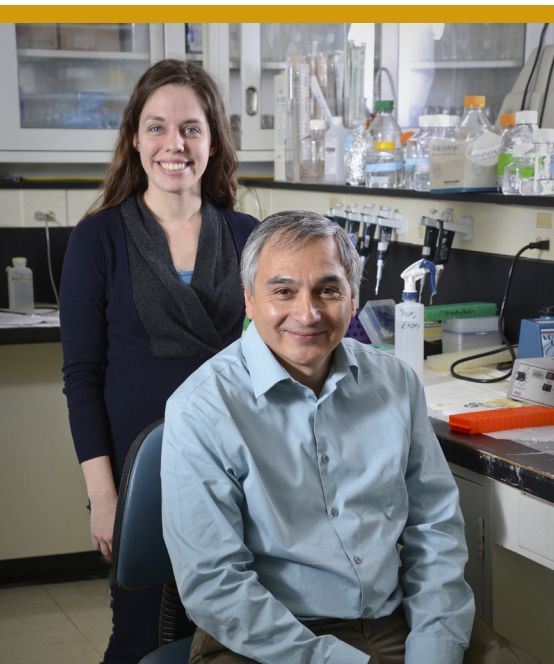




## Opening a New Window on Alzheimer's Disease

Aging is the main risk factor for Alzheimer's disease, but the aspects of the aging process that predispose the brain to develop Alzheimer's are largely unknown. Now researchers at the College of Medicine have made an exciting new discovery about the reason why brain cells deteriorate so rapidly in people with Alzheimer's disease. And they hope that this discovery may ultimately translate into effective treatment for the 36 million people who suffer from the disease worldwide.



Elizabeth Crowe, an M.D./Ph.D. student, is part of the research team led by Claudio Torres, Ph.D., focusing on the connection between astrocyte senescence and Alzheimer's disease.

During a two-year study led by Claudio Torres, Ph.D., assistant professor in the Department of Pathology & Laboratory Medicine, and published online in the September 12, 2012, issue of *PLoS ONE*\*, the research team found that senescence, a natural mechanism the body uses to protect against cancer, could be an important component in Alzheimer's disease.

When senescence occurs, biological changes stop cells from dividing as they normally do and switch them into producing toxic proteins that seem to trigger inflammation.

"Senescence is good when you're young because it's a protective mechanism against cancer, but as you get older, and the senescent cells continue to produce toxins, inflammation occurs, which is especially bad for the brain," says Torres, whose research has been inspired in part by his mother, who suffers from Alzheimer's disease.

Cellular senescence has been studied previously in other body tissues, but Torres's research group is the first to study senescence in the brain. Other group members from the Department of Pathology & Laboratory Medicine include Rekha Bhat, M.D., a former resident; graduate students Elizabeth Crowe and Alessandro Bitto; Michelle Moh, a

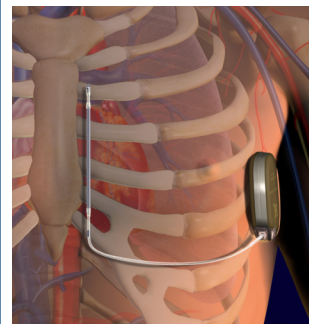
medical student; and faculty members Drs. Christos D. Katsetos, professor; Fernando Garcia, professor; and Christian Sell, associate professor. There were also two collaborators from the University of Pennsylvania.

For the first time, Torres and his team demonstrated that senescence occurs in the astrocyte cells of the brain. These star-shaped cells, which make up about 80 percent of the brain, perform many vital functions in the central nervous system to maintain homeostasis and support the neurons. Unlike neurons, astrocytes divide, which led Torres to hypothesize that senescence might be at play in the brain.

The research team studied post-mortem brain samples from fetuses; adults aged 35 to



### 5 Improving intubation for infants in the NICU



### 10 Subcutaneous option offers hope for heart patients



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# pulse

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# Dean's Message

President Fry's strategic plan has as its overriding theme that of One University. This idea is much greater than its symbolic value; it represents a mandate to think and act across boundaries. For the College of Medicine, it is a platform from which to explore and eventually accomplish stronger partnerships and collaborations between our school and other schools of the University.

There is precedent for this collaboration in the area of research, through Coulter grants and the surgical engineering program in our College. But we have only scratched the surface of what could be a very exciting future, in which our College and other Drexel colleges could come together around areas of common interest. In faculty hiring, for example, there could be faculty that straddle not only departments but also colleges. And this really has no limit – it is not limited to one or another college. Of course, we share many interests with the School



Daniel V. Schidlow, M.D.

of Public Health, including violence intervention and healthcare reform, and with the College of Nursing & Health Professions. In the College of Arts & Sciences they are addressing some areas of molecular biology; certainly we have commonalities with Engineering and Biomedical Engineering in many areas of health-related research; and the iSchool houses the Institute for Healthcare Informatics. It makes sense for other Drexel colleges to leverage the medical school's resources and vice versa.

I also believe that the College of Medicine can contribute to Drexel's aim to increase its global impact. We can be part of international research collaborations and educational exchanges. We might work with other Drexel schools to enhance the experience of our own students abroad, and to enrich the experience of students who come to Drexel from other countries, including offering research opportunities for those students. Likewise, we can foresee developing more faculty collaborations abroad.

Another strategic initiative is to create an innovation nexus, and we absolutely engage in the concept – we would like to help enhance Drexel's national reputation in research, build translational research, and support the goals of technology transfer and entrepreneurship. We are discussing an implementation plan for a translational research institute that will be located primarily at the College of Medicine but will share research cores with other colleges within Drexel and have an advisory board and governance that reflect their participation.

The University also seeks to intensify and improve the student experience. Our students – our medical students, graduate students, and postdoctoral students – are the main priority of the deanship. We will encourage our students to take part in University life – using the athletic and fitness facilities, cheering on the basketball teams, interacting with other Drexel students, and participating in student-driven initiatives. We support the notion that our students are an integral part of Drexel's student body and should be part of University life to the best of their ability.

Daniel V. Schidlow, M.D.  
Walter H. and Leonore Annenberg Dean  
Senior Vice President of Health Affairs

# COMMENCEMENT 2013



and deputy mayor for health and opportunity. Before entering government, he was vice chairman of the Department of Pediatrics of the University of Pennsylvania School of Medicine, and deputy physician-in-chief at The Children's Hospital of Philadelphia. He will receive an honorary degree.

An honorary degree will also be conferred upon Herbert Lotman, founder and former CEO of Keystone Foods. He co-founded the Macula Vision Research Foundation and serves on its board, along with those of the Philadelphia College of Osteopathic

The Drexel University College of Medicine Commencement will be held on Friday, May 17, at the Kimmel Center for the Performing Arts, 260 South Broad Street. Beginning at 9 in the morning, the event will welcome the 50-year reunion classes of Hahnemann and Woman's Medical College, celebrate our College community, and honor the students who are receiving their degrees.

This year's Commencement speaker will be Donald F. Schwarz, M.D., MPH, Philadelphia's health commissioner

Medicine, Children's Cancer Research Foundation of Philadelphia, and Ronald McDonald House Charities.

Trustees, administrators, alumni, and faculty are invited to don regalia and join in the academic procession. (Please register at [webcampus.drexelmed.edu/Regalia.asp](http://webcampus.drexelmed.edu/Regalia.asp) by March 29, whether or not you need regalia, or call the University Bookstore at 215-762-7628.) If you have questions, please contact Shay Lynn Myers at 215-991-8219 or [smyers@drexelmed.edu](mailto:smyers@drexelmed.edu).

## Destination Excellence: Diversity in Graduate Medical Education

Diversity in graduate medical education (GME), the residency training that happens after medical school, is essential to the programs that we sponsor, the patients that we care for, and the professional careers that our trainees aspire to achieve. In the GME programs sponsored by Drexel University College of Medicine/Hahnemann University Hospital, we look not only for qualified applicants, but for qualified applicants from a diverse background in training, ethnicity, country of origin, gender, and minority status. Diversity in GME has long been recognized as a product of the diversity of students graduating from medical school, the so-called pipeline effect. We continue to recruit the most qualified applicants from a diverse background.

The Drexel/Hahnemann GME programs directly reflect our commitment to diversity and our house staff policies. Our training programs exemplify this commitment by having residents from 27 different countries who speak upwards of 37 different languages. Our male to female ratio has averaged 60 percent to 40 percent for the last seven years and continues to approach 50/50. The proportion of trainees with underrepresented minority status is 62 percent.

We are very proud of our GME programs and the diversity of our trainees. This diversity enriches the educational environment of our programs and supports our GME mission.

— Olivia Rheinhart, Jay Yanoff, and Mark Woodland



Jay M. Yanoff, Ed.D., chief GME officer and designated institutional official, Hahnemann University Hospital; Mark B. Woodland, M.D., vice dean for graduate medical education, College of Medicine; and Olivia Rheinhart, director of graduate medical education, Hahnemann University Hospital.

