Criminal Intent: Could Lead Exposure Be to Blame?

UC Researchers Have Found That Childhood Lead Exposure May Be Associated With Criminal Behavior in Adulthood

By Amanda Harper

For years, we’ve known that lead is toxic to the nervous system. Early exposure to the metal has been implicated as a risk factor for developmental delays and behavioral problems in childhood and adolescence.

Now scientists are pointing the finger at lead in a new area—criminal intentions.

UC researchers have determined that early-life exposure to lead leads to an increased risk for criminal behavior later in life.

Kim Dietrich, PhD, and his team have determined that elevated prenatal and postnatal blood-lead concentrations are associated with higher rates of criminal arrest in adulthood.

“Previous studies either relied on indirect measures of exposure or failed to follow subjects into adulthood to examine the relationship between lead exposure and criminal activity in young adults,” explains Dietrich, principal investigator of the study and professor of environmental health at UC.

Kim Dietrich, PhD, and his research team have determined that elevated pre- and postnatal blood-lead concentration levels are associated with higher rates of criminal arrest later in life.

“We have monitored this specific sub-segment of children who were exposed to lead both in the womb and as young children for nearly 30 years,” he adds. “We have a complete record of the neurological, behavioral and developmental patterns to draw a clear association between early-life exposure to lead and adult criminal activity.”

Dietrich says few studies have attempted to evaluate the consequences of childhood lead exposure as a risk of criminal behavior. The UC-led study is the first of its kind to demonstrate an association between developmental exposure to lead and adult criminal behavior.

Dietrich and his colleagues report their findings in the May 27, 2008, issue of the journal PLoS Medicine.

This new study is part of a long-term lead exposure study...
LEAD: Early Lead Exposure Linked to Adult Criminal Behavior

conducted through the Cincinnati Children's Environmental Health Center, a collaborative research group that formed in 1979 and involves scientists from the UC College of Medicine and Cincinnati Children's Hospital Medical Center. Led by Dietrich, researchers recruited pregnant women living in Cincinnati neighborhoods with a higher concentration of older, lead-contaminated housing. Recruitment took place at four prenatal clinics between 1979 and 1984.

Dietrich's team has monitored this population group since birth to assess the long-term health effects of early-life lead exposure.

Of the original 376 newborns recruited, 230 were identified for the current study. Researchers measured blood-lead levels during pregnancy and then at regular intervals until the children were 6 1/2 years old to calculate cumulative lead exposure. Blood-lead level data was then correlated with public criminal arrest records from a search of Hamilton County, Ohio, criminal justice records. These records provided information about the nature and extent of arrests and were coded by category: violent, property, drugs, fraud, obstruction of justice, serious motor vehicle, disorderly conduct and other offenses.

Researchers found that individuals with increased blood-lead levels before birth and during early childhood had higher rates of arrest—both for violent and nonviolent crimes—than the rest of the study population after age 18. Approximately 55 percent of the subjects had at least one arrest—the majority of which involved drugs (28 percent) or serious motor vehicle violations (27 percent). However, the strongest association was observed between childhood blood-lead levels and crimes involving acts of violence.

Dietrich says that although both blood-lead levels and criminal rate in the United States have dropped in the past 30 years, they have not done so in a uniform way.

“Lower income, inner-city children remain particularly vulnerable to lead exposure,” he explains. “Although we’ve made great strides in reducing lead exposure, our findings send a clear message that further reduction of childhood lead exposure may be an important and achievable way to reduce violent crime.”

“Aggressive or violent behavioral patterns often emerge early and continue throughout life,” adds Dietrich, “Identifying the risk factors that may place youth on an early trajectory toward a life of crime and violence should be a public health priority.”

UC coauthors include John Wright, PhD; Douglas Ria, PhD; Richard Hornung, PhD; Stephanie Wessel; Bruce Langbein, MD; Mona Ho; and Mary Rae, PhD. Funding for the study came from grants from the National Institute of Environmental Health Sciences and the U.S. Environmental Protection Agency.

Many children living in 1950s tenements in Cincinnati were exposed to high levels of lead, which is responsible for more than 80 oncologists and researchers who are now practicing across the country. Although she retired in 1991, she still actively engages in teaching pediatric residents and families at Cincinnati Children’s.

“I’m highly honored and humbled by this honor, but it isn’t just for me,” she says. “It’s for all the people who work so hard in the division and for the children and families who participated in research of investigational drugs we used in the early days.”

A video about the UC Cancer Hall of Fame inductees is available at healthnews.uc.edu.

First Class of Honorees Inducted Into New Cancer Hall of Fame

Amanda Harper, amanda.harper@uc.edu

There is a group of everyday heroes among us whose mission is to beat an awful disease that 1.4 million Americans are diagnosed with each year—cancer. Some fight daily battles with their patients against cancer. Others spend hours behind a lab bench, tirelessly analyzing cells and compounds to understand biological mechanisms so they can develop new ways to combat cancer and improve the lives of those living with it.

Others travel throughout the community, spreading the important message of early cancer detection and prevention to high-risk populations or generating funding to support research that will improve cancer treatments.

It’s these individual efforts that add up to make a major impact in the fight against cancer.

Five of these “heroes” were recently recognized as part of the newly formed UC Cancer Hall of Fame. This honor was created to recognize individuals who have made a difference in the lives of people with cancer in Greater Cincinnati.

Herschel Chalk, Paul Flory, Jack Gluckman, MD, and Beatrice Lampkin, MD, were recognized for their efforts in combating cancer and improving the outcome for people with the disease at a May 9 event at the Cincinnati Country Club. Bernard Aron, MD, was recognized at an event on June 1.

For Lampkin, UC professor emeritus of pediatrics and oncologist at Cincinnati Children’s Hospital Medical Center, battling—and beating—childhood cancers has been the driving force in her life.

