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PUBLISHED FOR THE USC HEALTH SCIENCES CAMPUS COMMUNITY

### NIH awards \$6 million to USC Research Center for Liver Diseases

#### By Sara Reeve

The USC Research Center for Liver Diseases received a competitive renewal of a \$6.07 million grant from the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), a division of the National Institutes of Health.

Led by Neil Kaplowitz, chief of the division of gastrointestinal and liver diseases and Thomas Brem/ USC Associates Professor of Medicine at the Keck School of Medicine, the center has had continuous funding from the NIDDK since the center's inception in 1995. With this renewal, the Liver Center will be funded through 2015.

The center focuses on basic and translational research in the area of liver disease and injury, including acute and chronic viral hepatitis; medication and alcohol induced liver disease, fatty liver disease, cirrhosis and liver cancer.

According to Kaplowitz, who also holds the Veronica P. Budnick Chair in Liver Disease, the NIDDK funds approximately 16 center grants, but of that number, only four are centers focusing on liver disease.

"It's a marker of recognition that we have one of the nation's leading liver research programs," he said. "We're up against other strong proposals, and every time, we come out

as one of the top-rated applications in our pool. It reflects the outstanding level of liver science, as well as our ties to an excellent clinical program that's expanding now with the acquisition of USC University Hospital."

The center supports research and promotes an enrichment program that brings renowned scientists from around the country to discuss their research.

The center currently has 43 members from across the Health Sciences Campus, and approximately 20 affiliated members.

Members are individuals



Neil Kaplowitz

who are conducting NIH-supported research in digestive diseases, while affiliated members are conducting NIHsupported research in other areas with collaborative activities.

Liver immunology and stem cell approaches to liver diseases are two areas that Kaplowitz sees the center pursuing in the near future.

"Clinical and translational research will really be areas we focus on next because they complement both the basic science, which is outstanding here, and the new emphasis and support in the hospital arena," he said.

'We're up against other strong proposals, and every time, we come out as one of the top-rated applications in our pool.

—Neil Kaplowitz, chief of the **Keck School of** Medicine division of gastrointestinal and liver diseases



Keck School of Medicine Dean Carmen A. Puliafito, left, and Pat Levitt, right, director of the Zilkha Neurogenetic Institute, enjoy a reception in Levitt's honor April 20 at the Bel Air home of Mary Hayley and Selim Zilkha (center). Selim Zilkha is the Institute's naming benefactor. Levitt is also chair and professor of Cell and Neurobiology and Provost's Professor of Neuroscience, Psychiatry and Pharmacy.

### Haitian officials slate May 6 town hall meeting at USC

#### By Leslie Ridgeway

Medical and infrastructure challenges facing Haiti and USC's role in Haiti's reconstruction will be the topics of a May 6 town hall meeting featuring Haitian officials and hosted by Keck School Dean Carmen A. Puliafito and Vice Dean for Medical Education Henri Ford.

The town hall meeting will take place from 4 to 5 p.m. at the Aresty Auditorium, Harlyne J. Norris Research Tower, LG level, USC Norris Comprehensive Cancer Center and Hospital. Faculty, staff and students are invited to attend and share their ideas for assisting the Haitian people. Also on the agenda is the Keck School's continuing support of surgical and medical needs for the Haitian people through the University of Miami's Project Medishare field hospital. A fourth team of surgeons and nurses is scheduled to travel to Haiti on May 1.

As hurricane season approaches, Haiti lacks even a rudimentary health care system. Hundreds of buildings have been destroyed, leaving thousands of Haitians vulnerable to the elements. The Keck School of Medicine has invited health leaders from Haiti to meet with USC leadership on May 6 to determine what USC can do to further assist. The town hall will follow a day of discussions among officials.

USC's support has been demonstrated by the USC/LA County Haiti Medical Aid Team, which has been traveling to Haiti since Jan. 15, three days after the deadly earthquake that killed more than 200,000 people, injured more than 300,000, and left up to 1 million homeless.

Four teams including 27 Keck School faculty members and Los Angeles County Health Department staff have taken personal vacation time to provide uncompensated care, while sleeping in tents during their weeklong medical missions.