# Drexel Sports Medicine Testing Portable Concussion Detection Device

Perhaps more than anywhere else, there is a need for immediate detection of a concussion on the battlefield. That's why the Department of Defense has asked the College's Division of Sports Medicine (one of only two sites in the country) to test a portable concussion detection device. Concussions caused by combat can have long-lasting effects on soldiers, and the faster a concussion can be detected the better. Prompt detection can lead to more effective treatment and may help prevent some long-term side effects like depression, migraines, and memory loss. While the impetus for the current study is concussion on the battlefield, a portable detection device has the potential for broad application.

"The ramifications of a device like this can extend beyond the battlefield and could help scores of injured people in a quick and efficient manner," says principal investigator Eugene Hong, M.D., chief, Division of Sports Medicine, as well as chair of the Department of Family, Community & Preventive Medicine. "A portable detection device could also be used on the sidelines of many sports – like football, soccer and lacrosse – where concern is



growing over the serious impact concussions can have on athletes, at both the professional and student levels."

The device works by placing a forehead array on the injured patient. The array contains a line of several small tactile sensors that apply slight pressure to the patient in a certain specific pattern. The hypothesis is that the patient's ability to detect the specific pattern of applied pressure is altered when he or she has a concussion because of an alteration in brain function. The reason for this may be similar to the reason a concussed patient complains of dizziness and balance problems – that is, there is a change in the tactile sensory feedback to the brain in the concussed patient. The forehead array device is much smaller and thus more portable than devices used to test balance after concussion.

## New Window on Alzheimer's

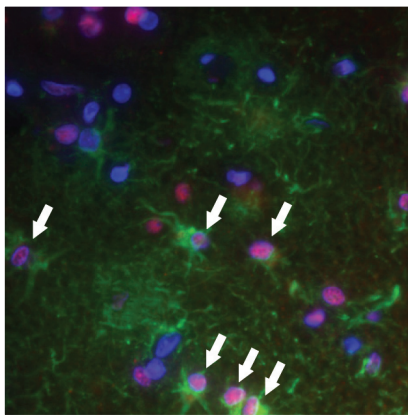
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50; and adults aged 78 to 90. They found that healthy brains from adults over 35 had six to eight times more senescent cells than the fetuses. In the oldest group, they studied subjects with and without the presence of Alzheimer's disease and discovered that adults with Alzheimer's had 10 percent more of these cells than those without.

Torres and his colleagues noted factors secreted by senescent cells that cause inflammation, long thought to contribute to Alzheimer's disease.

"Senescent cells secrete a large volume of cytokines, particularly interleukin-6, which is known to be increased in the brains of Alzheimer's patients," he relates. "Before this discovery, no one knew exactly where the inflammatory proteins were coming from. Now we suggest that they are coming from senescent astrocytes. This has opened a new window on Alzheimer's research."

Torres and his group also studied the relationship between senescence and beta amyloid protein plaques found in the brains of people with Alzheimer's. When they put beta amyloid in petri dishes filled with young astrocytes, the cells began to senesce within five days.



**Fluorescence microscopy image of the brain of an Alzheimer's disease patient shows astrocytes (green) that are positive for a marker used to identify senescent cells (red) in the nucleus (blue). Arrows denote astrocytes expressing the senescence marker.**

"Beta amyloid clearly acts as a stressor, causing more astrocytes to senesce," says Torres.

What can be done to prevent this?

Preventing senescence is probably not the best solution because it may increase the risk of cancer, according to Torres.

"Rather than preventing senescence, our main goal

now is to eliminate senescent cells through the immune system. This is the main focus of the next phase of our research," he says.

Torres notes that a study published last year reported the first clinical evidence that elimination of all senescent cells in the body of a mouse improved lifespan and prevented diseases of aging.

"We hope to show that the same can be achieved in brain cells," he says. "Then we can begin the path toward translation, perhaps an enzyme-based drug that will stop the toxic inflammatory secretions that occur in senescence. If we can eliminate senescent cells, or their senescence-associated secretory pattern, we may be able to mitigate signs and symptoms associated with Alzheimer's disease."

"After almost 50 years of research with no cure for Alzheimer's, we are excited by the potential," he concludes.

\*"Astrocyte Senescence as a Component of Alzheimer's Disease" in *PLoS ONE* 7(9): e45069. doi:10.1371/journal.pone.0045069 at plosone.org.

# Ultrasound to the Rescue: Improving Intubation in the NICU

Researchers at Drexel are finding a new use for an old technology: ultrasound. Jane McGowan, M.D., professor of pediatrics and director of the neonatal intensive care unit at St. Christopher's Hospital for Children, and Peter Lewin, Ph.D., Richard B. Beard Professor in Drexel's School of Biomedical Engineering, Science & Health Systems, hope that ultrasound may someday replace X-ray imaging as the standard way to determine if an intubated patient's endotracheal (ET) tube is in the proper position. They are particularly interested in developing this for neonatal populations but, if the technology is successful, it could have much broader applications.

The change would promise numerous benefits.

First, it would reduce the neonate's exposure to ionizing radiation. Intubated patients often need tubes replaced or repositioned, and each instance of this requires another X-ray. In the NICU, any change in an infant's respiratory status (such as increased CO<sub>2</sub> or decreased O<sub>2</sub> levels) must be attended to. The culprit is often an ET tube that has been displaced, but this must be confirmed via X-ray. If the tube has moved, it will be repositioned and then rechecked using another X-ray. These repeated exposures to ionizing radiation can add up quickly, which is of particular concern in newborns. In comparison, there are no known hazardous outcomes associated with diagnostic levels of ultrasound exposure. Furthermore, the neonatologist can watch the tube in real time as it is being repositioned, and be assured that it is placed properly without needing before and after images.

The ultrasound technology is also less cumbersome than even the smallest portable X-ray machine. It is about the size of a smartphone, with the ultrasound probe adding some additional bulk. These handheld devices are already present in most hospital emergency rooms. No alterations to the currently available machines would be required. The scan can be performed by NICU personnel on hand, rather than calling in the radiology department.

McGowan first had the idea while she was caring for infants in the NICU and noticed how frequently ET tube placement needed to be checked. She discussed her idea with Dr. Banu Onaral, director of the School of Biomedical Engineering, who then made the connection between McGowan and Lewin, an expert in the field of ultrasonography, and their collaboration began.

With the help of funding from the Coulter Foundation, the Drexel team has already had some success visualizing a typical ET tube via ultrasound in a tissue phantom (in this case, a cube of agar gel with chemicals added to mimic the tissue characteristics of an infant's chest) with a simulated trachea. Hoping to create the best possible chance for success, they are now exploring several avenues to improve the images.

First, they are manipulating various parameters of the

ultrasound field, including frequency, pulse duration, and mechanical index. Next, they are modifying the ET tube itself to improve its echogenicity. This involves creating small air voids, or microbubbles, within the walls of the tube.

Once the researchers have found the best model, they will move to preclinical trials, which will likely lead to further modifications of the tube, McGowan said. If those tests are successful, the study will move to human subjects. The modified ET tube would most likely require FDA approval. The FDA also regulates the amount of ultrasound exposure a patient can receive, so it is important that the researchers maximize the accuracy and efficiency of the technology, allowing the scan to be quick and the resultant images easy to interpret, while still complying with FDA guidelines regarding ultrasound exposure levels.



A pediatrician and an engineer are improving the technology for intubating tiny patients.

It is likely that most physicians could learn how to check ET tube position using this device with a minimum of additional training. There is already a push toward additional training in ultrasound technique and interpretation for medical students, due to the large and ever-growing number of uses for this technology. In fact, McGowan's idea has been met with excitement from various other specialists, including a critical care physician who imagined the technology transferring to intubated adult patients, and a nephrologist who thought ultrasound could be used to check the placement of dialysis catheters.

## Vision 2020 Congress Keeps Focus on Women's Equality

The campaign for women's economic and social equality traveled to Portland, Ore., in November for the Third National Congress of Vision 2020, an initiative of the Institute for Women's Health and Leadership at Drexel



**Former Oregon Gov. Barbara Roberts (right) receives the Legacy Award from Lynn Yeakel, Vision 2020 founder and co-chair.**

University College of Medicine.

The three-day conference gathered state delegates and leaders from allied organizations to discuss key strategies for reaching Vision 2020's five national goals by the year 2020, the centennial of the 19th Amendment, granting women the right to vote. The goals are to achieve pay equity, increase the number of women in senior leadership positions, promote family-friendly workplace policies, inform future generations, and encourage women to vote.

During the congress, state delegates described the progress of initiatives they have undertaken that reflect Vision 2020 goals. For example, the Utah delegates – a former Salt Lake City mayor and a former member of the state House of Representatives – discussed their project, "Real Women Run," which provides free training to encourage Utah women to run for political office.

"Efforts like these open doors for women," said Lynn Yeakel, Vision 2020 founder and co-chair. "The cumulative effect of Vision 2020's state and national activities is increasing awareness of the importance of women's equality."

At a public reception, Vision 2020 honored former Oregon Gov. Barbara Roberts and Jennifer Siebel Newsom, producer of the documentary *Miss Representation*. Also, the first junior delegate was introduced. She is Ying Ying Shang, 16, a Philadelphia-area Girl Scout, who is a teen adviser for the United Nations campaign *Girl Up*, and a blogger for the Huffington Post.

For more information, visit [drexel.edu/vision2020](http://drexel.edu/vision2020).