In her distinguished career of more than 30 years, she has accomplished many important things that have changed the outcome for childhood cancer patients across Greater Cincinnati and the world. Her laboratory and translational research on the effects of drugs on the cell cycle of acute myeloid leukemia led to development of new therapies that would “cure” the disease. In addition, she founded the pediatric bone marrow transplant program in 1981 and established the long-term survivor clinic in 1988.

“Dr. Lampkin illustrates the best of the so-called triple threat—a tireless researcher, a caring doctor and dedicated educator,” says co-leader Ralph Gruppo, MD, professor of clinical pediatrics at UC and oncologist at Cincinnati Children’s.

“She recognized the importance of involving a multidisciplinary team of physicians to provide the best care of treating childhood treating cancer,” he says. “She also recognized that care of children with cancer did not end once they were cured, and she founded the long-term survivor’s clinic to help manage and minimize the side effects of cancer treatment.”

When asked what she enjoyed most about her career, though, Lampkin says it was teaching.

She had a hand in training more than 80 oncologists and researchers who are now practicing across the country. Although she retired in 1991, she still actively engages in teaching pediatric residents and families at Cincinnati Children’s.

“I’m highly honored and humbled by this honor, but it isn’t just for me,” she says. “It’s for all the people who work so hard in the division and for the children and families who participated in research of investigational drugs we used in the early days.”

A video about the UC Cancer Hall of Fame inductees is available at healthnews.uc.edu.

Education Day Focuses on Cancer

Keith Wilson, MD, professor of otolaryngology, speaks with an attendee about thyroid cancer at the fourth annual UC Community Education Day. Diverse community members came out to University Plaza on May 10 to learn about cancer and speak one-on-one with nearly 40 UC physicians. The event, sponsored by the UC Barrett Cancer Center at University Hospital, was started by UC radiology professor William Barrett, MD, in 2005.

Allied Health Sciences Showcases Research at Annual Conference

Erin Hedges (right), a student in the College of Allied Health Sciences’ communication sciences and disorders department, discusses her research with Jill Hafner, MD, professor of otolaryngology, and Amanda Harper, PhD, at the 2008 Allied Health Sciences Showcases Research at Annual Conference. The conference kicked off in Kresge Auditorium where UC President Nancy Zimpher, PhD, addressed students, faculty and staff. Following her remarks, William Shields, DO, of Nationwide Children’s Hospital in Columbus, Ohio, presented the keynote address titled “Interventional Radiology—Surgeon’s Perspective.”

For more information on this event, call (513) 558-7495 or e-mail maureen.mcdonald@uc.edu.
Jeff Molkentin, PhD, Becomes the First at UC to Win the Mid-Level Award as a Professor and Researcher

By Katie Pence
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Jeff Molkentin, PhD, spends hours in the lab at Cincinnati Children’s Hospital Medical Center each day, researching and attempting to understand the mechanisms in the body that cause heart disease. But that’s only during his work day.

Before his day begins—in fact, before the sun rises—the 41-year-old is lifting weights to prepare for his next power lifting competition.

Molkentin, who competes in professional lifting competitions throughout the area, keeps his office stocked with protein powder and power bars.

Now, it contains another item that shows incredible strength: a 2008 Howard Hughes Medical Institute (HHMI) investigator award.

This strength, however, comes from the hard work and dedication that goes into Molkentin’s research at UC and Cincinnati Children’s—not protein shakes and arm curls.

“It makes me feel good,” Molkentin says modestly about receiving the influential award. “It was unexpected, but it shows that UC and UC’s are doing incredible research that impacts the field of medicine in many ways.”

Molkentin is the fourth HHMI investigator ever awarded in Ohio, the first at UC and the first at Cincinnati Children’s. He officially received his award on May 27.

He says he applied for the award on a whim.

“It’s open to anyone,” he says. “I thought I would give it a shot.”

Two other researchers—John Monaco, PhD, and Joanna Groden, PhD, both of the department of molecular genetics—were given junior HHMI awards in 1995, but Molkentin is the first to win this mid-level award with four to 10 years of experience as a researcher and professor.

HHMI is a nonprofit medical research organization that ranks as one of the nation’s largest philanthropies. It works to advance biomedical research and science education in the United States.

The institute provides long-term, flexible funding to about 300 scientists across the nation, commits almost $700 million a year for research and distributes $80 million in grant support for science education.

Winners of the HHMI award are said to be among the most creative and promising in the nation and are leaders in their field who push their research into new areas of inquiry.

Molkentin was selected from a pool of 1,070 researchers who came from such prestigious universities as Harvard and Duke.

Once selected for this award, investigators continue research at their host institutions but become HHMI employees and derive their salaries and benefits from the institute. The collaboration agreement also provides freedom to the host institute for the researcher’s laboratory space.

Molkentin will retain his faculty positions and will continue to participate in teaching and other professional activities at UC and Cincinnati Children’s.

He joined Cincinnati Children’s and UC in September 1997 after he completed his post-doctoral fellowship at the University of Texas Southwest.

His team studies the signaling mechanisms that control cell growth, differentiation and death. This work is creating new knowledge about basic molecular processes that influence cardiac and skeletal development as well as diseases like muscular dystrophy and heart failure.

Molkentin says this award will allow him to expand his research in a more exploratory way.

“HHMI encourages innovative research where as the National Institutes of Health typically funds research that is considered safe and incremental,” he says. “He says the award will also help to increase the visibility of UC and Cincinnati Children’s both locally and nationally.

“This award is typically given to individuals from institutions that have strong and innovative research programs,” Molkentin says. “This shows the success of both UC’s and Cincinnati Children’s.”

He adds that this is yet another way that the two institutions can strengthen the impact of their research on a local and national scale.”

Sunflower Revolution IV Nets a Record $440K

By Cindy Starr
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Sunflower Revolution officials recently announced record proceeds of $967,000 from the 2007 gala and bike ride—the region’s largest fundraiser for Parkinson’s disease research.

Since 2004 the Sunflower Revolution and related events have raised $967,000 for Parkinson’s disease research and wellness programs at the Neuroscience Institute at UC and University Hospital.