USC faculty, staff and friends are encouraged to help sustain this ongoing effort with donations

See **HAITI**, page 4

#### Hospitals' IT support moves in-house

#### By Tania Chatila

Hospital employees now have access to around-theclock, on-site information technology support, thanks to the recent creation of an internally staffed and managed help desk.

On April 1, hospital administrators transitioned what was formerly an outsourced IT-support module—Perot Systems—to an in-house operation, in an effort to provide better customer service and to have more control over IT-related services at USC University Hospital and USC Norris Cancer Hospital.

The decision to make the transition was finalized earlier this year, after a months-long assessment of the hospitals' contract with Perot.

"We really had to assess the situation, and in doing so we found that Perot wasn't meeting the new expectations that we-here in the hospitalswanted to provide in terms of technological support," said Keith Paul, chief technology officer for the Health Sciences Campus IT Services. "Now we can manage those expectations."

In addition to cost-savings. the transition has meant the creation of a 24-hour, sevenday onsite help desk, overseen by one manager and staffed by nine employees (some of whom were formerly working for Perot).

It has also meant a more focused effort on improving customer service.

For example, computer technicians are now providing customer callbacks within 30

minutes of the time an employee reports an issue. That means a technician will call an employee back within 30 minutes to acknowledge receipt of the call and to provide an estimated time for solving an issue. If necessary, employees can also ask to speak with a supervisor.

A new online ticketing system also now allows employees to create their own tickets by e-mailing their issues to helpdesk@health.usc.edu. The system, called Footprints, will have the capability in the near future for employees to track the status of their open tickets as well.

"We're a stronger organization by providing these IT support services in-house," said Mitch Creem, hospitals CEO. "It allows us more flexibility and control, and also furthers our ongoing efforts to oversee quality management within our organization."

As IT administrators continue to work through the Perot transition, they are also gearing up for a technology consolidation.

In the coming weeks, Paul said the help desks of the Keck School of Medicine and USC Care will be combined into one to create a more seamless support system.

"This will allow us to do things better, faster and more cost-effectively," said Paul. "The Keck School and USC Care will also have the added advantage of 24-hour, sevenday support, so it's an important move."

To contact the help desk, call (323) 442-8440.

### 2010 USC Women's Conference offers health focus

If the 500 Trojan women attending the 2010 USC Women's Conference were looking for empowerment, they may have found it in the words of Helga Van Herle, visiting associate professor of clinical medicine at the Keck School of Medicine, who promoted the new USC Women's Cardiovascular Center in a session about heart health.

"Women have to be their own, best advocates," said Van Herle, who, along with Leslie



Christy Russell (right) and Stephen Sener lead a breast cancer workshop at the March 12 USC Women's Conference.

Saxon, professor of clinical medicine and chief of cardiovascular medicine at the Keck School, talked to women about the latest in prevention, screening and treatment for the biggest threat to women's health—heart disease.

The Women's Conference was presented March 12 at the University

Park Campus by the USC Alumni Association. The Doctors of USC and the USC School of Pharmacy were among the sponsors. "Women Empowering Women" featured a daylong program celebrating women and promoting personal growth. Health and wellness workshops focused on breast cancer, Alzheimer's disease, heart health and stress relief.

Morning health and wellness workshops

highlighted Alzheimer's disease and breast cancer. Roberta Diaz Brinton, professor at the USC School of Pharmacy, spoke about the effects of Alzheimer's disease and gave tips on how women can reduce their risk of developing the condition. According to her, 95 percent of Alzheimer's is related to age, but it is preventable. Brinton encouraged women to eat a healthy diet, such as a Mediterranean diet high in healthy fats, fruits and vegetables.

"You are what you eat," she said, adding that women should also exercise regularly. She also shared her work on natural and synthetic hormones, which are used to increase neural activity.

In the breast cancer workshop, Christy Russell, associate professor of clinical medicine at the Keck School of Medicine and director of the Harold E. and Henrietta C. Lee Breast Center at USC Norris Cancer Hospital, discussed breast cancer risk assessment and management.

She emphasized minimizing postmenopausal hormone use, reducing alcohol consumption and increasing physical activity as modifiable ways to reduce breast cancer risk.

Stephen Sener, professor of clinical surgery and chief of the division of surgical oncology at Keck and a member of the USC Norris Comprehensive Cancer Center and Hospital, addressed recent controversy surrounding breast cancer screening recommendations. He advocated for a continuation of the guidelines set by the American Cancer Society, which

recommend yearly mammograms starting at age 40. Sener pointed to a drastic reduction in mortality rates in the past 15 years as proof that screening works.

