He and six other inventors hold a patent on an intraventricular brain-cooling catheter.

Hesham Masoud, MBCh

Masoud has expertise in endovascular surgical neuroradiology and vascular neurology. He comes to Upstate from Boston Medical Center and the Boston University School of Medicine, where he was an assistant professor of neurology.



Grahame Gould, MD

Hesham Masoud, MBCh

Masoud received his medical degree from Ain Shams University in Cairo. He completed his internship and residency in neurology at Case Western Reserve School of Medicine in Cleveland, where he was selected to serve as chief resident his senior year. He then went on to complete a combined fellowship in vascular neurology and endovascular surgical neuroradiology at Boston Medical Center.

He lectures and writes about acute stroke therapy, intracranial stenting, endovascular management of cerebral aneurysms, neuroimaging of intracerebral hemorrhage and other topics.

In addition to the clinical care they provide to adult patients, both physicians have faculty appointments and will be involved in research as well as teaching the next generation of physicians and surgeons.

The presence of Gould, a neurosurgeon, Masoud, a stroke neurologist, and Swarnkar, a neuroradiologist — all three with expertise in acute stroke rescue therapy — highlights the three-disciplinary approach to endovascular management of stroke at Upstate. ■

UNDER STUDY: A PROMPT HEAD-INJURY ASSESSMENT

Collegiate athletes in the communities near Upstate Medical University are helping researchers improve the identification and assessment of head injuries in sports.

Students playing sports at Cazenovia, Le Moyne and Onondaga Community colleges, Syracuse University and other schools may participate in a study that assesses the concussion assessment tools currently in use. Upstate is one of about 10 sites partnering with BrainScope, a private medical neurotechnology company that is developing a new generation of portable, hand-held devices for objectively assessing brain function.

The sports with higher concussion risk include football and soccer, but principal investigator **Christopher Neville, PhD**, said athletes from non-contact sports such as swimming and track are being used as controls.

When an athlete suffers a possible concussion, study coordinator Joshua Baracks, an athletic trainer, arranges for a sophisticated magnetic resonance imaging scan within 72 hours of injury. The athlete also undergoes balance and neurocognitive testing, plus an electroencephalogram. For the study, that athlete is matched with someone of the same age, gender and sport — likely a teammate — who has not been injured and who undergoes the same type of testing.

“All of this is to look at a suite of post-concussion tests to investigate which one or ones are helpful in the identification, and assessment over time,” Neville said.

Providers who treat a collegiate athlete with concussion symptoms within 72 hours of the injury may suggest that he or she participate in the BrainScope study. Call 315-464-9966 or email motion@upstate.edu for details. ■

CME CLASS: EMERGENCY NEUROLOGICAL LIFE SUPPORT

Neurocritical care physicians **Gene Latorre, MD**, and **Elwaleed Elnour, MD**, instruct a class in Emergency Neurological Life Support that's aimed at physicians, critical care nurses and other professionals who treat neurosurgical emergencies.

The class details what to do in the first critical hour of a neurological emergency, providing a consistent set of protocols, practical checklists, decision points and suggested communication to use during patient management. It includes

in-depth presentations on ischemic stroke, subarachnoid hemorrhage, traumatic brain injury and intracranial hypertension and herniation.

Classes run from 7:30 a.m. to 5 p.m. and are held at the downtown campus of Upstate University Hospital monthly. The next is scheduled for Dec. 5. Email curryj@upstate.edu to register. The class provides continuing medical education credits, and the cost is \$75. ■

PHASE II DRUG TRIAL SEEKS PATIENTS WITH ALZHEIMER'S

Patients in a mild to moderate stage of Alzheimer's disease are being sought for the clinical trial of a drug that aims to alter or delay memory loss.

The drug, T-817MA, is being tested nationwide in a phase II, randomized, double-blind, placebo-controlled, parallel group study. Upstate Medical University hopes to monitor about 15 people for the study, says **Amy Sanders, MD**, director of cognitive and behavioral neurology at Upstate and the principal local investigator.