Numerous Sunflower-funded research projects are in progress at the James L. and Joan A. Gardner Family Center for Parkinson’s Disease and Movement Disorders, a center of excellence within the Neuroscience Institute.

Sunflower organizers also announced that Joseph Broderick, MD, chair of neurology at UC and research director of the Neuroscience Institute, and his wife, Donna, will chair the next Sunflower Revolution gala.

Honorary chairs are Bob Kohlhepp, vice chairman of Cantas, and his wife, Linda. Ron Koetzters, chair and CEO of Monarch Construction, will head the Corporate Steering Committee.

Sunflower Revolution V will take place Sept. 5, 6 and 7.

The event is a collaboration involving the University Hospital Foundation, Neuroscience Institute, Mayfield Clinic and David Phinney Foundation. It includes:

• a fundraising gala (Sept. 5 at the Hyatt Regency Cincinnati)
• a free educational symposium for patients, families and caregivers (Sept. 6 at the Hyatt)
• fundraising bike rides of 108K, 40K and 10K (Sept. 7)

Gala tickets are $150, $250 and $500 each; ride fees are $80 per cyclist. For more information about the gala, symposium and ride, visit www.sunflowerrev.org.

Researchers funded by Sunflower Revolution proceeds are currently studying the:

• potential for a surgical procedure called deep brain stimulation to help protect brain cells
• effect of deep brain stimulation on balance and gait
• impact of depression on the progression of Parkinson’s disease
• development of Parkinson’s disease years after a toxic exposure
• measurement of two aspects of “bradykinesia,” the slowing and constriction of movement and reflexes that are characteristic of Parkinson’s disease.

The Neuroscience Institute, a regional center of excellence, is dedicated to patient care, research, education and the development of new treatments for stroke, brain and spinal tumors, epilepsy, traumatic brain and spinal injury, Alzheimer’s disease, Parkinson’s disease, disorders of the senses (swallowing, voice, hearing, pain, taste and smell), and psychiatric conditions (bi polar disorder, schizophrenia and depression).

Pharmacy to Bid Farewell to Seniors, Honor Alumni

The James L. Winkle College of Pharmacy will hold its 2008 Hooding and Recognition Ceremony on Tuesday, June 17, in Kresge Auditorium.

Degrees will be conferred for doctor of pharmacy and master of science. James Winkle, a 1958 graduate and namesake of the pharmacy college, will receive the college’s Benefactor Award for his unselfish pledge of $10 million to the college in 2007.

Gregory Kearns, PharmD, a 1979 graduate, will receive the Robert J. Delvalo Distinguished Alumnus Award in recognition of his national impact on the pharmacy profession.

In addition, Harry Dingeldein, a 1958 graduate, will receive the Arthur C. Glaser Distinguished Alumnus Award for his promotion of pharmacy as a profession.

For more information on this ceremony, call (513) 558-3784 or e-mail andreawall@uc.edu, or visit pharmacy.uc.edu.
**Student Nursing Study Takes a Closer Look at Culture and Homelessness in Ohio**

### Doctoral Student’s Own Appalachian Roots Become a Focus of Her Professional Research in Nursing

By Angela Koenig

Rebecca Lee (left) visits with Carolyn Castron at the Interfaith Hospitality Network Day Care Center in Lower Price Hill.

Monday through Wednesday evening, doctorate student Rebecca Lee lives a stable life by most standards. She teaches community health at the UC College of Nursing, interns at the Health Foundation of Greater Cincinnati, volunteers and dotes on her husband and four sons. Thursday through Sunday, however, Lee becomes “homeless” as she experiences firsthand the everyday struggles this growing population faces.

The immersion into homelessness is an integral part of Lee’s doctoral research study: the influence of culture on the experience of family homelessness, particularly among Appalachian families.

“I am basically spending time with the mothers and their children, doing everything they do—going on appointments to look at apartments, riding the bus and sleeping in churches at night,” explains Lee, a second-generation Appalachian, who contends that culture characteristics such as self-sufficiency, stubbornness and pridefulness can impede homeless families as they seek resources and outside assistance.

Lee says she identified the topic for her doctoral research after years of volunteering at the Interfaith Hospitality Network Day Care Center in Lower Price Hill, which is classified as an urban Appalachian community.

“What I noted while I was there was that there was a large number of families coming through struggled because of their background,” Lee says, citing an extreme sense of privacy among Appalachian households as one roadblock to assistance.

“You don’t talk about your problems to outsiders—whether you have a drug conviction, served time, are sick—however, these are all things they have to divulge to receive help.

Another hurdle is the outdated perception of homelessness as “the old guy with the bottle, panhandling,” says Georgine Getty, executive director of the Greater Cincinnati Coalition for the Homeless (GCCCH).

“In fact, according to a 2001 GCCCH study, one third of the homeless population in Cincinnati and families are the fastest-growing segment of the homeless population in the United States.” Getty says.

“News of Lee’s research was heartening to the GCCCH director.

“Lee does a lot of the professional interest in homelessness, when the more we can learn about various homeless populations and people experiencing homelessness the better chance we have of ending it,” Getty says.

With so many families, regardless of culture, living paycheck to paycheck, Lee says there needs to be more of a reality check when it comes to homelessness.

“We should be shocked as a society to see the barriers homeless families face, she says. For example, there are only two homeless shelters in the city which will allow men and teenage boys, she says, and very often families have to stay 5-6 a.m. to depart a sponsor shelter such as a church.

Lee says she hopes her research will help to guide the design of culturally congruent interventions and programming that improve the overall health and well-being of homeless families.

She hopes to defend her dissertation fall 2008.

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**DRUG: UC Tests Amifostine Against Neuropathy Caused by Chemotherapy**

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greatly impact his or her quality of life.”

Safa will test whether amifostine (A-mi-FOS-teen) can reduce neuropathy when given prior to chemotherapy.