In the afternoon workshops, an emphasis was made on heart health and stress relief. Saxon and Van Herle pointed out that some of the biggest cardiovascular risk factors in women include smoking, hypertension, obesity, diabetes and age.

Stephanie McClellan, graduate of the Keck School and private practice gynecologist in Newport Beach, spoke about findings related to research done for the book *So Stressed: The Ultimate Stress Relief Plan for Women*, which she co-authored. She emphasized the numerous negative effects stress can have on the body and advocated for women to learn more about the ways they handle stress in order to deal with it in more constructive ways.

"If we can affect the stress pathway, we can change health in a profound way," said McClellan. "The absence of stress is not joy, it is vitality."

The conference opened with a talk by Elizabeth Sample, USC alumna and daughter of USC President Steven B. Sample and his wife, Kathryn.

Other highlights included a power panel of prominent businesswomen hosted by KCAL-9 anchor and USC alumna Sylvia Lopez and a keynote speech by Gloria Burgess, USC alumna, author and founder of Jazz, Inc., an executive coaching and consulting firm.

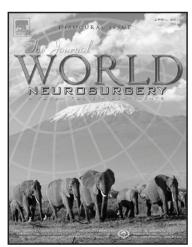
### Apuzzo named the founding editor of World Neurosurgery

Michael L. J. Apuzzo, the Edwin Todd/Trent H. Wells, Jr. Professor of Neurological Surgery and Radiation Oncology, Biology and Physics at the Keck School of Medicine, was named founding editorin-chief of *World Neurosurgery*, the first new neurosurgical journal launched by a major society in 32 years.

The journal is published by Elsevier, the publisher of more than 20,000 scientific medical titles.

The official journal of the World Federation of Neuro-surgical Societies, the journal debuted in April 2010. The federation represents the largest organization of neurosurgeons in the world, with more than 30,000 members and 115 aggregate societies.

The Weekly



Above is the cover of the inaugural issue of *World Neurosurgery*.

Editor emeritus of *Neuro-surgery*, *Operative Neurosurgery* and *Neurosurgery-Online*, Apuzzo said he was honored to lead development of the new world journal. The

journal will address not only operative techniques, but also scientific, clinical, educational, social, cultural, economic, and political ideas and issues that affect regional neurosurgical practices, research and education.

One of the world's best known and respected neurological surgeons, Apuzzo is recognized as a surgeon, innovator, researcher, educator and internationalist. He focuses on surgery of brain diseases such as tumors, epilepsy, Parkinson's disease and neuropsychiatric disorders.

Apuzzo was one of the earliest pioneers of stereotactic radiosurgery and the employment of imaging as a navigational basis for brain surgery. He is director of the Gamma Unit Facility at USC University Hospital, one of the first in the country to acquire the Gamma Knife Perfexion, which Apuzzo said represents the next generation of stereotactic radiosurgery. Stereotactic radiosurgery is a highly precise form of radiation therapy that is commonly used to treat tumors and other brain abnormalities while the patient is awake and under only a local anesthetic.

Apuzzo has more than 750 scientific publications and 55 edited volumes, including the

acclaimed surgical atlas texts Surgery of the Third Ventricle and Brain Surgery: Complication and Avoidance Management.

The Michael L. J. Apuzzo
Professorship for Advanced
Neurological Surgery was
established in 2009 at the
Keck School of Medicine.
Based on a relationship of
mutual respect for more than
40 years, the professorship was
endowed by Ernest A. Bates,
a neurosurgeon, entrepreneur,
and chair and CEO of
American Shared Hospital
Services.



**SUPPORTING PHYSICIANS**—Trustees of the Donald E. and Delia B. Baxter Foundation visited the Health Sciences Campus on April 15. The foundation supports junior faculty research and medical students at the Keck School and recently named Alan Horsager, of the ophthalmology department, and Yong-Mi Kim, of the pediatrics department, as the 2010 Donald E. and Delia B. Baxter Foundation Junior Faculty Fellows. They will each receive an award of \$100,000 to support their research. Above, from left, are Keck School Dean Carmen A. Puliafito with foundation trustees Donald Haake, Jane Haake-Russell and Jim Russell.