Sanders is excited about the trial drug because it works on the tau protein, rather than the amyloid protein on which other Alzheimer's drugs have focused.

Patients of either gender who are between 55 and 85, have been diagnosed with Alzheimer's and are taking donepezil

(Aricept) or using the rivastigmine (Exelon) transdermal patch are eligible. They must have a partner or caregiver who understands English, and both must give informed consent and commit to an appointment at Upstate's Institute for Human Performance every four to six weeks for a year. The study pays patients \$2,500, in increments.

Ineligibility factors include clinically significant cardiac, hepatic or renal impairment; non-Alzheimer's dementia; and taking galantamine (Razadyne) or oral rivastigmine. Nursing home patients are ineligible; those in assisted living will be evaluated for eligibility.

For more information or to enroll, contact physician assistant Kimberly Amodio at 315-464-9005 or amodiok@upstate.edu. ■

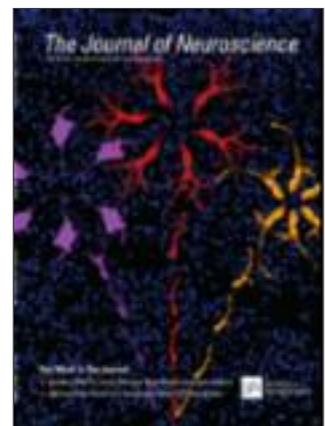
JOURNAL FEATURES UPSTATE BRAIN RESEARCH

Research from an Upstate laboratory is featured on the July 29 cover of *The Journal of Neuroscience*, showcasing the cellular and molecular processes of cerebral cortex development.

Findings from a study funded by the National Institutes of Health provide insight into how a signaling molecule called Reelin coordinates the growth and wiring of the developing brain and may help explain why patients who have mutations of the RELN gene have profound intellectual disability and epilepsy. The RELN gene provides the code that produces Reelin.

The study is from the laboratory of **Eric Olson, PhD**, co-author of the paper and associate professor of neuroscience and physiology. The paper's lead author, **Ryan S. O'Dell, PhD**, recently received his doctorate at Upstate, working in Olson's laboratory, and is completing his medical degree through Upstate's MD/PhD program.

The researchers use multiphoton microscopes to take images of the embryonic mouse nervous system and observe developing neurons in their native environment, both in embryos that included a deficiency of the Reelin molecule and in normal mouse embryos. ■



BRAIN GAIN

INNOVATION SCHOLAR HAS NEUROSCIENCE RESEARCH EXPERTISE

Upstate Medical University's newest Empire Innovation Scholar, **Wei-Dong Yao, PhD**, focuses his research on the brain.

Some of what he is exploring:

- what molecules play a role in the neurodevelopment of diseases such as schizophrenia and autism.
- how drug abuse hijacks the brain's circuitry to destroy neural communications at synapses that can have a negative affect on the brain's prefrontal cortex.
- how proteins in synapses signal dopamine, which also plays a role in addiction.

Yao was recruited to Upstate last October from Harvard as part of the SUNY Empire Innovation Program. Other Empire Innovation Scholars at Upstate are **George Holtz, PhD**, **William Kerr, PhD**, and **Francesca Pignoni, PhD**. Yao leads Upstate's Molecular Cellular Neuropsychiatry Laboratory.

"Dr. Yao helps knit together expertise in psychiatrics genetics in our Department of Psychiatry and expertise in neuro-development within our Department of Neuroscience and Physiology," said **David C. Amberg, PhD**, Upstate's vice president for research.

At Harvard, Yao led the Cellular Molecular Neuroscience



Neuroscientist Wei-Dong Yao, PhD in his lab at Upstate Medical University

Laboratory at the school's New England Primate Research Center. He served as an assistant professor of psychiatry at the medical school and Beth Israel Deaconess Medical Center, and as an adjunct faculty member at the University of Massachusetts, Amherst.

His research has been published in several top scientific journals, including *Neuron*, *PNAS*, *Nature Medicine*, the *Journal of Neuroscience* and the *Journal of Biochemistry*, among others.