Amifostine is in a class of drugs known as “chemoprotectants” that have been shown to shield non-cancerous cells from the harmful effects of cancer treatment. Previous studies have shown that amifostine, which is given by injection, specifically protects nerve cells from radiation and the effects of chemotherapy drugs like cisplatin.

It is approved by the U.S. Food and Drug Administration to prevent moderate or severe dryness of the mouth caused by radiation treatment for head and neck cancer and to prevent kidney damage caused by cisplatin chemotherapy in ovarian and non-small cell lung cancer patients.

“Although amifostine may not prevent this neuropathy entirely,” Safa adds, “it may prevent the condition from worsening, allowing the patient to safely stay on cisplatin for a longer period without further side effects.”

This UC investigator-initiated clinical trial is looking for about 28 patients with stage-2, 3 or 4 colorectal cancer who are candidates to receive oxaliplatin-based chemotherapy. Study participants will receive a standard chemotherapy drug regimen known as FOLFOX, which consists of three intravenous drugs—5-FU, leucovorin and oxaliplatin—and another drug, Avastin, if recommended by the doctor. Amifostine will be given about an hour prior to each chemotherapy session to prevent nerve damage.

All medications will be given intravenously every two weeks for six months. Each treatment will last 1 to 1.5 hours and can be administered at most UC-affiliated clinics. Response to the drugs will be monitored using regular blood tests and physical examinations that may include imaging tests.

According to the American Cancer Society, more than 148,000 Americans will be diagnosed with colorectal cancer in 2008. For more information on study eligibility, call (513) 584-7614.

Safa has no financial interest in the study.

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**UC Bone Expert Recognized by Leading Medical Organization**

By Katie Pence

Bone expert Nelson Watts, MD.

Nelson Watts, MD, helps people with severe bone issues every day at the UC Bone and Osteoporosis Center.

But his good work has not gone unnoticed. On May 17, Watts was awarded the Yank D. Coble Jr., MD, Distinguished Service Award by the American College of Endocrinology (ACE).

Watts, a professor of medicine at UC and director of the bone center, was presented the award at ACE’s 17th annual meeting and clinical congress in Orlando, Fla.

The Yank D. Coble Jr., MD, Distinguished Service Award is presented annually to a clinical endocrinologist who is recognized by his or her peers as having achieved distinction in the field of clinical endocrinology and has record of devotion to teaching.

Coble, the namesake of the award, is the former president of the World Medical Association and American Medical Association, as well as a founder of the American Association of Clinical Endocrinologists (AACE) and ACE.

It is the highest award given by members of ACE, a nonprofit organization that supports clinical endocrinology and improvement of patient care and public health.

“It is truly a privilege to receive the highest honor awarded by my colleagues and the American Association of Clinical Endocrinologists,” says Watts.

“I am deeply honored to join such a group of physicians who have given so much of themselves.”

Watts, who has been at UC since 2001, also serves as chair of the U.S. Food and Drug Administration’s Advisory Committee for Endocrine and Metabolic Drugs and is on the American Board of Internal Medicine subspecialty board in endocrinology and metabolism.

He is a past president of ACE, served on the AACE Board of Directors from 1995 to 2003 and also served as associate editor of Endocrine Practice, the official ACE journal.
Scaling a Fence, Running an Extra Mile Not Enough to Stop Ortho Resident From Finishing Flying Pig

Resident Gets the Flying Pig ‘Run Around,’ But Still Finishes Fourth

By Angela Koenig
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When fourth-year orthopedic resident Mike Greiwe signed up for the 2008 Flying Pig Half Marathon, he had an impressive reputation: second place in 2007, in a time of 1:10:36.

This time around, he placed fourth but with always be that “what if” factor; considering he ran nearly a mile out of his way, had to scale a fence, and crossed the finish line coming from the opposite direction.

“I’ve finished every race I’ve ever entered,” recounts Greiwe with true runner’s determination, and a grin that belies the seriousness of all his training and what he went through on race day.

Let’s just call it the Flying Pig Half Marathon less traveled...

Greiwe, 29, was among a handful of elite runners who ran astray, so to speak, due to a series of unforeseen events in the 13.1-mile race. A three-alarm fire earlier in the day rerouted the full marathon without a major glitch, but some rerouting uncertainties carried over to the half marathon.

When Greiwe and one of the race’s cyclist guides reached Mile 11, at the intersection of Eslinore Place and Gilbert Avenue, Greiwe says they should have turned right onto Eslinore but instead were directed by a police officer to go straight.

After doing so, at around Eighth and Plum streets, it became evident they were off course. Greiwe says he asked the cyclist to “just get me to the finish line,” which involved a trek across Fifth and Third streets, through downtown traffic.

After about a mile of additional running, he finally saw the finish line—through a chain-link fence. Up and over he went, sprinting to outkick the fifth-place finisher coming toward him. “I felt bad for him,” says Greiwe.

Although he loves the competition of race day, his compassion wasn’t difficult to muster, since Greiwe runs as a way to decompress and energize his mind after long days.

It’s become one of those personal enjoyments he’s carried over from college at the University of Notre Dame, where as a senior he placed second in the 10,000-meter run at the 2000 Big East Championships.

“Running makes me more efficient than less,” he says of going for a run before or after work or to break up the drudgery of an extended study session.

Although by Greiwe’s estimation he wasn’t on pace to take the lead (his official time was 1:14:54.1 minute and 32 seconds behind second place and 5 minutes, 32 seconds behind winner Todd Pihlek of Erie, Pa.) his coworkers and running buddies in orthopedics beg to differ.

“He had a shot at second, and an outside shot at winning,” says resident Rick Owens, who ran in the full marathon as a member of the orthopedic residents’ relay team. That team, he says, had its own misfortune when one of the runners veered off course and then lost his tracking chip, disqualifying the team.

“We all had a big laugh about the whole race,” Owens says, chuckling that the relay team’s misfortune “was probably self-inflicted.”