## New Pediatrics Chair Is David J. Schonfeld, M.D.

A world-renowned expert in school crisis and bereavement, David J. Schonfeld, M.D., has been appointed chair of the Department of Pediatrics at the College of Medicine. He has also been named physician-in-chief at St. Christopher's Hospital for Children.

Schonfeld's reputation and expertise extend from pediatric bereavement to pediatric AIDS education and cancer prevention. He is the founder and director of the National Center for School Crisis and Bereavement, which specializes in providing information and support to children and schools after crises, like a shooting or natural disaster.

Schonfeld provided pediatric bereavement and school crisis consultation in the aftermath of Hurricanes Sandy, Katrina, and Ike, as well as after the shootings in Aurora, Colo., and recently in Newtown, Conn. Because of his work in Newtown, Schonfeld has been named to the Sandy Hook Advisory Commission, which will make recommendations on school safety, mental health, and gun violence prevention.

"He brings a wealth of knowledge and experience, as well as a significant track record as a researcher and program builder," said Dean Daniel V. Schidlow, M.D.



**David J. Schonfeld, M.D.**

"We look forward to Dr. Schonfeld's role in strengthening the academic and educational relationships between St. Christopher's, Drexel University, and the College of Medicine, and igniting exciting new collaborations between our institutions."

Prior to joining St. Christopher's, Schonfeld was the

Thelma and Jack Rubinstein Professor of Pediatrics and former director of the Division of Developmental and Behavioral Pediatrics (2005-2012) at Cincinnati Children's Hospital Medical Center. He was a member of the National Commission on Children and Disasters and is the author of *The Grieving Student: A Teacher's Guide*. He served as president of the Society for Developmental and Behavioral Pediatrics, as chair of the Committee on Pediatric Research of the American Academy of Pediatrics, and on the academy's Disaster Preparedness Advisory Council.

Schonfeld received his medical degree at Boston University. He completed his pediatric residency at The Children's Hospital of Philadelphia and a developmental-behavioral pediatrics fellowship at the University of Maryland. After his fellowship, Schonfeld joined the faculty at Yale, where he worked for 16 years and conducted research in the New Haven public school system.



## Come Golf for a Great Cause

The 2013 Manuel Stamatakis Golf Classic takes place on Tuesday, June 18, at the historic Philadelphia Cricket Club. It's a great day of golf for a worthy cause. All proceeds of the event will go to support scholarships for medical students with proven academic talent and financial need, through the Manuel N. Stamatakis Medical Education Scholarship Fund. This will be the 13<sup>th</sup> annual outing in the name of Stamatakis, a trustee and the founding chair of the College, who established the scholarship fund. In addition to a beautiful course on a June afternoon, players will enjoy a buffet lunch, cocktail reception, and awards dinner. For more information, email [golf@drexelmed.edu](mailto:golf@drexelmed.edu).



## Initiative to Raise Awareness of Heart Attacks Among Latinas

Only half of women say they would call 9-1-1 if they thought they were having a heart attack, according to a 2009 American Heart Association survey, and many women didn't recognize several key symptoms. A woman suffers a heart attack every minute in the United States, and the disease takes a heavy toll on Hispanic women especially. It is the number one killer of that group in the United States. Knowing the symptoms is essential to calling 9-1-1 and reducing fatalities.

The Women's Health Education Program at the College of Medicine is one of eight community-based organizations awarded funds by the Department of Health & Human Services Office on Women's Health to promote "Latina Heart Health." The specific goal is to increase awareness and recognition of seven common heart attack symptoms seen in women and to encourage the use of the 9-1-1 emergency response system when these symptoms occur.

The *Make the Call. Don't Miss a Beat.* campaign aims to educate, engage and empower women and their families

concerning the seven symptoms of a heart attack that most commonly present themselves in women:

- Chest pain, discomfort, pressure or squeezing
- Shortness of breath
- Nausea
- Lightheadedness or sudden dizziness
- Unusual upper body pain, or discomfort in one or both arms, back, shoulder, neck, jaw, or upper part of the stomach
- Unusual fatigue
- Breaking out in a cold sweat

"Together, stroke and heart disease account for a third of all deaths of Latina women in the United States," says Ana Núñez, M.D., professor of medicine, director of the Women's Health Education Program, and associate dean for urban health equity, education and research at the College of Medicine. "Latinas have higher rates of diabetes, are more likely to be overweight or obese, and these factors all increase heart disease risk. With numbers like these, it is vitally important to spread the word to Latina women that if they think they are having a heart attack or stroke, they should call 9-1-1 immediately."

The campaign runs through the summer.



## Family Practice Open in University City

Drexel Family Medicine kicked off the New Year by opening its new practice in the University City Science Center at 34<sup>th</sup> and Market Streets (entrance on 34<sup>th</sup> Street). Drexel Medicine University City is staffed by faculty physicians from the College of Medicine's Department of Family, Community & Preventive Medicine. Drexel employees who have the Drexel Preferred Plan for insurance will have no co-pay for office visits when they see a Drexel primary care physician. The University City practice is adjacent to the new Drexel University Student Health Center. Office visits are available by appointment; the number is 215-220-4720.

## Pathologists' Assistant Program Goes West

The College of Medicine's Master of Science in Pathologists' Assistant will expand to Drexel's Sacramento campus beginning in May. Applications are now being accepted for the inaugural California class. This is the first time in the history of the profession that an educational program for pathologists' assistants has been offered west of the Mississippi. It's a case of supply meeting a ready demand, said Tina Rader, MHS, PA(ASCP)<sup>CM</sup> assistant professor and co-director of the program with James Moore, MHS, PA(ASCP)<sup>CM</sup>.

A pathologists' assistant is a highly trained allied health professional who provides anatomic pathology services under the direction of a pathologist. Drexel's two-year full-time program begins in May of each year. The first year is devoted to the instructional portion, supplemented by pathology laboratory exposure. The second year comprises several hospital-based rotations offering progressively



responsible experience in autopsy and surgical pathology. The rotations are supplemented with informal classroom education.

The M.S. in Pathologists' Assistant is accredited by the National Accrediting Agency for Clinical Laboratory Sciences. After finishing the program, students are eligible to sit for the American Society of Clinical Pathologists certification exam.

For more information, visit [drexelmed.edu/PathA](http://drexelmed.edu/PathA).



Medical Student Research Day 2012

## Showcasing Medical Student Research March 20

The medical school's second annual Medical Student Research Day will take place on Wednesday, March 20, from 1 to 5 p.m. at the Queen Lane Campus.

A distinguished speaker from the National Institutes of Health will lead off the activities: Mahendra Rao, M.D., Ph.D., will present "Stem Cells and Regenerative Medicine." Internationally renowned for his research involving human embryonic stem cells and other somatic stem cells, Rao is the director of the NIH Center for Regenerative Medicine. He has worked for more than 20 years in



Dr. Mahendra Rao

the stem cell field, with positions in academia, government and regulatory affairs, and industry.

Poster presentations will follow the keynote speaker. Last year, 56 medical students and 16 M.D./Ph.D. students presented their research, and the organizing committee is excited by the prospects for growth this year. An awards reception for participants will take place in the evening.

Although the medical student's schedule typically leaves little time for research, the effort pays big dividends, notes Jane Clifford, Ph.D., associate dean for medical student research. It fosters teamwork, improves analytical and critical thinking skills, and offers the opportunity for a mentor-student relationship, all of which have lasting value. Organizers hope that participation in research and Medical Student Research Day will someday include every medical student at the College of Medicine.

For more information, go to [drexelmed.edu/biograd](http://drexelmed.edu/biograd) and select *Medical Student Research Day* in the left-hand menu.



# Compliance & Privacy

## Encryption as a Safe Harbor

The number of patient privacy breach cases continues to grow nationally. Often the cause is a very busy healthcare professional who makes a physical security mistake with an unencrypted device. Stated in plain English, an unencrypted device or a paper copy of a file is lost or stolen because it was not secured physically. It was not locked up; it was forgotten, dropped, or misplaced. Accidents happen!

While there is no “safe harbor” for paper documents (claims records, notes jotted on paper during rounds, study binders in the research area), we are provided a safe harbor if an electronic device was encrypted. *Safe harbor* is a legal and regulatory term that means if the device

was encrypted to the required standard and this can be proven by the device owner, then a “breach” or “loss” caused no harm. So, for the cost of encryption, all fines, penalties, notification costs, reputational damage, and harm to a patient or research subject is negated.

Privacy investigations, audits, and the work associated with protecting sensitive information and granting access, along with the need for additional privacy education, has led the Compliance & Privacy Office to add a director of privacy services to the Compliance & Privacy team.

