Preclinical Imaging Lab Opens at Vontz Facility Offers Non-Invasive Services for Better Collection of Basic Research Data

By Amanda Harper
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The UC College of Medicine has added a dedicated preclinical imaging center to its roster of shared research resources: the Vontz Core Imaging Lab (VCIL). Located in the Vontz Center for Molecular Studies, the preclinical imaging center offers non-invasive imaging services, performed on some of the most advanced equipment available. Any researcher affiliated with UC can apply to use the facility for approved research projects. A collaboration between the departments of radiology and cancer and cell biology, the VCIL is equipped with multimodal systems tailored specifically for use in small animals and capable of 3-D imaging and nuclear medicine techniques, including computed tomography (CT), positron emission tomography (PET), single photon emission tomography (SPECT), X-ray, fluorescence and biodistribution.

Lisa Lemen (left), imaging physicist for the preclinical imaging facility, and associate professor of radiology, says the facility opens up significant possibilities to expand our research. “This will most definitely improve access to care for patients in this area,” she says. Cardiac services available include inpatient congestive heart failure care, cardiac imaging, electrocardiology and coronary and peripheral angioplasty. The study allows smaller community hospitals to provide advanced catheter-based therapies to local patients and will help determine if angioplasty success and complication rates are the same at hospitals with and without cardiac surgery capabilities. “This trial could greatly impact the future of cardiac care at smaller community hospitals, helping patients receive the care they need in a more timely manner closer to home,” Lemen says. More on this story, visit healthnews.uc.edu.

West Chester Hospital Part of National Clinical Trial Examining the Outcomes of Cardiac Procedures

By Katie Pence
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West Chester Hospital and UC Health cardiologists have been selected to participate in a national clinical trial looking at whether or not there are differences in the outcomes of angioplasty when performed in hospitals that do not offer cardiac surgery versus hospitals with heart surgery capabilities.

“Cardiologists with UC Health, Ohio Heart and Vascular Center and Middletown Cardiovascular Associates will be providing coronary angioplasty and stenting services at West Chester, which did not previously offer these procedures,” Massoud Leesar, MD, medical director of the cardio catheterization lab at West Chester Hospital and UC Health cardiologist, says this study will not only provide important data for the treatment of cardiac patients but will also provide necessary care in a more convenient location. “This will most definitely improve access to care for patients in this area,” he says. Cardiac services available include inpatient congestive heart failure care, cardiac imaging, electrocardiology and coronary and peripheral angioplasty.

Tom and Carol Johnson of West Chester were the first patients accepted into the trial, which is sponsored by the University of California, San Francisco. The clinical trial is the largest study of its kind to determine if complication rates are the same at hospitals with and without cardiac surgery capabilities. “We chose this trial to be a part of because it’s really founded in our great relationship with the United States Air Force,” says Leesar.

The agreement is set to fund five research tasks in its beginning. But Lentsch says the work isn’t limited to those five tasks. “This agreement allows us to work with the Air Force to continually develop new ideas and new studies that can answer questions for which they need answers. As those projects develop, we can add them on under the umbrella of this agreement.”

“While we’ve created in terms of the Institute for Military Medicine and UC Health cardiology, says this study will not only provide important data for the treatment of cardiac patients but will also provide necessary care in a more convenient location. “This will most definitely improve access to care for patients in this area,” he says. Cardiac services available include inpatient congestive heart failure care, cardiac imaging, electrocardiology and coronary and peripheral angioplasty. The study allows smaller community hospitals to provide advanced catheter-based therapies to local patients and will help determine if angioplasty success and complication rates are the same at hospitals with and without cardiac surgery capabilities. “This trial could greatly impact the future of cardiac care at smaller community hospitals, helping patients receive the care they need in a more timely manner closer to home,” Lemen says. More on this story, visit healthnews.uc.edu.

A collaborative effort with the Department of Defense will be used to leverage the trial’s success and increase the job growth related to our research. We have a great capacity to do more research that is relevant to the military at UC.”

The agreement initially funds five research tasks:

- Studying the way aeromedical evacuation affects the body
- Researching the amount of oxygen needed when using an oxygen concentrator at altitude
- Researching the amount of oxygen victims of traumatic injuries need
- Studying the effect of task saturation on military medical teams treating injured personnel
- Evaluating video-assisted intubation devices

For more on this story, visit healthnews.uc.edu/findings.