Coffee and Kids—Not a Good Mix

Coffee and Kids—Not a Good Mix

By Katie Pence
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Nothing sounds better in the morning than a latte—better yet, a white chocolate mocha latte.

But the new trend, especially for teens and tweens, is not just hitting the coffee shop for a morning jolt. A growing number of adolescents seem to be replacing their breakfast, afternoon snack, milk and water intake with a tall sugary coffee drink, and UC experts say this could lead to a number of health issues.

Michael Benedict, MD, says that the rise in sugary drinks can lead to a toby physique in the teenage years and health problems in adulthood.

And the caffeine content is nearly four times as much, too, he adds. This could not only lead to weight gain, but, if intake of these beverages is overdone, adolescents could develop insomnia, fatigue or jittery behavior, which can hinder concentration.

“Excessive intake of empty calories and caffeine may negatively impact normal growth and lead to continued problems in adulthood,” Benedict says.

Benedict says consumption of coffee drinks or soda in moderation is acceptable.

“Once in awhile, a soda or any caffeinated or sugary drink is all right for teens,” he says, adding that children under 12 should be given very minimal amounts of these drinks and virtually no coffee, in his opinion.

“However, parents should monitor the intake of these sorts of beverages closely and make sure their children are opting for water or more nutritious beverages, such as milk, most of the time.”

Benedict says that adolescents should be snacking on fruits and veggies instead of sugar-loaded fillers, eating breakfast daily and maintaining an active lifestyle.

HONDURAS: Student Provides Volunteer Care

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experience, it seems to have affected Freisthler more strongly than she’s seen in others.

“I liked the people and I feel like I can help,” Freisthler says, adding there was no lightning strike event to mark the calling. His compassion is evident, however, when he describes the experience as nursing in its “truest” form.

“They get by, they live, but they suffer with things that could have been so easily treated here,” such as an eye infection that might blind a child without access to antibiotics. And while suffering runs the gamut, the people are “the most kind, genuine and grateful” he’s ever encountered.

Volunteers of all kinds are welcomed, says Mo Jennings, development director at Shoulder to Shoulder.

“We have people who have gone down on a two-week stint with a group and said, ‘Wow, I want to contribute more,’ and people for whom it’s a one-time experience.

“We need both, but we also need everyday people who can’t just walk away from life here but who empower other people by their financial resources and emotional support,” Jennings adds.

To learn more about Shoulder to Shoulder, visit shouldertoshoulder.org. To contact Freisthler, e-mail, freistae@email.uc.edu.
University Hospital's New Top Executive Works to Change the Health Care 'Landscape'

By Keith Herrell keith.herrell@uc.edu

In what little spare time she has, Lee Ann Liska finds relaxation in the yard of her Anderson Township home. But the new senior vice president and executive director of University Hospital (UH), she developed an interest in the rich landscape of a far different sort.

Fortunately, she’s well equipped to deal with such challenges as declining reimbursements from insurance carriers, competition in the health care market and the changing face of the Health Alliance of Greater Cincinnati. A veteran of over two decades in health administration, she had already spent almost four years as vice president and executive operations director at UH when she was elevated to the top role in April.

“I think there are clear advantages of coming from within, because I had the support of the medical staff in terms of my appointment, so I already have very well established relationships,” she says. “I think you can get up to speed faster in your new role if you’re internal.”

Liska is clearly eager to continue building the reputation of University Hospital, and she lists service excellence as one of her top priorities.

“We’ll be doing a lot around customer service, patient satisfaction and service excellence over the next two years,” she says, adding that she also wants to improve patient safety and security at the hospital, that she also wants to improve patient safety and security at the hospital, and community leaders on children’s issues.

Central Clinic Marks 85 Years
With Anniversary Celebration

Central Clinic, a United Way Agency located on the UC Academic Health Center Campus, is the area’s oldest outpatient clinic providing mental health services to families of Greater Cincinnati.

The clinic celebrated its 85th anniversary in May with a reception at the Hilton Cincinnati Netherland Plaza. During the celebration, Central Clinic, and its director, UC psychiatry professor Walter Smitson, PhD, (left) paid special tribute to its first executive director, Dr. Dorothy Murray (center) and Vickie Buyinski Gluckman (right), cofounder of United Medical Centers of Excellence.

“I think University Hospital’s relationship to the University of Cincinnati has never been stronger,” says Liska, who adds that she enjoys working with David Stern, MD, vice president of health affairs and dean of the College of Medicine, and talks with him almost daily.

“The relationship is vital to our success, because it’s UC’s facility that brings us patients. Hospitals don’t admit patients all by themselves, so the faculty are very important to our volume, for our success. They are the educators of our residents, our future physicians.”

UH also participated with UC and UC Physicians on a strategic plan, Liska says, and identified four centers of excellence: neuroscience, cardiovascular, cancer and diabetes and metabolic disorders.

“We were pleased to be part of that,” she says.

Away from the hospital, Liska is looking at community involvement opportunities and finding time for relaxation at home with her husband, Joe Ed, a sales vice president for Sibcy Cline, and daughter Catherine, 7, who has leukemia and is a patient at Cincinnati Children’s Hospital Medical Center.

“We’re working on a joint cancer center (with Children’s), so interestingly some of the people I meet with at work I also interact with as a parent,” Liska says. “So it gives me an interesting perspective about patient care.”

Stroke, Followed by Seizures May Lead to Death

By Keith Herrell keith.herrell@uc.edu

Patients who experience seizures within 24 hours of an acute stroke are more likely to die within 30 days of the stroke than patients who did not experience seizures, a study by UC researchers has found.

The study was led by Jerry Stafitskas, MD, PhD, assistant pro- fessor of neurology at UC. It will be published in the June 2008 issue of Epilepsia.

The study of 6,044 cases of hospi- talized stroke in the Cincinnati metropolitan region found that the overall incidence of acute seizures within 24 hours after stroke was 3.1 percent. Of the patients who develop- ed seizures, 32.1 percent died within 30 days. For those who did not develop seizures, the mortality rate was 15.3 percent.