Robert Asante, MBA, CISA, CISSP, has joined the College of Medicine as the new director of privacy services. This will expand the ability of our office and the College to meet the regulatory privacy services requirements of HIPAA and the HITECH Act, while supporting the critical clinical, research, and education missions



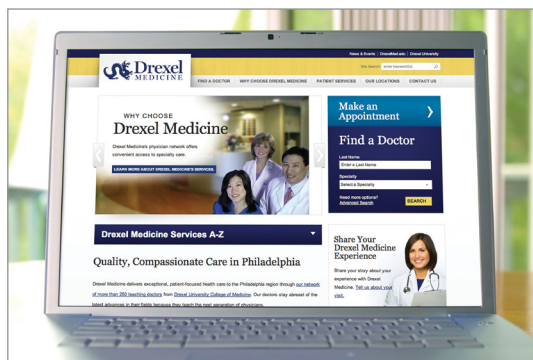
**Robert Asante**

of the College and University. In essence, he is the College privacy program “safe harbor.” Robert, who most recently headed his own consulting firm and worked with Citibank, is well-known to the College and University from his previous positions at the College in IT and in the Clinical Research Group. He will be a guest author in this column and is also available for privacy education sessions upon request. Robert may be reached at 215-255-7346.

**We never guess ... we ask! Call anytime to ask a compliance or privacy question, or to request compliance or privacy training: 215-255-7819**

**Confidential compliance hotline: 866-936-1010 or visit [www.drexelmed.edu/ComplianceHotline](http://www.drexelmed.edu/ComplianceHotline)**

The Drexel Medicine website, [drexelmedicine.org](http://drexelmedicine.org), recently won a “Best in Class” in the Interactive Media Awards competition. Launched last August, the site achieved high marks for design, content, feature functionality, and usability, among other standards.



## Saris Memorial Award Presented

The fourth Demetrius S. & Nayda E. Saris Memorial Award was presented to Aminah Shahid, M.D., on November 19, 2012. Shahid is a first-year resident in the Drexel/Hahnemann Emergency Medicine Residency Program.

The Saris award is offered annually to an intern or member of the house staff at Hahnemann University Hospital to help defray the cost of childcare. Demetrius Saris and Nayda Emanuelli met each other during their first year at Hahnemann Medical College (class of 1950) and were married for 55 years. While completing their medical training at Hahnemann University Hospital, the couple struggled to afford appropriate childcare for their first two children. The Sarises ultimately had six children, who created the Saris award to honor their parents. Three of them earned medical degrees from Hahnemann University: Anne ('76), Steven ('77), and Theresa ('88).

To apply for the award, please contact the Office of Graduate Medical Education at 215-762-2618. If you are interested in creating an award or scholarship, please contact John Zabinski in Institutional Advancement at 215-255-7343 or [jjz@drexel.edu](mailto:jjz@drexel.edu).



**From left: Anne Saris, M.D.; Rizwan Ali Khan and his wife, the award recipient, Aminah Shahid, M.D., with their son; Steven Saris, M.D.; and Michael Halter, CEO of Hahnemann University Hospital.**

# Revolutionary Heart Device Now an Option for At-Risk Patients

A new, less invasive heart defibrillator, recently approved by the FDA, is offering new hope to patients at risk of cardiac arrest. The device, which cardiologists are calling a breakthrough treatment, is known as an S-ICD, which stands for subcutaneous implantable cardioverter-defibrillator.

Physicians at Drexel University College of Medicine and Hahnemann University Hospital were among the first nationally to use the device in clinical trials. Drexel is one of the few clinical sites in the country participating in the post FDA-approval study, evaluating the long-term efficacy of the device. Doctors here have already implanted a dozen of the devices in patients, with several more procedures scheduled in the coming weeks.

"This is the biggest breakthrough we've seen in cardiology since the invention of the VAD [ventricular

assist device] in the 1980s," said Steven P. Kutalek, M.D., director of cardiac electrophysiology and associate chief of the Division of Cardiology at the College of Medicine.

What makes the device unique is that it provides defibrillation therapy without actually touching the heart; instead it is placed under the skin. Traditional cardiac defibrillators run a wire – or lead – through veins into the heart. The wire is attached to an implanted defibrillator, which can send an electric shock to the heart to treat arrhythmia, an abnormally fast or chaotic heartbeat. But leads sometimes need to be extracted because of infections, or they fracture due to their repetitive motion inside a beating heart.

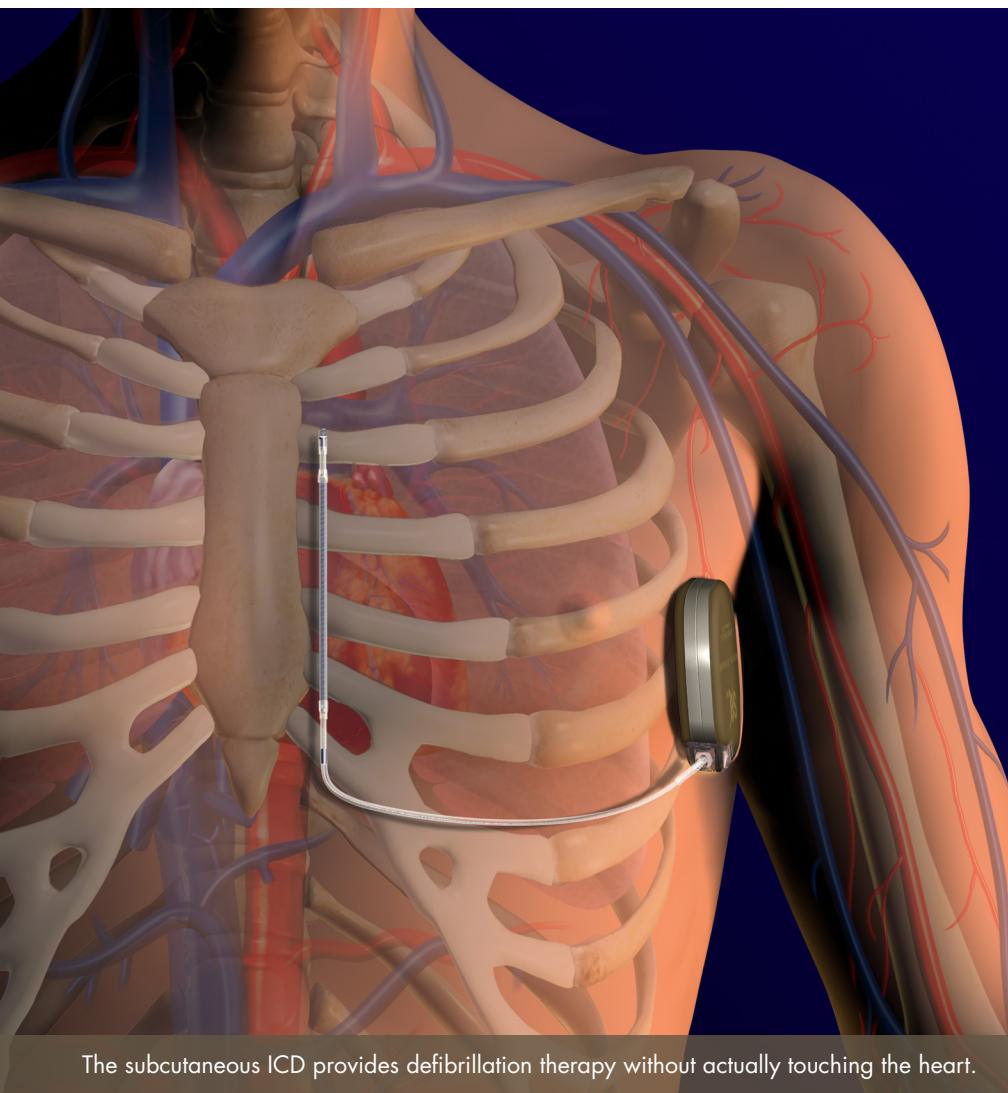
"The implantable defibrillators we've been using for years are a wonderful option for preventing cardiac arrest in many patients," said Kutalek, who is a national

expert in lead extraction. "Now this gives us another weapon in our arsenal to treat patients who can't tolerate standard defibrillators or those at increased risk of infection. Because of its placement, the S-ICD offers patients more mobility after implant and a lower risk of systemic infection."

Kutalek cautions that the new device has its limitations. Unlike standard defibrillators, the S-ICD currently can only be used for life-threatening rapid heartbeats like ventricular tachycardia or ventricular fibrillation. Standard defibrillators can also act as pacemakers, adjusting to pace the heart when it is beating too slowly.

For Robert Dougherty, a truck driver from Vineland, New Jersey, the S-ICD is literally a lifesaver. Dougherty received the new device at Hahnemann in December when doctors determined his ventricular fibrillation was putting his life in danger. Dougherty says he was extremely relieved to hear about the new subcutaneous option.

"I know someone who has the kind [of defibrillator] with the leads and I was scared of that," he said. "I feel much better about this one. It's one heck of a step in technology."



The subcutaneous ICD provides defibrillation therapy without actually touching the heart.

# Physician Refresher Eases Re-entry

A growing number of physicians are taking extended time off from clinical practice, according to a 2011 national survey. Why? The reasons include personal health issues, family needs, career dissatisfaction, and the desire to pursue other interests such as nonclinical positions in industry, among others. Physicians who decide to return to practice after several years away are increasingly seeking refresher courses to regain confidence and bring their clinical skills up to speed.



Over the past five years, the Drexel Medicine Physician Refresher/Re-entry Course has helped about 60 physicians meet the challenges of re-entry, remediation, and retraining through an innovative and rigorous program customized to teach each individual exactly what he or she needs to know. The majority of physicians who completed the course attained their initial goals, which included employment and hospital privileges.