### Next Issue: May 7

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#### **USC Transplant Institute brings doctors together to improve patient outcomes**

#### By Sara Reeve

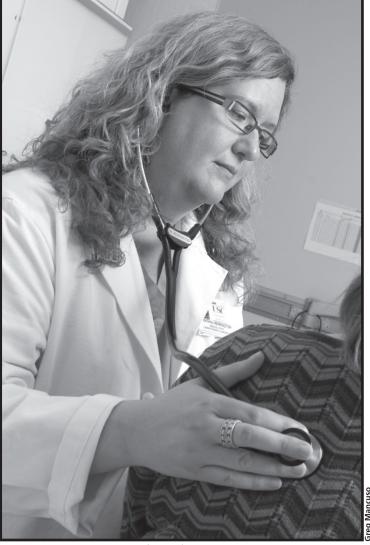
As the founding director of the new USC Transplant Institute, Cynthia Herrington is working to integrate different organ transplant programs into a seamless administrative unit that will ultimately improve patient care.

"Transplantation is not something we do to improve someone's lifestyle," she said. "This is something we do because the patient is dying. All of our transplant patients are dying—that's why they need the transplant."

Herrington, who came to USC from the University of Minnesota in 2009, is associate professor of clinical cardiothoracic surgery at the Keck School of Medicine and surgical director of pediatric thoracic transplantation at Childrens Hospital Los Angeles.

USC has a long history of organ transplantation at both USC University Hospital and Childrens Hospital Los Angeles. Currently, USC offers transplantation for heart, lung, liver, kidney and pancreas.

Administration of those organ-specific programs had been run separately for years, but at a physician retreat held by Keck School Dean Carmen A. Puliafito in 2009, discussions arose about the possibility of integrating the practices. With the university's acquisition of USC University Hospital and USC Norris Cancer Hospital in April 2009, clinical leaders carefully examined how different programs could be strengthened and patient care improved.



Cynthia Herrington, associate professor of clinical cardiothoracic surgery at the Keck School of Medicine, examines a patient.

"We were operating in silos," Herrington said. "Each program operated independently of other programs, and there was a loss of collaboration... It really just made sense that in the process of the rebirth of these hospitals, this program would be getting some attention and some changes would be made."

An idea that began a slow rise in popularity 10 years ago, the institute model has gained momentum recently for transplant programs. By combining administrative functions that are applicable across the different organ transplant systems, the institute model promises increased efficiency, better communication among physicians, more timely response to patient needs, and, ultimately, better patient care.

Coordinating business and administration aspects of the institute is the job of transplant administrator Mike Donnell, who has extensive experience in the management and organization of transplant programs. Donnell emphasizes the overall care offered at the USC Transplant Institute.

"We should be recognized as an organ disease management center," he said. "Transplantation is just the end treatment of that care continuum, and really, a very miniscule number of the total population ever gets to transplantation. The fact is that there is an organ shortage, so for us, the real win is if we can intervene earlier and keep those patients from ever needing a transplant."

As the USC Transplant Institute continues to grow and develop, Herrington expects great things to happen, such as an increase in the number of transplants performed and the addition of a larger research component. But she is adamant that the institute is building on already strong transplant programs at USC whose outcomes are a testament to the hard work and determination of the staff and physicians.

"A lot of the care and talent was already here," said Herrington. "The surgeons are amazing here and the medical doctors are amazing, and the staff that takes care of the patients, the coordinators, it was all here. This is going to create an infrastructure and bring everyone together so we can take that next step to be an even larger and even better program."

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—Cynthia Herrington, director of the USC Transplant Institute

### New pharmacy Ph.D. program focuses on translational science

#### By Kukla Vera

The Titus Family
Department of Clinical
Pharmacy and Pharmaceutical
Economics in the USC School
of Pharmacy has launched a
new Ph.D. program designed
to train translational scientists
to bridge the gap between
scientific discovery and
clinical application.

The Ph.D. in Clinical and Experimental Therapeutics (CXPT) is an interdisciplinary degree that teaches students how to make the connection between biomedical research and human disease. Those enrolled study the disease process and use their findings to develop drugs and therapeutic regimens.