Yao's current research has received more than \$3.9 million in funding from the National Institutes of Health, which has supported his work since 2007. ■

SOLVING A NEURODEGENERATIVE MYSTERY:

NOW THAT WE KNOW HOW CELLS DIE, CAN WE HALT THEIR DEATH?

A project on which **Xin Jie Chen, PhD**, has been working for a decade provides insight into the physiological impact of mitochondrial dysfunction, which is associated with an increasing number of aging-related neuromuscular degenerative diseases.

Chen is a professor of biochemistry and molecular biology at Upstate and principal investigator of the study which was published in the July 20 online edition of the journal *Nature*. The lead author of the paper is research scientist **Xiaowen Wang**.

The research team identified a new pathway that can kill cells by attacking the mitochondria, a key part of the cell that produce energy. Calling it mPOS for mitochondrial precursor over-accumulation stress, this new pathway is triggered by conditions that interfere with the integrity and function of the mitochondrial inner membrane. As a result, proteins that are normally transported into mitochondria get stuck outside of the organelle, from where they are misfolded and become toxic to the cell. Conditions that promote mPOS may contribute to the pathogenesis of several muscle and cardiac diseases and neurodegenerative disorders.

"The more research that allows us to gain greater knowledge of how mitochondrial dysfunction induces cell deterioration during aging, the better our chances of developing drugs that delay the onset of cell death and may hold greater hope for drug therapies against these neuromuscular degenerative diseases," Chen said.

In addition to discovering the new pathway, the team also identified a network of anti-degenerative genes in yeast that can protect against the mPOS, by detoxifying the dislocated mitochondrial proteins and thereby readjusting cell activity. The anti-degenerative genes are highly conserved in humans and are mutated in several neuromuscular diseases, including myotonic dystrophy and spinocerebellar ataxia. The discovery also has implications for amyotrophic lateral sclerosis.

"Dr. Chen's results provide novel insights into the cellular consequences of mitochondrial damage that could ultimately suggest new treatments for diseases associated with mitochondrial dysfunction," said **Patricia Kane, PhD**, professor and chair of Upstate's Department of Biochemistry and Molecular Biology. ■

IMPROVED TRIAGE AND TRANSFER PROTOCOLS

The Upstate Triage and Transfer Center was created in June to facilitate patient transfers from physician offices and urgent care centers.

Registered nurses field phone calls from referring providers on a dedicated phone line, collecting the patient's name, date of birth, chief complaint, any diagnostic tests that have been completed and an estimate of his or her arrival time, which is entered into the hospital's electronic medical record system. The nurse can also connect providers with an attending physician in the Emergency Department, if necessary.

This new system is designed to prevent delays and ensure quality patient care. Physicians who contact admitting, registration or the Emergency Department directly are transferred to the Triage and Transfer Center.

The phone number to call is 315-464-5449 or 866-464-5449. ■



BRINGING URGENT CARE TO THE PATIENT

Emergency physicians and nurse practitioners from Upstate University Hospital offer a new service that is centuries old: house calls.

Called Upstate at Home, the service began Sept. 10 in DeWitt, Fayetteville, Manlius and Minoa, north of Route 20; Kirkville, south of the Thruway; East Syracuse, east of Interstate 481 and south of the Thruway; and the villages of Cazenovia and Chittenango.

Christian Knutsen, MD, a board-certified emergency medicine physician who serves as medical director for several area fire departments, created Upstate at Home because he recognizes how many people become ill or injured but don't require a trip to the hospital and don't want to leave their home.

The service is perfect for people who cannot get an appointment with their regular doctor, especially evenings and weekends, and for visitors in the Central New York area. A house call can eliminate taking the whole family to a clinic or hospital emergency room when one member is sick, driving in bad weather, sitting with other sick people in a waiting room or having to leave a comfortable home when one is not feeling well.