"Our program has gained a national reputation for excellence," notes Nielufar Varjavand, M.D., associate professor of medicine and director of the Refresher/Re-entry Course. "Physicians like the fact that ours is a university program in an urban setting. We have also worked hard to make our program easily accessible with many online components."

One physician-student observed, "If you are not in medical practice for a long time, it makes you a little uneasy to come back again. The program gave me a sense of security, encouragement, and support, and that helped."

The Refresher/Re-entry Course, which is taught by College of Medicine faculty, offers four learning modules and formats: a structured on-site preceptorship, an online medical update curriculum and assessment, an online clinical skills curriculum and assessment, and targeted remediation and training in medical documentation; all have online and on-site components.

The preceptorship is offered at Hahnemann University Hospital in internal medicine, pediatrics, surgery, ob/gyn, and since September 2012, anesthesiology. The course is offered in six-week blocks; most physicians enroll for 6, 12,

or 18 weeks. The rigorous curriculum includes conferences, rounds, assignments, outpatient clinics, case presentations, and one-to-one meetings with a preceptor.

The online medical update module includes more than 100 lectures in internal medicine as well as electives in adolescent medicine, critical care, healthcare policy, ophthalmology, and radiology.

The online clinical skills module is an interactive program that individually assesses and provides an educational prescription in communication skills and history taking customized for each physician-student. Using computers with webcams, physician-students participate in online video encounters with experienced standardized patients.

Participants are evaluated using a series of assessments before, during, and after the course. Several assessments are administered using the Post-Licensure Assessment System exams developed by the Federation of State Medical Boards and National Board of Medical Examiners.

Varjavand notes a recent trend among hospital credentialing committees, which increasingly require physicians who have been inactive for longer than two years to complete a refresher course before being hired. Time out without retraining raises concerns about competence and patient safety, Varjavand says.

"Also physicians' confidence deteriorates when they are away from practice for a few years," she adds. "Participants say that our refresher course really helps them to regain it."

The reasons why physicians decide to return to practice vary, according to Varjavand. Some who retired early have a change of heart, while others who have been working in a nonclinical position in industry miss seeing patients. Some physicians who have been disciplined by their state boards require remedial education to enhance their skills.

"We are changing people's lives with this course," says Varjavand. "Some of these physicians have been out of work, completely done with medicine with no hope of coming back, and now they are reenergized, highly motivated and they do extremely well. On top of that, they give back to the College because when they rotate with other students and residents, they bring with them clinical experience that is different from the experience of academic faculty."

Varjavand emphasizes the growing importance of refresher courses, given the looming shortage of physicians nationwide combined with changing practice patterns. In a 2008 survey about practice issues, 20 percent of the approximately 12,000 practicing physicians in the U.S. who responded said they planned to reduce patient loads, 10 percent will work part time, and 13 percent will take a nonclinical position in health care. "It is important to our national health care to create effective programs for facilitating return of physicians," she says.

For more information, visit [drexelmed.edu/PhysicianRefresher](http://drexelmed.edu/PhysicianRefresher), email [nielufar.varjavand@drexelmed.edu](mailto:nielufar.varjavand@drexelmed.edu), or call 215-762-2580.



Dr. Goldsmith

**Donald P. Goldsmith, M.D.**, professor of pediatrics, has been designated a master of the American College of Rheumatology. Bestowed on no more than 15 members per year, the honor recognizes outstanding contributions in the field of rheumatology through scholarly achievement or service to patients, students, and profession.



Dr. Gracely

**Ed J. Gracely, Ph.D.**, associate professor, Department of Family, Community & Preventive Medicine, provided the questions and answers for "7 Questions to Ask While Reading Health Research" published on WHY?Y's NewsWorks website.



Dr. Joshi

**Suresh G. Joshi, M.D., Ph.D.**, director of surgical infections research, and assistant professor, Departments of Surgery, and Microbiology & Immunology, was a member of the organizing committee for the International Conference on Surgery and Transplantation, held in San Antonio, Texas, November 26-28, 2012. In addition, he has been appointed editor of "Surgical Infection Diseases," a special issue of the journal *Surgery: Current Research* to be published in 2013. Joshi was also invited by the International Neurotoxins Association to give a talk, "Botulinum Toxin Detection and Proteolytic Activity," at Toxins 2012, the association's conference held in Miami, December 5-8, 2012.



Dr. Brooks

Drs. Joshi (principal investigator), and **Ari Brooks** (co-PI), associate professor and director of research, Department of Surgery, and Gregory Fridman (co-PI), School of Biomedical Engineering, Science & Health Systems, have been awarded a Coulter Foundation seed grant for "Investigations on Non-Thermal Plasma-activated Antimicrobial Wound Dressing."



Dr. Clifford



Dr. Reginato

**Diane Kambach, Ph.D.** '12, Molecular Pathology Program; **Valerie Sodi, Ph.D. candidate**, Molecular & Cell Biology & Genetics Program; **Jane Clifford, Ph.D.**, professor and chair; and **Mauricio Reginato, Ph.D.**, associate professor, all in the Department of Biochemistry & Molecular Biology, are authors of "ErbB2, FoxM1, and 14-3-3ζ Prime Breast Cancer Cells for Invasion in Response to Ionizing Radiation" published in the January 14 edition of *Oncogene*. This work was supported by College of Medicine CURE grants.



Dr. Kralick

**Francis Kralick, D.O.**, associate professor of neurosurgery, was invited to the faculty of AOSpine North America in New Orleans, January 11, for the course "Principles and Treatment of Spinal Disorders for Residents." He presented on the topics of evaluation and treatment of a thoracolumbar trauma and the treatment of herniated nucleus pulposus.

## Farabaugh: Trauma Team Leader in Afghanistan

Eric A. Farabaugh, M.D., assistant professor of emergency medicine, is currently deployed to Afghanistan as part of the Navy Reserve. A 2003 graduate of the College, he is a lieutenant commander and serves as a trauma team leader with NATO Role 3 Multinational Medical Unit at Kandahar Airfield. His team, one of four at the hospital, consists of two nurses, two corpsmen, and himself. The team is responsible for the care of wounded soldiers and civilians from the time they enter the trauma bay until they are moved to the operating room.

The unit's mission is to provide medical care to U.S. and coalition forces, as well as members of the Afghan National Army, National Police, and civilians wounded in the ongoing conflict. Kandahar Airfield is the busiest single runway operation in the world, and NATO's largest air base.

**Dr. Farabaugh's Emergency Medicine colleagues recently sent him a College of Medicine sweatshirt.**





**Dr. Kresh**

**J. Yasha Kresh, Ph.D.**, professor of cardiothoracic surgery and medicine, and research director for cardiothoracic surgery, was invited to serve on the NIH Special Emphasis Panel for Surgical Sciences, Biomedical Imaging, and Bioengineering Study Section to provide expert

review of multidisciplinary applications in the areas of developmental tissue engineering, cardiac regenerative therapies, artificial organs, circulatory mechanical assist devices, surgical wound healing, and trauma.

**Daniel A.N. Mascarenhas, M.D.**, clinical professor of medicine, is the senior author of "Reuse of Explanted, Resterilized Implantable Cardioverter-Defibrillators: A Cohort Study" in *Annals of Internal Medicine*, October 16, 2012, Vol. 157, No. 8. The paper was the subject of an editorial in the same issue.



**Dr. Simmons**



**Dr. Gadegbeku**

**Drs. B. Brent Simmons**, assistant professor; **Annette Gadegbeku**, assistant professor; and **Barbara Cirignano**, former resident, all in the Department of Family, Community &

Preventive Medicine, published "Transient Ischemic Attack: Part I. Diagnosis and Evaluation" and "Transient Ischemic Attack: Part II. Risk Factor Modification and Treatment" in the September 15, 2012, issue of *American Family Physician*.



**Dr. Sorrentino**

**David F. Sorrentino, M.D.**, assistant professor of pediatrics, was honored by the March of Dimes Central Pennsylvania division at an event on November 12, 2012. He is chief of neonatology and medical director of Reading Hospital's neonatal intensive-care unit, which was expanded from 22 to 30 beds last year. He joined Reading as part of the hospital's partnership with St. Christopher's Hospital for Children.



**Dr. Sudak**

**Donna M. Sudak, M.D.**, professor of psychiatry, presented grand rounds at Delaware State Hospital on December 11, 2012. The topic was "Evidence Based Psychotherapy for Major Depression."

On February 1, she presented a one-day workshop, "When the Going Gets Tough: Practical Applications of CBT and DBT in Suicidal Patients," at Michigan State University. She also presented grand rounds at the University of Vermont, "Making Psychotherapy Supervision More Effective," on February 8.



**Dr. Varjavand**

**Nielufar Varjavand, M.D.**, associate professor of medicine and program director of the Drexel Medicine Physician Refresher/Re-entry Course, published "Physician Refresher/Re-entry Course: To Regain Up-to-Date Clinical Knowledge & Skills" in the Winter 2013 issue of

*The Pulse*, the official online publication of the National Association of Physician Recruiters.