Patients with hemorrhagic stroke (bleeding within the brain) had an 8.4 percent incidence of seizures, compared with 2.4 percent for patients with ischemic stroke (obstruction within a blood vessel), the study found.

“Patients with seizures in the set- ting of an acute stroke may consti- tute a target population for the development of drugs that may prevent seizures,” Stafitskas says.

Despite the fact that African- Americans are known to have high- er prevalence rates of seizures and strokes, the study found no differ- ence in regard to mortality or inci- dence of seizures across groups of white and black patients. Further studies are necessary to explain this discrepancy, the authors say.

GRANT: UC to Study Injuries, Disorders
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overseen by Narayan and Lori Shutter, MD, professor of neurosurgery and director of neur- oscopic surgery at the Neuro- science Institute and University Hospital (UH).

The PTSD research will be over- seen by Thomas Geraciotti, MD, professor of psychiatry and direc- tor of mental health research at the Cincinnati Department of Veteran Affairs (VA) Medical Center and Kate Chard, PhD, associate profes- sor of clinical psychology and direc- tor of the PTSD program at the VA Medical Center.

“We are delighted to have been chosen from among 30 appli- cants for this consortium,” Narayan says.

Geraciotti describes TBI and PTSD as “difficult-to-treat prob- lems that are the scourges of our combat troops in Iraq and Afghanistan.” He expects that “concrete therapeutic advances will be achieved as a result of this funding.”

Narayan predicts the research will make new inroads in the areas of mild to moderate traumatic brain injury.

“In the past, neurosurgeons

find the study useful because we studied the use building would be built near Holmes Hospital.”

Central Clinic Marks 85 Years
With Anniversary Celebration

Central Clinic, a United Way Agency located on the UC Academic Health Center Campus, is the area’s oldest outpatient clinic providing mental health services to families of Greater Cincinnati.

The clinic celebrated its 85th anniversary in May with a reception at the Hilton Cincinnati Netherland Plaza. During the celebration, Central Clinic, and its director, UC psychiatry professor Walter Smitson, PhD, (left) paid special tribute to its first executive director, Dr. Dorothy Murray (center) and Vickie Buyinski Gluckman (right), cofounder of United Medical Centers of Excellence.

“I think University Hospital’s relationship to the University of Cincinnati has never been stronger,” says Liska, who adds that she enjoys working with David Stern, MD, vice president of health affairs and dean of the College of Medicine, and talks with him almost daily.

“The relationship is vital to our success, because it’s UC’s facility that brings us patients. Hospitals don’t admit patients all by themselves, so the faculty are very important to our volume, for our success. They are the educators of our residents, our future physicians.”

UH also participated with UC and UC Physicians on a strategic plan, Liska says, and identified four centers of excellence: neuroscience, cardiovascular, cancer and diabetes and metabolic disorders.

“We were pleased to be part of that,” she says.

Away from the hospital, Liska is looking at community involve- ment opportunities and finding time for relaxation at home with her husband, Joe Ed, a sales vice president for Sibcy Cline, and daughter Catherine, 7, who has leukemia and is a patient at Cincinnati Children’s Hospital Medical Center.

“We’re working on a joint can- cer center (with Children’s), so interestingly some of the people I meet with at work I also interact with as a parent,” Liska says. “So it gives me an interesting perspective about patient care.”

STROKE, FOLLOWED BY SEIZURES MAY LEAD TO DEATH

Patients who experience seizures within 24 hours of an acute stroke are more likely to die within 30 days of the stroke than patients who did not experience seizures, a study by UC researchers has found.

The study was led by Jerry Stafitskas, MD, PhD, assistant pro- fessor of neurology at UC. It will be published in the June 2008 issue of Epilepsia.

The study of 6,044 cases of hospi- talized stroke in the Cincinnati metropolitan region found that the overall incidence of acute seizures within 24 hours after stroke was 3.1 percent. Of the patients who devel- oped seizures, 32.1 percent died within 30 days. For those who did not develop seizures, the mortality rate was 15.3 percent.

Patients with hemorrhagic stroke (bleeding within the brain) had an 8.4 percent incidence of seizures, compared with 2.4 percent for patients with ischemic stroke (obstruction within a blood vessel), the study found.

“Patients with seizures in the set- ting of an acute stroke may consti- tute a target population for the development of drugs that may prevent seizures,” Stafitskas says.

Despite the fact that African- Americans are known to have high- er prevalence rates of seizures and strokes, the study found no differ- ence in regard to mortality or inci- dence of seizures across groups of white and black patients. Further studies are necessary to explain this discrepancy, the authors say.

GRANT: UC to Study Injuries, Disorders
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overseen by Narayan and Lori Shutter, MD, professor of neurosurgery and director of neur- oscopic surgery at the Neuroscience Institute and University Hospital (UH).

The PTSD research will be over- seen by Thomas Geraciotti, MD, professor of psychiatry and direc- tor of mental health research at the Cincinnati Department of Veteran Affairs (VA) Medical Center and Kate Chard, PhD, associate profes- sor of clinical psychology and direc- tor of the PTSD program at the VA Medical Center.

“We are delighted to have been chosen from among 30 appli- cants for this consortium,” Narayan says.

Geraciotti describes TBI and PTSD as “difficult-to-treat prob- lems that are the scourges of our combat troops in Iraq and Afghanistan.” He expects that “concrete therapeutic advances will be achieved as a result of this funding.”

Narayan predicts the research will make new inroads in the areas of mild to moderate traumatic brain injury.

“In the past, neurosurgeons

have focused most of their research efforts on severe TBI, which is more likely to kill people,” Narayan says. “This grant will help us and our colleagues in psychiatry to expand our studies into the mild and moderate TBI end of the spec- trum, which, although less fatal, is far more common.”

Narayan adds that the terms “mild and moderate” are decep- tive.