"Our new Ph.D. program offers a unique translational approach integrating rigorous training in basic sciences with a clinical perspective," said associate professor Annie Wong-Beringer who spearheaded the development of this program.

The program provides students with a unique "cross training" between clinical and basic sciences with a focus on investigation of diseases, drug development, and efficacy and toxicity of therapeutic regimens.

Students follow a curriculum that melds the needs of a translational scientist—including the principles of clinical research and basic science concepts and laboratory techniques.

"Each student's thesis must reflect both these areas," said Wong-Beringer. "So a clinical investigation must also have a basic science arm and a basic science project must also have a clinical tangent."

Wong-Beringer is co-chair of the Titus Family Department.

Tim Bensman, one of three students currently enrolled in the degree program, explained, "By bringing together the clinical and basic science disciplines, the program trains young translational scientists how to facilitate the application of new scientific understanding and techniques in the clinical realm."

Bensman is simultaneously pursuing a Pharm.D. degree at the school.

The new 60-unit program

provides students with both experimental and diseasefocused opportunities that complement the graduate's individual research focus.

The program offers two curricular tracks, an advanced professional track for students with Pharm.D., M.D. or D.D.S. degrees and a bachelor degree track for those entering the program from undergraduate school.

For information on the program, visit http:// www.usc.edu/schools/ pharmacy/clinicalpharmpep/ experimental\_therapeutics.

### The Weekly NEWSMAKERS

An April 26 *Modern Healthcare* article quoted Keck School of Medicine student **Joshua Goldman** about a survey he conducted of M.D./MBA graduates, which found that the vast majority consider the effort to have been worthwhile.

An April 26 Los Angeles Business Journal article reported that free biotech laboratory space will be developed in the medical center building on the Los Angeles County+USC Medical Center campus. The Bell Gardens Sun also reported on the laboratory space.

An April 21 Los Angeles Daily News

article noted that Autism Speaks, which raises money and awareness for families with autistic children, has a goal of funding research at institutions such as USC.

An April 20 *Huffington Post* article quoted professor of pediatrics and head of the Center for Diabetes, Endocrinology and Metabolism at Childrens Hospital Los Angeles **Francine Kaufman** about a proposed soda tax.

On April 20, CNBC interviewed **Joel Hay** of the USC School of Pharmacy about possible legalization of marijuana. A second CNBC story and KPCC-FM also quoted Hay.

### Calendar of Events

### This Calendar of events is also online at www.usc.edu/hsccalendar for the Health Sciences Campus community

#### Saturday, May 1

**8 a.m.** "Current Trends in Gastrointestinal Malignancies," Heinz-Josef Lenz, USC. Westin Pasadena. Info: (323) 865-3967

**8 a.m.** "Coronary Artery Disease 2010: When and How to Intervene," various speakers. KAM Mayer Aud. Info: (323) 442-2555

#### Monday, May 3

Noon. USC Wellness Workshop for Students. "Relationship Success." NML East Conference Rm. Info: (323) 442-3360

**Noon**. KSOM Research Seminar. "Protein Arg Modifications in Innate Immunity and Tumorigenesis," Yanming Wang, Penn State. NOR 7409. Info: (323) 442-1144

#### Tuesday, May 4

**Noon**. Psychiatry Grand Rounds. "A Translational View of Alzheimer's Disease: Neuroimaging, Cognition and Psychiatric Symptoms," David Sultzer, UCLA. ZNI 112. Info: (323) 442-4065

#### Wednesday, May 5

**Noon**. ZNI Seminar Series. "Imaging Experience-Dependent Emergence of Functional Circuits in Visual Cortex," David Fitzpatrick, Duke Univ. ZNI 112. Info: (323) 442-2144

#### Friday, May 7

**8:30 a.m.** Annual USC-Caltech MD/PhD Symposium. Various speakers. Beckman Institute Auditorium at Caltech. Info: (323) 442-2553

**Noon**. Pharmacology and Pharmaceutical Sciences Seminar. "Molecular Behavior in Small Spaces," Julius Rebek, Skaggs Inst. PSC 104. Info: (323) 442-2341

#### Saturday, May 8

**8 a.m.** Revlon Run/Walk for Women. Exposition Park. Join the USC team – info: (323) 865-0668,

#### Monday, May 10

**4 p.m.** "Biologically Inspired Artificial Haircell Sensors," Chang Liu, Northwestern. UPC: HNB 100. Info: (213) 821-2084