# Calendar

## March

*National MS Education and Awareness Month*

- 3 **American Academy of Dermatology Reception**  
Loew's Miami Beach Hotel, 6-7:30 p.m.
- 6 **Harrisburg Area Alumni Reception**  
Hilton Harrisburg, 6-8 p.m.
- 10 **American College of Cardiology Reception**  
JW Marriott Union Square, San Francisco, 6-7:30 p.m.
- 13 **San Diego Area Alumni Luncheon**  
Fleming's, San Diego, 11:30 a.m.-1:30 p.m.
- 15 **Match Day**  
Queen Lane Campus, 11:45 a.m.  
For Class of 2013 members only.  
Contact: shay.myers@drexelmed.edu
- 20 **Medical Student Research Day**  
Queen Lane Campus, 1-5 p.m.  
Information: See page 8.
- 21 **American Academy of Orthopaedic Surgeons Reception**  
Palmer House Hilton, Chicago, 6-7 p.m.
- 30 **National Doctors' Day**  
doctorsday.org

## April

*National Alcohol Awareness Month*

- 10 **Golden Apple Ceremony**  
Queen Lane Campus (time TBA)  
Contact: shay.myers@drexelmed.edu
- 29 **Woman One Award Ceremony**  
Rittenhouse Hotel  
Contact: iwhl@drexelmed.edu or 215-991-8190

## May

*ALS Awareness Month*

- 3-4 **Alumni Weekend**
- 15-17 **50-Year Reunion**
- 17 **Commencement**

## June

*Cataract Awareness Month*

- 18 **Manuel Stamatakis Golf Classic** See page 7.

**For information about specialty receptions or alumni events, please call 215-255-7345 or 866-373-9633 (toll-free), or email [medical.alumni@drexel.edu](mailto:medical.alumni@drexel.edu).**

# College of Medicine CURE Grants Awarded

A scientific review panel met on November 13, 2012, to evaluate applications for funding through the College of Medicine's FY2013 Commonwealth Universal Research Enhancement program. (The internal CURE grant program is funded each year through Pennsylvania's share of the tobacco companies' settlement.) The panel comprised faculty from the medical school and from other Drexel University schools and colleges. The following were selected to receive awards:



## **"Role of MeCP2 in Pain and Its Regulation by MicroRNAs"**

PI: Seena Ajit, Ph.D.,  
Pharmacology & Physiology

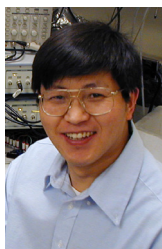
Co-investigator: Ahmet Sacan, Ph.D.,  
Biomedical Engineering



## **"Tumor Characterization in Breast Carcinoma Using Computerized Image Analysis"**

PI: Fernando Garcia, M.D.,  
Pathology & Laboratory Medicine

Co-investigators: David Breen, Ph.D.,  
Computer Science, College of  
Engineering; Mark Zarella, Ph.D.,  
Pathology & Laboratory Medicine



## **"Phenotypic Diversity of Neurons Modulating Executive Function in ADHD"**

PI: Wen-Jun Gao, Ph.D.,  
Neurobiology & Anatomy

Co-investigator: Barry Waterhouse,  
Ph.D., Neurobiology & Anatomy



## **"Interaction of Interstitial Flow and ErbB2 Signaling in Breast Cancer Invasion"**

PI: Mauricio Reginato, Ph.D.,  
Biochemistry & Molecular Biology

Co-investigator: Adrian Shieh, Ph.D.,  
Biomedical Engineering

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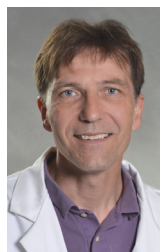
The Office of the Vice Dean for Research awarded additional funding for four groups that passed a previous peer-review screening through the Multi-Investigator Research Program Planning Grants process. The awarded projects are as follows:



## **"Making a Mouse to Study Hereditary Spastic Paraplegia"**

PI: Peter Baas, Ph.D.,  
Neurobiology & Anatomy

Co-investigator: Terry Heiman-Patterson,  
M.D., Neurology



## **"An Analysis of Mitochondrial Mutation and HIV Antiretroviral Therapy"**

PI: Christian Sell, Ph.D.,  
Pathology & Laboratory Medicine

Co-investigators: Jeffrey Jacobson, M.D.,  
Division of Infectious Diseases and HIV  
Medicine; David Libon, Ph.D., Neuro-  
logy; Michael Nonnemacher, Ph.D., Vanessa Pirrone, Ph.D.,  
and Brian Wigdahl, Ph.D., Microbiology & Immunology;  
Claudio Torres, Ph.D., Pathology & Laboratory Medicine



## **"Irreversible HIV-1 Inactivation for AIDS Intervention and Prevention"**

PI: Irwin Chaiken, Ph.D.,  
Biochemistry & Molecular Biology

Co-investigators: Jeffrey Jacobson, M.D.,  
and Michele Kutzler, Ph.D., Division of  
Infectious Diseases & HIV Medicine



## **"Innate Immunity and Bacterial Pathogenesis"**

PI: Shira Ninio, Ph.D.,  
Microbiology & Immunology

Co-investigators: Carol Artlett, Ph.D.,  
Peter Katsikis, M.D., Ph.D., Sandhya  
Kortagere, Ph.D., Fred Krebs, Ph.D.,  
Yvonne Mueller, Ph.D., and Richard Rest,  
Ph.D., all Microbiology & Immunology

# From Volunteer to Physician: Danielle Belardo, Class of 2014

Danielle Belardo didn't know she wanted to be a doctor. Born into a non-medical family, she says she "never felt any sort of push to go into medicine or even considered it much." Enrolled at the University of Delaware, she was taking classes in psychology and fashion merchandising when she started the volunteer work that led to her calling and has been part of her life ever since.

Looking to do some service work during college, Belardo began volunteering at the Alzheimer's Association. Then she became involved with the Leukemia & Lymphoma Society's Light the Night program to raise funds for the pediatric oncology unit at duPont Children's Hospital. While volunteering, she says, "I decided late in the game that I wanted to go to medical school."

It was too late to complete her medical school prerequisites as an undergraduate, so Belardo looked for a structured post-baccalaureate program, hoping to find one in Philadelphia that was affiliated with a medical school. The College of Medicine's Evening Post-Baccalaureate Premedical Certificate Program fit the bill. "It was associated with a medical school and Hahnemann was right there," she says. "I thought it would be very convenient to get involved in research and volunteering because it was all in one place."

Belardo noted that some other post-baccalaureate premedical programs put their students in large classes with undergraduates, whereas the Drexel program is small and focused. "My year it was maybe 20 students. You get to know the professors, and being from a non-science background, it's really helpful to have more personal attention and guidance."

Belardo also appreciates the fact that students have the opportunity to know the larger Drexel community. "I emailed Ari Brooks [associate professor of surgery] when I began my post-bacc program and said I was interested in doing research, and he let me join his lab." She worked on a study of the temporal and spatial expression of transcription factors Oct4 and Sox2 in zebrafish larvae, and eventually presented a poster at a research symposium at Harvard.

One might think Belardo was fully occupied with research and her prerequisites, but she hadn't left her desire to volunteer behind. First, she ran the healthy weight project for the homeless health initiative of The Children's Hospital of Philadelphia. Then, she organized a team to enter the Broad Street Run, raising nearly \$2,000 for breast cancer research in Brooks's lab. (In her first year of medical school, she did it again.)

Belardo and classmates created a program with associate professor Dr. Laurie Varlotta of the Pediatric Cystic Fibrosis Center at St. Christopher's Hospital for Children. The students raised funds for small practical items for families of CF patients, such as parking tokens and gas gift cards. Out of that grew another well-received program, which Belardo developed with a friend who is a middle-

school teacher. The middle-schoolers learned about CF, raised funds to buy small gifts, and sent them to age- and gender-matched CF patients with semi-personalized letters (no patient names because of HIPAA).

Under the Drexel umbrella, Belardo got involved with the Chinatown Clinic, a free community clinic directed by Dr. Vincent Zarro and run by Drexel medical students. "I applied to be a doctor-recruitment coordinator, and they allowed me even though I wasn't a medical student," she relates. "I didn't have any patient contact, but it gave me the opportunity to be involved with the Health Outreach Project board [which runs the clinics]."



Danielle Belardo in a simulation center in New College Building

Belardo shrugs off any credit for what she does. "I owe it to the opportunities available through the premed program. It was so simple to volunteer with Drexel. We were under the post-bacc umbrella, but we were part of the whole College of Medicine. The faculty care about the students, so it was easy to reach out to them."

By the time Belardo became a first-year medical student, she had logged nearly two years in the lab as well as time shadowing Ari Brooks and, through him, other surgery faculty. "These attendings really took me under their wing," she says. "I had so much clinical exposure before I even began medical school."

Now, as a third-year student, Belardo's days are all about clinical work. She has rotated at many different clinical sites, including Abington, Easton, Hahnemann, and Capital Health in New Jersey, as well as Drexel Medicine at Manayunk.

"The faculty has been great everywhere. I have not met an attending or resident anywhere who didn't love teaching," she reports.

Time permitting, when she is in Philadelphia she volunteers of course – now at the Eliza Shirley House, another student-run clinic of the Health Outreach Project.