“These patients can be substan- tially affected in many ways, and for life. The overlap between TBI and PTSD is only beginning to be studied and understood,” he says.

Narayan has done extensive research in TBI, has published the major textbook on the subject and serves as chair of the American Brain Injury Consortium. He says Cincinnati was selected as a site because of its many strengths, including:

• the clinical and basic research programs in traumatic brain injury at the Neuroscience Institute and in PTSD at the VA Medical Center

• UH’s status as the only Level 1 trauma center in a populous region, and its experience with about 200 moderate to severe traumatic brain injuries each year

• the VA Medical Center’s compre- hensive treatment of veterans suf- fering from PTSD

• the VA Medical Center’s Substance Abuse and Dual Diagnosis Program, which is one of only three designated national centers of excellence in this field.

The Clinical Consortium will also include Duke University, University of Washington, Henry M. Jackson Foundation, South Carolina Research Authority and the University of Maryland’s Shock Trauma Center.
A physician, a researcher and a local businessman were recently awarded the University of Cincinnati's top honors.

**By Dama Kimmun**

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Jack Gluckman, MD, of otorhinolaryngology, and Litsa Kranias, PhD, of pharmacology and cell biophysics, received Daniel Drake Medals—the college’s highest honor awarded to distinguished living faculty and alumni.

Joseph Pichler, former CEO of Kroger Co., was presented with the Dean’s Community Service Award, an honor created in 2007 to recognize those who have demonstrated remarkable service to the college through committee service, motivating others to serve the institution or continued involvement in and support of university activities.

**Daniel Drake Medals**

Jack Gluckman, MD

Jack Gluckman, MD, professor and chair emeritus of otolaryngology, was born and raised in South Africa and attended medical school at the University of the Witwatersrand in Johannesburg. After completing his otolaryngology residency in Johannesburg and Cape Town in 1973, he joined the full-time faculty at Groote Schuur Hospital in Cape Town and subsequently entered private practice for a number of years in Port Elizabeth, South Africa.

In 1977, Gluckman moved to Cincinnati for a fellowship in head and neck oncology surgery and remained on the faculty at UC. He became a tenured professor in 1985 and was named chair of the otolaryngology department in 1991—a post he held through 2004.

Gluckman has served in many leadership roles in the College of Medicine and at University Hospital, including associate dean for clinical affairs and chief of the medical staff.

Gluckman has served as president of the American Academy of Otolaryngology–Head and Neck Surgery and vice president of the Triologic Society. He is a director of the American Board of Otolaryngology. In 1993, the American Cancer Society awarded him a professorship of clinical oncology. He has published 10 textbooks and more than 290 scientific papers.

Litsa Kranias, PhD

Litsa Kranias, PhD, Hanna Professor of Cardiology and chair of pharmacology and cell biophysics, is the leader of an international research team that has made contributions to our understanding of heart function and identified novel targets for heart failure treatment.

Kranias has distinguished herself with many notable research discoveries and contributions in molecular cardiology, with special emphasis in heart failure.

Her pioneering research defined the role of calcium cycling genes in the control of heart function and identified novel targets for heart failure treatment. Kranias was also the first to identify human mutations in calcium cycling genes and to show that these may predispose to arrhythmias and heart failure.

Kranias has published more than 250 scientific articles and has been invited to organize national and international conferences and to speak at numerous scientific meetings. She has also received many national and international awards and honors, and was named one of Cincinnati’s “2007 Leading Women” for women’s advocacy.

**Dean’s Community Service Awards**

Joseph Pichler, PhD

Joseph Pichler, PhD, is a magna cum laude graduate of the University of Notre Dame and has an MBA and a PhD from the University of Chicago. He retired as chairman of the board of the Kroger Co. in June 2004.

He served as chief executive officer of Kroger from 1990 to 2003, chief operating officer from 1996 to 1990 and executive vice president from 1995 to 1986.

Pichler taught at the University of Kansas School of Business from 1965 to 1980 and served as dean from 1974 to 1980. From 1968 to 1970, he served as special assistant to the assistant secretary for manpower, U.S. Department of Labor.

The businessman is a member of the board of directors of UC Medical Alumni and a member of the Business Council.

He is chair of the UC College of Medicine Community Advisory Board, co-founder of the Greater Cincinnati Scholarship Association, chair of the Xavis page to provide updated information about the ongoing UC Re-engineering Project.

The page can be reached by visiting the UCP Web site, www.ucphysicians.com. Visitors should click on “Re-engineering” at the bottom of the left navigation list, or go directly to www.reengineering.ucphysicians.com.

The page features the latest news about the project along with an archive of past updates and information. It also is a list of frequently asked questions, an easy way of asking a question if it’s not addressed and a complete list of working groups and participating members.

The page is accessible only from computers connected to UC Physicians, UC and the Health Alliances networks.

The Re-engineering Project is an effort to develop a clinical practice with shared and centralized services to improve patient care and overall operations, allow for greater integration of change, enhance cooperation and collaboration and improve patient access to specialists and services.

The Re-engineering Project is being led by David Stern, MD, senior vice president for health affairs and chief executive officer of the University of Cincinnati College of Medicine dean, and Thomas Boat, MD, executive associate dean of the College of Medicine.
**Stroke Rehabilitation Researcher Named 2008 UC Faculty Award Winner**

Stephen Page, PhD, is noted for his research, teaching in Rehabilitation Sciences

By Dama Kimmon
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Stephen Page, PhD, and his team at the Neurorecovery Motor and Rehabilitation Laboratory at the Drake Center are part of a small group of health care providers giving renewed hope to stroke survivors.

Only in the past few years have researchers and clinicians begun to realize that stroke can no longer be viewed as a retrained following stroke, and that function can be re-established. In fact, Page’s research group has shown that specific therapies can actually prompt the brain to rewire itself.

Fact is, work provides optimism to stroke survivors who once thought recovery stopped after six months to a year. And his research has been eye-opening to clinicians and patients who previously thought that stroke recovery was not possible years after stroke.