$24 Million Grant From U.S. Air Force Boosts Research

By Katy Cosse
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UC’s Institute for Military Medicine will be able to continue and expand its research on combat casualty care and aeromedical evacuation through a new agreement with the United States Air Force. The award has a ceiling of $24 million to fund research housed at the institute, says Alex Lentsch, PhD, vice chairman for research in the department of surgery and director of the institute. While the Air Force has funded multiple projects in the past, he says this agreement allows for a direct and more efficient flow of research funds.

“What we’ve created in terms of the Institute for Military Medicine really is founded in our great relationship with the Air Force,” he says. “It runs very parallel with what we do as a department, in terms of our strengths in basic and clinical research.”

The agreement is set to fund five research tasks in its beginning. But Lentsch says the work isn’t limited to those five tasks.

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For more on this story, visit healthnews.uc.edu/findings.

Hybrids for the Hearing Impaired

By Katy Cosse
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For several decades, technology has successfully helped those with mild hearing loss using hearing aids and those with severe to profound hearing loss using cochlear implants. But for those in the middle—either with moderate hearing loss or loss in some frequency ranges but not others—long-term solutions have yet to be developed.

Now, researchers with the department of otolaryngology—head and neck surgery are participating in a national, multicenter trial studying the efficacy and safety of an investigational device combining two types of hearing loss technology.
New Orthopedic Surgeon Hopes to Inspire Women to Enter Specialty

By Angela Koenig
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When the newest member of the department of orthopedic surgery, Ying Chi, MD, says “We are definitely in the minority,” she isn’t speaking about her Chinese-American cultural heritage, she’s speaking about her gender.

“Orthopedic surgery is portrayed as a man’s field because of the power tools and the nature of the surgery, but I’ve only had great mentors who are encouraging and inspiring,” says Chi, who joined the department and UC Health Orthopedics and Sports Medicine in August 2010.

Upon completion of her general surgery residency at Loyola University Medical Center in Chicago, she went on to train at Henry Ford Hospital, where she was the only female orthopedic resident. A hand and microsurgery fellowship then took her to the University of California, Irvine-Kaiser Permanente.

Across the board, orthopedic surgery is a demanding and competitive field. But with estimates of less than 10 percent of women choosing the specialty, Chi sees the shortage as an opportunity, not a disparity.

“A lot of the perception has changed, and it’s changed for the better,” she says.

But her hope is to inspire others to look at the field as gender neutral. While UC Health chose her for her credentials, she says she chose UC due to the national reputation of the department’s chair, Peter Stern, MD, and the department’s exemplary team.

“What Chi brings to UC, says Stern, is diversity, outstanding training and unlimited energy.”

And with the construction of a new, permanent medical clinic, the College of Medicine Simulation Center celebrates 10 years of extension outreach.

By Katie Pence
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The College of Medicine Simulation Center will celebrate its 10th anniversary Wednesday, Oct. 26, from 4 to 6 p.m., in the MBE-C045. For more information, call (513) 558-7724.

Simulation Center Celebrates 10 Years, Extends Outreach

By Angela Koenig
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There is no substitute for real-life experience, unless you visit the Simulation Center in the UC College of Medicine, where real-life scenarios are replicated for educational purposes.

Formerly called the Center for Competency Development and Assessment (CCDA), the center is now in its 10th year of operation. To celebrate the anniversary and formalize the name change, the Simulation Center staff is hosting an open house from 4 to 6 p.m. Tuesday, Oct. 26, in the Medical Sciences Building, suite 1-350.

“We believe our new name allows people to know who we are and what we do — education through simulation,” says Michael Sostok, MD, professor of clinical medicine and assistant dean of medical education.

The center’s resources include high-fidelity human simulators, task trainers, which are models of bodily parts to teach medical procedures, and standardized patients, people who portray a patient for medical students, residents, nurses and others.

“These resources help students gain the confidence they need to develop clinical skills in a safe enviroment,” says Sostok.

In addition to providing a clinical teaching setting for all medical students, the center is used by residents, and nursing, pharmacy and allied health science faculty.

The open house is also a way to extend an invitation to educators outside the Academic Health Center, showing how the Simulation Center services can be adapted to assist learners in professions outside of medicine.

For more information or to register for the open house, visit medicine.uc.edu/simulation.

“The multimodal system allows us to capture mental types of images without having to move the subject,” adds Kathleen LaSance, who manages day-to-day operation of the facility.

“During processing, the different types of images can be superimposed to allow researchers to correlate physiologic and anatomic data relative to the study.”

The VCGs services are expected to be particularly valuable for cardiac and cardiovascular diseases, two of the College of Medicine’s core research focus areas.
Training Experiences Build Successful Physicians: Electrophysiologist a Pioneer in One-of-a-Kind Program

By Katie Pence
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Rena Mazraeshahi, MD, says his general cardiovascular diseases fellowship at UC is a time well thought of—a time when he learned a lot from a variety of well-known professionals.