## '60s

**Juel Pate Borders-Benson, M.D., WMC '60** was honored with a Lifetime Achievement Award from *Black Health Magazine* at the National Black Women's Health Awards Banquet.

**Joel Schwartz, M.D., HU '65** a board-certified child, adolescent, and adult psychiatrist, as well as a certified child, adolescent, and adult psychoanalyst, published a book about prostate health care, *To Pee or Not to Pee: The Prostate Guide for the Common Man* (Infinity Publishing, 2012). He serves on the board of directors of the Association for Applied and Therapeutic Humor.

**Richard Satava, Jr., M.D., HU '68** presented a two-day lecture series at the King Saud University in Saudi Arabia, "Using Simulation for Teaching & Assessment – Clinical Skills Curriculum Development." Satava is emeritus professor of surgery at the University of Washington Medical Center in Seattle and a senior science adviser at the U.S. Army Medical Research and Materiel Command in Fort Detrick, Md.

## '70s

**Thomas Newmark, M.D., HU '70** is president-elect of the American Association of Psychiatric Administrators, and is currently president of the International Society of Sports Psychiatry.

A distinguished life fellow of the American Psychiatric Association, he served as chief of psychiatry at Cooper University Hospital for 14 years. He is now professor of psychiatry at the new Cooper Medical School of Rowan University.

**C. Richard Schott, M.D., HU '70** was installed as the 163<sup>rd</sup> president of the Pennsylvania Medical Society. Schott has served as chairman of the Division of Internal Medicine and chief of cardiology at Riddle Memorial Hospital in Media, Pa. He is in private practice at Cardiology Consultants of Philadelphia in Media, Pa.

**Bruce Levy, M.D., HU '71** the CEO of Austin Gastroenterology in Austin, Texas, was listed as one of "176 Physician Leaders in the Ambulatory Surgery Center Industry" by *Becker's ASC Review*. He also serves on the Texas Ambulatory Surgery Center Society board of directors. He is a board-certified anesthesiologist.

**Beth Piraino, M.D., MCP '77** has been appointed president of the National Kidney Foundation. She is a tenured professor of medicine and associate dean of admissions and financial aid at the University of Pittsburgh School of Medicine.

**Arthur Labovitz, M.D., HU '78** professor of medicine and director of cardiac imaging, University of South Florida, Tampa, has been named chair of the Department of Cardiovascular Sciences at USF. He joined USF Health in February 2011 from St. Louis University.

**Frederick J. Denstman, M.D., HU '79** a colorectal surgeon who practices in Newark, Del., was named a 2012 Top Doctor in *Delaware Today* magazine.

**Shirley Neal Parker, M.D., HU '79** an obstetrician/gynecologist with the Family HealthCare Network in Porterville, Calif., earned membership in *Stanford Who's Who*.

## '80s

**William Constad, M.D., MCP '80** an ophthalmologist, was honored as a "Man of Vision" by the Lions Eye Bank of New Jersey. He is the organization's medical director, as well as a clinical professor of ophthalmology at UMDNJ–New Jersey Medical School. He is in private practice with Hudson Eye Physicians & Surgeons and in his own practice in Millburn, N.J.

**Rebecca Jaffe, M.D., MCP '80** has been elected to the board of directors of the American Academy of Family Physicians. She is the owner of Rebecca Jaffe M.D. and Associates, a three-physician private practice specializing in family and sports medicine; serves as an instructor in the Department of Family Medicine at Jefferson Medical College; and is a member of the Department of Family & Community Medicine at Christiana Care Health System in Wilmington, Del. She earned a Master of Public Health from Drexel's School of Public Health in 2010.



**A. Jill Leibman, M.D., MCP '80** has been promoted to professor of clinical radiology at Albert Einstein College of Medicine. She practices mammography at Jacobi Medical Center in New York and is a fellow of the Society of Breast Imaging.

**Ted Yaeger, M.D., HU '81; Hahnemann Resident '85** a board-certified radiation oncologist, is the director of the radiation oncology program at the McCreary Cancer Center in Lenoir, N.C., a division of Caldwell Memorial Hospital. The center opened in fall 2012. He is an associate professor of radiation oncology at Wake Forest School of Medicine.

**Steven M. Katz, M.D., HU '82** an anesthesiologist who practices in Newark, Del., was named a 2012 Top Doctor in *Delaware Today* magazine.

**Beth R. Nalitt, M.D., HU '85** has been elected governor-elect designee of the New Jersey Northern Chapter of the American College of Physicians, beginning in April. Nalitt is an attending physician at Barnabas Health and Overlook Hospital and has a private internal medicine practice at Millburn Primary Care in Millburn, N.J.





**David J. Shulkin, M.D., MCP '86** president of Morristown Medical Center and vice president of Atlantic Health System, has been named chairman of the board of the New Jersey Council of Teaching Hospitals. He is also administrator of the Atlantic Accountable Care Organization. He joined Atlantic Health System in January 2010 from Beth Israel Medical Center in Manhattan.

**Stephen A. Chidylo, M.D., HU '87** a board-certified plastic, cosmetic, reconstructive, and maxillofacial surgeon, was chosen as a Top Doctor by *U.S. News & World Report*, and named to New Jersey Top Docs (2012-13) and Castle Connolly Top Doctors of the New York Metropolitan Area 15<sup>th</sup> edition. He is a member of the faculty of AO North America, Craniomaxillofacial Surgery, and serves on the voluntary editorial staff of *Craniomaxillofacial Trauma and Reconstruction*.

**F. Todd Harad, M.D., HU '87** a urologist who practices in Newark, Del., was named a 2012 Top Doctor in *Delaware Today* magazine.

**Helen Goldberg, M.D., MCP '88** a medical oncologist, has completed a two-year fellowship in integrative medicine under Dr. Andrew Weil at the Center for Integrative Medicine at the University of Arizona College of Medicine. She has opened an integrative oncology practice in San Antonio, Texas, called Blue Sage Center for Integrative Oncology.

**David A. Paul, M.D., HU '88** a neonatologist, was named a 2012 Top Doctor in *Delaware Today* magazine. Paul is an attending neonatologist at Christiana Hospital and the duPont Hospital for Children in Newark, Del. He is director of neonatal research at Christiana Care Health Services and associate professor of pediatrics at Thomas Jefferson University.

**Timothy L. Jackson, M.D., HU '89** was inducted as a fellow of the American College of Physicians in internal medicine. Jackson practices at the Heritage Valley Medicine Group in Beaver, Pa. He is a medical director at Gentiva/Odyssey Hospice in Crafton; Franciscan Manor in Beaver Falls; and Home Health in Monaca.

**Chong Park, M.D., HU '89** has been named medical director of the Heart Institute at Jefferson Regional Medical Center in Jefferson Hills, Pa. Park is a cardiothoracic and vascular surgeon who has long been associated with the Park Cardiothoracic and Vascular Institute at the medical center.

## '90s

**Stephen Kaminski, M.D., HU '92** was named one of Cottage Health System's 2012 Physicians of the Year. A native of Allentown, Pa., Kaminski has been a critical care surgeon at Santa Barbara Cottage Hospital in Santa Barbara, Calif., since 2011.

**Amy Burhanna, M.D., HU '93** board-certified in internal medicine and cardiovascular disease, joined Cape Regional Physicians in Cape May Court House, N.J. She and her sister share a private practice, Coastal Cardiology, also in Cape May Courthouse.

**Kerry A. Kirifides, M.D., HU '93** a pediatrician who practices in Newark, Del., was named a 2012 Top Doctor in *Delaware Today* magazine.

**Molly A. McBride, M.D., MCP '94** was named a 2012 Top Doctor in *Delaware Today* magazine. McBride, who is board certified in obstetrics and gynecology, practices at The Woman's Place, a gynecological practice in Wilmington, operated by Saint Francis Hospital.

**Kenneth E. Morgenstern, M.D., MCPHU '95; MCPHU General Surgery Intern** has received staff privileges at the Doylestown Hospital, specializing in oculoplastic surgery. Morgenstern is certified by the American Board of Ophthalmology. He practices at Nevyas Eye Associates in Bala Cynwyd, Pa.

**Sachin Shah, M.D., MCP '98** director of emergency services at Nyack Hospital in Nyack, N.Y., was named a Top Doc of New York in *Hospital Newspaper* magazine.

DREXEL UNIVERSITY  
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YEAR REUNION

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## '00s

**Rick Hammer, M.D., MCPHU '00** was promoted to vice president of clinical market development at Capital BlueCross in Harrisburg, Pa. Hammer oversees accountable-care arrangement initiatives and develops clinical capabilities.

**Richard Neff, M.D., MCPHU '00** has been elected president of the medical staff at Flagstaff Medical Center, the tertiary care center for the Northern Arizona region. He has worked at FMC as a hospitalist since moving to Arizona in 2006.

**Elizabeth Tillman, M.D., MCPHU '01** has joined The Hospital of Central Connecticut in New Britain. Most recently, she was a hospitalist with IPC: The Hospitalist Company. She also worked at Bristol Hospital where she was medical director, hospitalist practice; chairman, Section of Inpatient Medicine; and medical director, hospice.

**Jon Kittredge, M.D. '02** a vascular surgeon, joined Delaware Bay Surgical Service in Lewes, Del. He does surgery and vascular procedures at Beebe Medical Center, also in Lewes.