Upstate at Home participates with most major health insurance companies, Medicare and Medicaid, and people with insurance will be asked to pay their co-payment over the phone before the house call. People whose insurance coverage

cannot be verified are asked to make a down payment of \$175, and they will be billed for the remainder of charges after the visit.

A nurse answers the Upstate at Home phone at 315-464-4646 and asks a series of questions to make sure a house call is appropriate. Upstate at Home sees patients every day from 11 a.m. to 11 p.m. ■



Christian Knutsen, MD, created Upstate at Home.

APPROPRIATE FOR UPSTATE AT HOME TREATMENT:

Coughs and colds	Dehydration from intestinal illness
Fevers and flu	Tension and migraine headaches
Sore throats	Urinary tract infections
Mild breathing problems from asthma, pneumonia and COPD	Mild to moderate burns
Skin abscesses or infections	Cuts and abrasions
Sinusitis	Sports injuries
Nosebleeds	Back and neck pain
Eye and ear pain	Concussions
Nausea, vomiting, diarrhea	Dental pain

UPSTATE ROUNDUP

Upstate's **Physical Medicine and Rehabilitation** program has moved its West Side Syracuse outpatient location to 4671 Onondaga Blvd., in the Western Lights Shopping Center. This location, which opened Aug. 31, replaces the outpatient rehabilitation center Upstate previously operated at 5108 Velasko Road, Syracuse.

The new space provides similar services, such as the Balance and Falls Program, the Neurological Program, orthopedics, spine, sports medicine, stroke, total joint and hand therapy. In addition to physical therapy, the center also offers occupational and speech therapy. It provides better parking options and has space that better accommodates patient care.

For patient referrals to the Western Lights location, call 315-475-1433.

Upstate's other outpatient Physical Medicine and Rehabilitation centers can be reached by calling 315-464-6542. Locations include Upstate Physical Therapy at Manlius, 102 W. Seneca St., Manlius; the Institute for Human Performance, 505 Irving Ave., Syracuse; and Upstate Bone and Joint Center, 6620 Fly Road, East Syracuse. Upstate University Hospital also provides outpatient rehabilitation services at the downtown hospital.

The **Designated AIDS Center at Upstate**, now known as Immune Health Services, has been awarded a \$1.5 million grant to develop and expand programs that foster greater adherence to treatment protocols for patients infected with HIV. The grant comes from the state Health Department's AIDS Institute.

A new Department of **Transitional Care at Upstate** helps manage a patient's care after he or she leaves the hospital. Members of the department work with social workers, case managers, patient educators, physicians, pharmacists and others to help streamline patient moves into rehabilitation or other specialized treatment centers. Intervention may also involve Meals on Wheels, Hospice, the Rescue Mission or other community resources.

"Our patients are members of the community, and we want to take care of them. It's not just about getting people out the door. It's about providing quality outcomes and quality of life," said the department's director, Diane Nanno.

To learn more, call Nanno at 315-464-1964 or assistant director Kelly Mussi at 315-464-3493.

The **Joslin Diabetes Center** has expanded, adding 10 new spacious and bright exam rooms for pediatric patients. "This allows us to see more patients, more efficiently," said Roberto Izquierdo, MD, medical director for the pediatric diabetes program.

The center is located at 3229 E. Genesee St., Syracuse. Call 315-464-5726 for referrals.

Upstate University Hospital received the "Hope Award" for **operations performance excellence** this year from Mainspring Healthcare Solutions, the company that helped the hospital implement a new equipment delivery process called iGotIt. The new system has reduced equipment delivery time averages from 50 to 15 minutes.

Upstate University Hospital celebrated the 10th anniversary of its **smoke-free initiative** this year. Upstate was the first health care facility in New York state to kick the smoking habit by banning cigarettes in 2005. In 2012, Upstate strengthened its stance to become entirely tobacco-free, outlawing electronic cigarettes and other forms of tobacco.

This and other efforts helped Upstate earn CEO Gold Standard accreditation from the nonprofit CEO Roundtable on Cancer, founded by former President George H. W. Bush in collaboration with the National Cancer Institute.