But the work he observed from Mehran Attari, MD, and Alex Costea, MD, UC Health electrophysiologists, really persuaded him to look a little deeper into the field.

“We have two brilliant practicing electrophysiologists in Drs. Attari and Costea, who have been providing outstanding service to patients at UC Health University Hospital and the Cincinnati Veterans Affairs Medical Center,” he says. As of July 1, the division of cardiovascular diseases began an electrophysiology fellowship program. A one-year, Accreditation Council for Graduate Medical Education (ACGME)-accredited program, it is the only one of its kind in the Tri-state, and Mazraeshahi is its first fellow.

“The program provides training in managing patients with complex cardiac arrhythmias, performing a wide range of training for invasive and noninvasive cardiac, electrophysiologic and pacing procedures,” says Attari, director of the program.

UC Health electrophysiologists perform complex procedures including epicardial ablations (ablating occurring on the outside of the heart muscle), laser lead extraction (removal of the wire that delivers energy to a pacemaker or internal defibrillator using catheter guided lasers) and robotic catheter navigation.

“UC provides EP services to a very diverse patient population, which is a prerequisite for an academic training program,” says Mazraeshahi. “As the first fellow, I feel that I can help with the formation of the EP fellowship and make it a better training experience for myself and future trainees.”

“We hope this program adds to the reputation of UC, including the training of future physicans and heart care provided to patients locally and beyond,” adds Attari.

Program Gives Resident Physicians Medical Device Innovation Experience

By Amanda Harper
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Texas native Andrew Yoo, MD, never imagined himself living in Ohio.

But the UC department of surgery’s track record for turning out skilled surgeons paired with its proximity to a medical device industry heavyweight like Ethicon Endo-Surgery made training in Cincinnati a natural choice.

Yoo is currently serving in a medical innovation role at Ethicon Endo-Surgery. This new two-year program is a contracted cooperative program between Ethicon Endo-Surgery and the University of Cincinnati College of Medicine.

“This type of dual role—with one foot in the patient care realm and the other in the biomedical technology and implementation industry—is exactly what I envisioned for myself when going through medical school,” says Yoo.

“Getting experience working on medical devices that will ultimately help fill patient needs”

Timothy Broderick, MD, the UC professor who started the program, says the partnership fills needs for both UC and Ethicon Endo-Surgery.

“We have a world-class department of surgery and residents who have finished two years of training and have a passion for developing the art, science and tools of surgery. Ethicon Endo-Surgery had a need for someone with surgical expertise to help determine what unmet medical device needs exist and assess whether their tools will address them. Working together helped both organizations,” he explains.

New Team Has UC Chapter of Research Society Sigma Xi Poised for Rejuvenation

By Keith Herrell
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The UC chapter of Sigma Xi, an international research society dedicated to promoting scientific enterprise and honoring scientific achievement, is poised for rejuvenation.

The chapter, founded in 1925, has a rich history of supporting and showcasing excellence in science and engineering research. In the past decade, however, its activities had largely been confined to honoring an annual Sigma Xi Young Investigator and, in some years, a Southwest Ohio Science or Math Teacher of the Year at an annual banquet.

Earlier this year, a new faculty leadership team and a board of advisors convened to chart a new course for the UC chapter, including an expanded extramural regional role of partnership with other colleges and institutions.

“We’re reinventing the chapter’s role as a champion of science and engineering research and educating excellence as an advocate for research ethics in the Greater Cincinnati region,” says chapter President Ronald Millard, PhD, a professor in the department of pharmacology and cell biophysics.

The UC chapter also plans to establish a Greater Cincinnati STEMM (Science, Technology, Engineering, Mathematics and Medicine) Network of Excellence. This network, with UC at the center, will connect to STEMM units at four area colleges and universities (the College of Mount St. Joseph, Northern Kentucky University, Thomas More College and Xavier University) and the Cincinnati Museum Center, Cincinnati Zoo & Botanical Garden and the Cincinnati Federal Chapter of Sigma Xi (Environmental Protection Administration and National Institute for Occupational Safety and Health).

In addition, the UC chapter will sponsor an annual Sigma Xi Innovation and the annual Science & Engineering Expo.

Fall Event Showcases Young Investigator Lecture

Sigma Xi’s showcase event for the fall will be the Young Investigator Lecture on Oct. 12 at UC’s Myers Alumni Center, immediately followed by its annual banquet and induction of new members. Provost Santa Ono, PhD, Vice President for Research Sandra Degen, PhD, and Chair of the Faculty Assembly Richard Harknett, PhD, will be among those on hand for the event.