**Judy C.Y. Lin, M.D. '02** a board-certified general internist, has joined ColumbiaDoctors of the Hudson Valley in Suffern, N.Y. Lin was previously a primary care physician at Hudson Valley Medical Associates in Pomona, N.Y., and she was the first full-time medical director for United Hospice of Rockland.

**Pradeep Nair, M.D. '03** an interventional cardiologist, joined Somerset Hospital in Somerset, Pa., in January 2013. He previously practiced at Excelsa Health Cardiology in the Greensburg, Pa., area. Nair is board certified in medicine, cardiology, interventional cardiology, echocardiology, and nuclear cardiology.

**Toby Genrich, M.D. '04** has returned to Colorado Springs, Colo., his hometown, to practice obstetrics and gynecology at Academy Women's Healthcare. A recipient of the Health Professions Scholarship from the U.S. Air Force, he completed his residency in obstetrics and gynecology in the Air Force at Wright Patterson Medical Center/Wright State University in Dayton, Ohio.

**Badar Jan, M.D. '04** has joined the cosmetic surgery practice of Kevitch & Chung Aesthetic Surgery Associates in Allentown, Pa. He recently completed his plastic and reconstructive surgery residency at the University of Texas Health Science Center in Houston.

**Emiliano A. Tatar, M.D. '04** is now the head of Roxborough Pediatrics, an Einstein Healthcare Network practice in Roxborough, Pa. Tatar is a native of Argentina and has also lived in Israel.

**Chi D. Ha, M.D. '05** a facial plastic and reconstructive surgeon, has opened a cosmetic surgery center, Highly Artistic Surgery, in Poway, Calif. He is a clinical instructor in head and neck surgery at Stanford University College of Medicine.

**Kristen Halm, M.D. '05** a colon and rectal surgeon, has joined the staff at Geisinger Medical Center and Geisinger-Scenery Park in State College, Pa.

**Adam Saad, M.D. '05; Drexel/Hahnemann General Surgery Resident '10** completed his residency in plastic surgery at Louisiana State University of the Health Sciences in New Orleans and has joined Shore Medical Center of Somers Point, N.J. He practices at the Plastic Surgery Center in Egg Harbor Township.

**Cara Guilfoyle, M.D. '06** a breast surgeon, has joined Coordinated Health and has begun seeing patients at Coordinated Health's Cetronia Road campus in Allentown, Pa.

**Elizabeth Purcell, M.D. '08** joined Women's Health Connecticut Gynecology & Obstetrics in Hartford, Conn., in 2012. She completed her residency in gynecology and obstetrics at Johns Hopkins.



**Raza Shah, M.D. '08** chief resident of ophthalmology in the Drexel/Hahnemann Ophthalmology Residency Program, was inducted into the Blue Mountain High School All-Sports Hall of Fame (see also Hassan Shah, M.D. '09). Shah, who also completed a post-baccalaureate certificate at Drexel in 2003, has co-authored more than 40 book chapters and hopes to pursue a fellowship in vitreoretinal disease.

**Melanie Sobel, M.D. '08** an instructor of ophthalmology at the Wilmer Eye Institute, John Hopkins Medicine, joined the institute's Columbia, Md., practice.

**Hassan Shah, M.D. '09** a resident at Albert Einstein Medical Center for Orthopedic Surgery, was inducted into the Blue Mountain High School All-Sports Hall of Fame. Among other sports accomplishments, he teamed with his brother Raza, class of 2008, to win the Pennsylvania Interscholastic Athletic Association doubles tennis title.

## '10s

**Kevin M. Bernstein, M.D. '11** a lieutenant in the U.S. Navy and a second-year family medicine resident at Naval Hospital Pensacola, in Florida, is the resident member on the board of trustees of the American Academy of Family Physicians Foundation.

**Benita Tjoe, PBC '11; M.S. '12** entered the College of Medicine at Northeast Ohio Medical University in Rootstown, Ohio.

**Diane Kambach, Ph.D. '12** See page 12.

## Former Interns, Residents, and Fellows

(in alphabetical order)

**Amy J. Aronsky, D.O.; Pulmonary Disease, Critical Care Medicine, and Sleep Medicine Fellow, MCP '98** has joined the medical staff at Capital Health Center for Sleep Medicine. She also practices at the Comprehensive Sleep Associates of New Jersey in Hamilton. She was previously the medical director of the Center for Sleep Disorders at St. John Medical Center in Longview, Wash. She is board certified in sleep medicine.

**Barbara Cirignano, M.D.; Family Medicine Resident '12** See *Simmons*, page 13.

**Edwin DeJesus, M.D.; Infectious Diseases Resident, MCP '93** a hepatitis C and HIV specialist, was featured in the "Finest Physicians" section in *Orlando Magazine*. He is the medical director at Orlando Immunology Center, Orlando, Fla.; partner at Infectious Disease Consultants; and assistant professor of medicine at the University of Central Florida College of Medicine.

**Alaa El-Gendy, M.D.; Pulmonary Disease and Critical Care Medicine Fellow, MCPHU '98** celebrated the 10<sup>th</sup> anniversary of his practice, Florida Lung & Sleep Associates in Lehigh Acres, Fla.

**Richard Iorio, M.D.; Orthopedic Surgery Resident, HU '91** was appointed the William and Susan Jaffe Professor of Orthopaedic Surgery and chief, Division of Adult Reconstructive Surgery, at the New York University Langone Medical Center.

## In Memoriam

**Alexander F. Amadio, M.D., HU '54**, October 30, 2012

**Gregory J. Bauer, M.D., HU '89**, August 22, 2012

**Laurence E. Lundy, M.D., HU '54**, November 8, 2012

**Irwin H. Marill, M.D., HU '54**, August 28, 2012

**Deon Patten, M.D., M.P.H., WMC '52**,  
November 21, 2012

**Derle R. Riordan, M.D., HU '56**, November 27, 2012

**James A. Shaver, M.D., HU '59**, April 13, 2012

**Herbert S. Stein, M.D., HU '58**, December 30, 2012

**Luis J. Torres-Oliver, M.D., HU '44**, November 22, 2012

**John H. Walsh, Jr., M.D., HU '60**, November 25, 2012

**Sidney Wolan, M.D., HU '61**, May 29, 2012

**Terrence P. Lenahan, M.D.; Pulmonary and Critical Medicine Fellow, HU '93** has joined the medical practice Delta Medix of Scranton, Pa. He is vice chair of medicine, director of the intensive care unit, and chief of the pulmonary/critical care service at the Regional Hospital of Scranton.

**Ayaz Matin, M.D.; Internal Medicine Resident, HU '11** has joined St. Luke's University Health Network in the St. Luke's gastroenterology specialists practice in Bethlehem, Pa.

**Bjorn Miller, M.D.; Emergency Medicine Resident, MCPHU '04** joined Nason Medical Center in Charleston, S.C. He is board certified in emergency medicine and is also certified in emergency medicine bedside ultrasound.

**Sion Nissim Soleymani, M.D.; Resident, HU '62** a fellow of the American College of Surgeons, retired after 50 years of practicing medicine. He was on staff at St. Mary Hospital in Livonia, Mich., Sinai Grace Hospital in Detroit, and several other hospitals. His wife, **Elaine Soleymani, M.D., WMC '62**, a family practice doctor, shared an office with him.

## WE WANT TO HEAR FROM YOU!

Please send your professional accomplishments and achievements to *Pulse* at [pulse@drexelmed.edu](mailto:pulse@drexelmed.edu). The Drexel University Online Alumni Directory ([www.alumniconnections.com/olc/pub/DXU/](http://www.alumniconnections.com/olc/pub/DXU/)) allows you to post and view more informal class notes, search for friends, and register for permanent email forwarding. Be sure to visit the directory often and keep your information up to date. If you have any questions, please contact the Office of Alumni Relations at [medical.alumni@drexel.edu](mailto:medical.alumni@drexel.edu) or 866-373-9633.



## The Fine Art of Imaging

Jatin Patel, M.D., a second-year rheumatology fellow, has been awarded the grand prize in the American College of Rheumatology's annual image competition. The winning image, which depicts arterial aneurism in Takayasu arteritis (vasculitis), was chosen from among 175 contest submissions and will eventually be included in the organization's Rheumatology Image Bank, one of the preeminent medical image collections in the world ([images.rheumatology.org](http://images.rheumatology.org)). The image will be published in the journal *Arthritis & Rheumatism*, and Patel will receive complimentary registra-

tion and accommodations for the rheumatology organization's next conference.

Patel created the image with Dr. Khuram Kazmi, a faculty member in the Department of Radiology. The image is a three-dimensional CT scan of the neck of a young asymptomatic patient. The volume-rendered image demonstrates the osseous structures in white. The left common carotid artery, which demonstrates marked fusiform dilatation, is depicted in beige. Takayasu arteritis is a life-threatening disease if not treated in time.

**This prize-winning 3D CT scan shows Takayasu arteritis. The three-dimensional reconstruction was performed on an independent Vitrea workstation. The osseous structures are in white. The left common carotid artery, which demonstrates marked fusiform dilatation, is in beige.**