Page works daily to pass on what he knows about stroke recovery—not only to patients in the community, but also to clinicians across the country, and to graduate and undergraduate students in medicine, engineering, neuroscience, design, and many allied health professions.

This is because of this, and the many other ways Page has exemplified the goals of UCl, he has been named the 2008 President’s Excellence Award winner.

The region and its Greater Cincinnati/Northern Kentucky Stroke Team is a leader in the treatment of the acute phase of stroke. Page’s accomplishments that effectively added to it the treatment for the chronic phases of stroke and other neurological diseases.

Page, who serves as an associate professor in both the colleges of allied health sciences and medicine, spends much of his time reaching out to clinicians and patients in the Cincinnati community and around the country. He and his team develop and test therapies to restore movement after stroke, and then examine how the physical changes they observe might be driven by changes in the central nervous system, also called neuroplasticity.

**Working to Fill a Gap**

The research Page leads fills a major gap between the amount of therapy allowed by most insurers and the actual time post-stroke that patients can see improvement in function. In fact, his team’s work has helped to change the way payers consider and reimburse many therapies after stroke.

The husband of one of Page’s patients previously wrote that his child’s work with Page and his team “began 14 years after her stroke, and it seems to have opened the door again. Her right arm and hand are no longer just a sleeve stuffer.”

A once- aspiring college swimming coach, Page took his interest in exercise physiology and began working with paralympians and others with disabilities. It was this work, Page says, that led him to focus on stroke recovery.

Page credits his many experiences for leading him to be so interested in improving the lives of others, and says his work at UC has given him the opportunity to interact with many people.

“At the end of a typical day, I may have spoken to a colleague in genetics about an impending project, then someone in neurimag- ing,” says Page. “I could have also chatted with a subject in one of our therapy regimens, mentored a stu- dent, and talked to a support group. I love the variety and the fact that it necessarily occurs at so many levels.”

Page’s group recently received funding to continue a collaboration with colleagues in industrial design. The group is working on an intervention for people with paralysis in their arms.

According to College of Allied Health Sciences Dean Elizabeth King, PhD, “In his commitment to life-long learning he is a role model to faculty, students and other researchers as they work together to strive to increase their understand- ing of the process that we call stroke recovery.”

**Placing Students at the Center**

Page has been described as a student-centered faculty member. With the President’s Excellence Award comes a $2,000 award, which Page has donated back to the UC Office of Research to support student research initiatives.

But Page’s work with students doesn’t end at UC. He mentors and conducts research with a student group at Xavier University, where in April, he and a colleague were honored with an award for the clinical mentoring they have pro- vided to students there.

Page has had a prolific research career at UC. He’s obtained several grants from the National Institutes of Health and, in 2005, was one of only a handful of researchers across the country to receive a prestigious Bugher Award from the American Stroke Association. This four-year grant recognizes the best stroke research studies from across the United States.

Page has been named a fellow of the American Stroke Association and he served as chairperson of the 2004 and 2005 joint annual confer- ences of the American Congress of Rehabilitation Medicine (ACRM) and American Society of Neuro- rehabilitation—the world’s largest, interdisciplinary rehabilitation research conference. In 2006, Page received ACRM’s first ever Deborah Wiklsson Award, an international prize honoring a promising early career scholar in rehabilitation research.

Stephen Page, PhD, associate professor in the colleges of allied health sci- ences and medicine, is a recipient of UC’s 2008 Faculty Award.

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**Shriners Hospital Celebrates 40 Years, Opens Burn Exhibit**

Burn Patients and Family Members Reunite to Celebrate the Care They Received at the Hospital

By Louise Hoekler
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More than 40 years ago Shriners of North America, a group of fun-loving men mostly known for their work running 340 charitable hospitals and their little cars in parades, made a decision that would save the lives of thousands of children and have an effect felt around the world when it came to the treatment of children with burn injuries.

Most of the 1960s, pediatric burn care did not exist as an area of specialized medicine. There were few recognized medical protocols in place, and children with severe burns; there weren’t any freestanding hospitals to treat these injuries; and there were no studies to determine how best to treat chil- dren with a burn injury.

Today, medical advances enable children with 80 and even 90 per- cent of their bodies burned to sur- vive their injuries. Forty years ago, it was unheard of for anyone to sur- vive this type of injury.

The higher survival rates, along with better cosmetic results and improved function and quality of life for burn survivors, result from medical advances made possible by the work done at Shriners Hospitals for Children—Cincinnati, which celebrated its 40th anniversary with an open house on May 17.

Dozens of patients who have been treated at the Cincinnati hos- pital attended, including Bill Patterson from New Jersey, who at age 6 inspired Shriners to expand its health care mission to include children with burn injuries.

Facing amputation of his leg due to inadequate medical care for a burn injury, Roach and his family turned to the Shriners. The success of his ensuing treat- ment at a shrine orthopedic hospi- tal was highlighted two years later when Roach kicked a football into an audience of cheering Shriners at their 1962 convention.

That day the Shriners unani- mously approved a resolution that led to the establishment of three Shriners hospitals specializing in pediatric burn injuries (a fourth was added in 1997).

During the Cincinnati celebration, the hospital unveiled a new exhibit, “40 Years of Pediatric Burn Care.” The exhibit showcases the most significant advancements in pediatric burn care over the last four decades, but more important- ly, it tells the stories of the children who have been treated at the Cincinnati Shriners Hospital— their physical pain, emotional struggles and determination to overcome adversity.

The exhibit also includes an interactive display to show stages of first-, second- and third-degree burns and a timeline display that highlights important milestones in burn care.

The exhibit, located in the hospi- tal main lobby and atrium, is now open to the public from 9 a.m. to 8 p.m. seven days a week. Call the hospital at (513) 877-8787 or e-mail surethe exhibit isn’t out on loan. For more information, visit shrinershospitals.org.