The 2010 Young Investigator of the Year, nominated and selected by the fellows of the UC Graduate School on behalf of Sigma Xi, is Margaret Hanson, PhD, a professor in the physics department. She will give a public lecture at 5 p.m. on her research on how to determine the age of star clusters. The award and lecture are sponsored by Sigma Xi and Degen.

The banquet, open to all active and inactive Sigma Xi members and their guests, will include the announcement of a new endowment supporting UC Sigma Xi awards and scholarships. (Membership in Sigma Xi is by nomination; the UC chapter currently has about 130 active members).
The advice rings true, whether it comes from your Uncle Ned or an internationally known psychiatrist: “You need to love what you do. In order to really excel at your job, you need to love what you do. That’s exactly the case with Henry Nasrallah, MD, a professor in the department of psychiatry and behavioral neuroscience since 2003. As the editor-in-chief of two prominent journals—Schizophrenia Research and Current Psychiatry—he’s able to combine his love for the English word with his love of medicine.

Nasrallah recently received news that Schizophrenia Research has the highest Impact Factor among all of the psychiatric journals produced by Elsevier, the international science and health information publisher. (Impact Factor is a measurement of how frequently the average article in a journal is cited in a given period.)

Current Psychiatry, aimed at clinicians, functions as a forum for general practitioners and is highly ranked in readers’ metrics by the A.C. Nielsen Co.

Up until a few years ago when he had a lifelong love of writing and editing, going back to high school and college, where he worked on school magazines, and medical school at the American University of Beirut, where he edited the medical school journal.

“In high school, I took one of those aptitude tests that predict which vocation would be good for you; he recalls. “I filled it out, and the results came in as a ‘scientist/editor.’ And that’s exactly what I became.”

Nasrallah established Schizophrenia Research in 1988 after approaching Elsevier and pointing out that no journal devoted exclusively to schizophrenia existed at the time. Elsevier continued marketing research that confirmed the need for such a journal, and Nasrallah was given the go-ahead to start one from scratch.

“It’s a lot of work, but I enjoy doing it like nothing else because I get to interact with all my colleagues around the world,” he says. “They send me their latest work, and I get to see it first and edit it, then send it to reviewers to get the best articles for publication.”

The interaction with colleagues led to another benefit formation of the Schizophrenia International Research Society (SIRS), founded in 2003, with Nasrallah as its co-founder and Schizophrenia Research as its official journal.

The society has held two well-attended international meet- ings, with a third scheduled for 2012 in Italy.

Nasrallah’s editing duties grew when he was asked to take over Current Psychiatry in 2006, after editor-in-chief and then-chair of the psychiatry department Randy Hilliard, MD, stepped down. Hilliard had founded the journal in 2001 to meet the need for a practi- cal review journal in psychiatry. It is published jointly by Quadrant HealthCom and the department of psychiatry and behavioral neuroscience.

“When I lecture around the country, I feel gratified that so many people come up and tell me how much they appreciate Current Psychiatry because it’s so relevant to their work,” Nasrallah says.

The two journals, Nasrallah notes, give the department of psychiatry and behavioral neuroscience a high degree of editorial visi- bility, which gives UC visibility as well. But how does he find the time to juggle both of them?

“I don’t stop working,” he says. “I come into the office on Saturdays and Sundays and get a lot of my work done. When people tell me I look unbalanced, I say, ‘Absolutely—and I’m proud of it!’”

Nasrallah is also quick to give credit to his staff, including his wife, Amelia Nasrallah, a research assis- tant professor in the department of psychiatry and behavioral neuroscience who serves as senior managing editor for Schizophrenia Research as well as director of clinical research management for the department.

In Nasrallah’s view, his editing duties fit in perfectly with academic medicine’s mission of teaching, healing and research.

“Being an editor helps me be- come a better teacher because lifelong learning is the key to being a good physician,” he says. “If you don’t stay up on the literature, you will become obsolete in 10 years.”

UC Health Leadership

Announced

University of Cincinnati College of Medicine faculty members Kevin Joseph, MD, and Michael Edwards, MD, have been appointed to UC Health leadership positions.

Joseph, an assistant professor of emergency medicine, has been named chief executive officer of West Medical Center and senior vice president of UC Health, and Edwards, Christian R. Holmes Professor and chair of surgery, has been named vice president, system development, at UC Health. For more information, visit healthnews.uc.edu/news/7113348/.

Gibler Appointed President and CEO of UC Health University Hospital

W. Brian Gibler, MD, has been appointed president and chief executive officer of UC Health University Hospital and senior vice president of UC Health.