Hans Cassagnol, MD, who served as associate chief quality officer at Geisinger Health System in Danville, Pa., has been named chief quality officer at Upstate University Hospital. Nurse **Ann Marie Gressler Szczesniak**, with 20 years experience in patient relations and nursing, is the new chief experience officer.

Derek Cooney, MD, associate professor of emergency medicine and medical director of Upstate's Physician Response Team, was named 2015 Central New York Emergency Medical Services Physician of Excellence. Cooney also serves as medical director of Rural/Metro.

Antonio Culebras, MD, professor of neurology and one of the world's leading experts on sleep, was inducted as an honorary member of the Royal Academy of Medicine in Valencia, Spain. Culebras is the neurology consultant for the Upstate Sleep Center.

Leslie Kohman, MD, distinguished service professor and medical director of the Upstate Cancer Center, is one of 23 individuals to receive a 2015 St. George National Award from the American Cancer Society. The award recognizes her ongoing leadership in the community to further the society's mission to fight cancer.

Donald Simpson, PhD, became dean of the College of Health Professions this year, succeeding Hugh Bonner, PhD, who retired in July after serving 20 years as dean. Simpson comes from the University of Arkansas for the Medical Sciences in Little Rock, Ark., where he held several leadership positions.

UPSTATE'S NEW PRESIDENT



Danielle Laraque-Arena, MD, FAAP

A female pediatrician is the new president of Upstate Medical University. Danielle Laraque-Arena, MD, will be the first woman to lead the university when her appointment takes effect Jan. 14.

She comes to Upstate from Brooklyn, where she leads the Department of Pediatrics at Maimonides Medical Center and serves as vice president of Maimonides Infants and Children's Hospital. Laraque-Arena also currently is professor of pediatrics at the Albert Einstein College of Medicine, Yeshiva University.

"Dr. Danielle Laraque-Arena is an accomplished professional with precisely the right balance of academic, medical and community engagement experience needed to lead our esteemed SUNY Upstate Medical University," said SUNY Chancellor Nancy L. Zimpher.

At Maimonides since 2010, Laraque-Arena strengthened the teaching and research profile through the recruitment of new faculty, transformed the residency program, developed a new fellowship program and significantly increased the first-attempt board pass rate.

From 2000 to 2010, she served as professor of pediatrics and the endowed Debra and Leon Black Professor of Pediatrics, as well as the chief of the Division of General Pediatrics in the Department of Pediatrics at Mount Sinai School of Medicine. She focused on growing innovative clinical pediatric programs, strengthening academic teaching in support of primary care residency training, and building infrastructure for primary care research. Laraque-Arena was also a member of the faculty at Columbia University.

Laraque-Arena's career has focused on evaluating and treating abused and neglected children and examining the best ways to integrate public health and primary care to assure healthy communities. She is nationally and internationally recognized as an expert in injury prevention, child abuse, adolescent health risk behaviors and issues critical to health care delivery in underserved communities. She has served as president of the Academic Pediatric Association and been a United States Public Health Service Primary Care Policy Fellow.

A native of Haiti, Laraque-Arena immigrated to the United States in 1962. She received her medical degree from the University of California at Los Angeles School of Medicine and her bachelor's degree in chemistry from UCLA. Her internship and residency were completed at the Children's Hospital of Philadelphia, University of Pennsylvania, where she was a Robert Wood Johnson Fellow in General Academic Pediatrics.

Laraque-Arena is married to Luigi Arena, MD, PhD, and the mother of two, Marc Anthony Arena and Julia Marie Arena. In addition to English, she speaks French, Creole and Italian.

Her appointment is the culmination of a national search process that began in February with the creation of a 19-member search committee comprising Upstate Council members and representatives from the faculty, student body, alumni, hospital, Upstate Foundation and professional support staff.

Upstate Medical University is one of the largest employers in Central New York and the region's only academic medical center. It educates more than 1,450 students in four colleges — Medicine, Graduate Studies, Health Professions and Nursing — as well as graduate physicians in residency and fellowship training programs. ■