Prior to his new appointment, Gibler served since 1995 as the Richard C. Levy Professor and chair of emergency medicine at the UC College of Medicine.

Gibler graduated from the UC Emergency Medicine Residency Training Program where he served as chief resident his senior year, Gibler joined the faculty in 1989 after coming from Vanderbilt University School of Medicine in Nashville.

Pancioli Named UC’s Chair of Emergency Medicine

Arthur Pancioli, MD, has been appointed the Richard C. Levy Professor and chair of the department of emergency medicine at the University of Cincinnati College of Medicine. The appointment was effective Oct. 1 and is pending UC Board of Trustees approval.

Pancioli has been a professor of emergency medicine at UC since 2009 and has served as vice chair of the department since 2000. He joined the UC faculty after completing his emergency medicine residency at University Hospital/UC College of Medicine in 1995. He is a graduate of the University of Michigan Medical School.

New Findings Editor Announced

Kate Pence, public information officer for the Academic Health Center, has been appointed the new editor of Findings. She succeeds Jill Hafner, who edited and designed the publication for the last five years. In addition to Findings, Pence is responsible for publishing many College of Medicine and UC Health University Hospital departments with a focus on cardiovascular diseases. Hafner will focus now on Web communications strategies for the Academic Health Center. For more information or to submit a story idea, contact Pence at (513) 558-4561 or katie.pence@uc.edu.

Performers Needed for IvaDean Benefit Concert

The College of Medicine is asking students, faculty and staff to volunteer to perform in the annual IvaDean Benefit Concert, held to raise money for the IvaDean Scholarship Fund. This year, the concert will be held on Friday, Dec. 3. Please send an e-mail listing the type of performance, the names of participants (designate whether it is a student [with year], faculty or staff), and length of the act to katharine.roberto@gmx.com by noon on Oct. 29. Write “IvaDean performer” in the subject line.

Mini Medical College

The mini medical college, a public health lecture series, will be held each Tuesday in October from 6:30–8:30 p.m in Kreeger Auditorium. The series is open to all; the fee is $59.

For more information, visit uc.edu/minmed.

Save the Date: Walk to Fight Diabetes

Join UC Health Saturday, Oct. 16, at “Step Out: Walk to Fight Diabetes” benefiting the American Diabetes Association. The walk begins at 10 a.m. at Great American Ball Park—University of Cincinnati Physicians and University Hospital will each have teams at the walk—both organized under the UC Health banner.

For information, contact Jeanie Holsing at (513) 558-3810 or e-mail jeannie.holsing@uc.edu. To join a team visit stepout.diabetes.org.

“I Want Your Blood” Drive

HydroRapid Systems is a partner- ing with the Cincinnati Shakespeare Company to host the “I Want Your Blood” Drive on Friday, Oct. 8, from 11 a.m. to 1 p.m. The blood mobile will be located at Piatt Park. Donors will receive a 20 percent discount on tickets to see “Dracula.” More information at hosework.org.

HYBRIDS: Help for the Hearing Impaired

Patient Georgia Purdum (left), talks with Lisa Houston, UC, audiologist.

from page 1

A processor of a traditional cochlear implant. It is designed to help those patients for whom each technology on its own does not.

“In the moderate to severe cate- gory of hearing loss, you’ll see pa- tients who don’t benefit from hear- ing aids any longer, or they benefit sometimes but not all the time,” says Ravi Sany, MD, as- sistant professor of otolaryngology and co-investigator in the trial.

Many of these patients can still hear lower frequencies, but not sounds typically heard in higher frequencies. They may have difficulty talking on the phone or distinguishing conversation in a crowded room.

“With the hybrid cochlear im- plant, the hope is we can get the mid- to high-frequencies taken care of by the cochlear implant, and the low frequency loss helped from the hearing aid,” says Sany.

The trial aims to enroll 50 pa- tients, with UC contributing 5 pa- tients, says UC audiologist and co- investigator Lisa Houston. For those who do qualify, pa- ticipants face a long period of ad- justment to the device. After the surgery to implant it, they have a series of audiology appointments to measure the device’s perform- ance and “map” their hearing range.

In “mapping,” the au- di o l o g i s t w orks with the patient to de- termine how much current the implanted electrode array re- needs in a better order for the patient to hear properly and com- fortably. It also takes time for patients to adjust to the new sounds, says Sany.

“You must be willing to learn a new language. The sound goes straight to the nerve—it’s abnor- mal. It’s not that the body is used to it. It can be daunting.”

For more information, call (513) 475-8453.