#### Tuesday, May 11

**11:15 a.m.** USC Hospital Guild Speaker Series. "Antibiotics Made by Our Blood Cells," Michael Selsted, USC. UNH Impatient Café. Info: (323) 254-0600

**5 p.m.** Visions for Change Lecture. "Meeting the Survival Needs of the World's Least Healthy People," Larry Gostin, Institute for National and Global Health Law. NRT Aresty Aud. Info: (323) 865-0419

#### Monday, May 17

**11:30 a.m.** USC Norris Auxiliary Speaker Series. "USC's World Class Institute of Urology," Inderbir Gill, USC. San Gabriel Country Club. Info: (626) 282-9516

#### Thursday, July 8 – Sunday, July 11

**8 a.m.** 6th Annual International Head & Neck Symposium. Various speakers. USC Health Sciences Campus. Registration deadline: May 15. Info: (323) 442-7432

**Notice**: Deadline for calendar submission is 4 p.m. Monday to be considered for that week's issue—although three weeks' advance notice of events is recommended. Please note that timely submission does not guarantee an item will be printed. Send calendar items to *The Weekly*, KAM 400 or fax to (323) 442-2832, or e-mail to eblaauw@usc.edu. Entries must include day, date, time, title of talk, first and last name of speaker, affiliation of speaker, location, and a phone number for information.

### Phoning it in: the future of medicine?

#### By Ryan Ball

Doctors phoning it in hardly seems like progress, but imagine a physician using an iPhone to remotely administer a dose of localized medicine, calibrate a pacemaker or even restart a heart by activating an implantable defibrillator.

That's where medicine is headed, according to Stephen N. Oesterle, senior vice president for medicine and technology at Medtronic Inc., a multinational company that uses technology to transform the way debilitating, chronic diseases are treated. Oesterle spoke at the Keck School of Medicine on April 21 as part of the Dean's Translational Medicine Seminar Series.

Oesterle recently made waves within the medical device industry when a Wall Street Journal blog quoted him saying, "When biotechnology gets it right, we're finished... It's done. Devices ultimately are done." He explained that the quote was taken a bit out of context, and instead painted a picture of a landscape where medical devices work alongside emerging treatments designed to address chronic illness at the genetic level.

"Biotechnology is the future of medicine," Oesterle stated. "How could it not be?" He went on to explain that most chronic diseases can be reduced to abnormal proteins, and that Medtronic will play a vital role in delivering biotech treatments via remote patient management. For instance, the company is developing a small, implantable pump that can be activated remotely to deliver antibodies capable of flushing out plaques that build up in the brain of an Alzheimer's patient.

The infrastructure for remote patient management

## HAITI: Donations sought to help pay for medical missions

Continued from page 1 to the Keck School of Medicine Haiti Relief Fund that will pay for transportation to Haiti. Team Four is traveling thanks to the generous sponsorship of Simon Ramo, a Keck School benefactor and a member of the Keck School of Medicine Board of Overseers.

A donation of \$1,000 will support one team member for one week in Haiti; a donation of \$5,000 will support an entire team. Donations of any amount will be gratefully accepted.

To contribute, you may make a donation online with a credit card by visiting http://uscsom.convio.net/Haiti, or call Elliott Law at (626) 457-4066.



Stephen N. Oesterle, senior vice president for medicine and technology at Medtronic Inc., discusses his view of the future of medicine at an April 21 lecture at the Aresty Conference Center.

already exists, Oesterle said, pointing out that IBM is currently able to screen all phone calls made in the U.S. to flag conversations that may be of interest to national security. A similar system, according to Oesterle, could be set up to monitor millions of patients around the world using wireless broadband technology to communicate with miniature devices implanted in the human body.

Oesterle said key communications and electronics companies such as Apple, Cisco and Qualcomm "all want to be part of this story that is medical device technology."

As the world's population

continues to rapidly grow, so do the ranks of the elderly. Oesterle projects that by the year 2030, nearly half of all Americans will suffer from chronic conditions, most commonly linked to spinal deterioration. It's a staggering notion, but one that Medtronic and other manufacturers of medical devices are banking on as they lay out their business plans for the next 20 years.

"The next decade will be the most interesting decade for medicine," Oesterle proclaimed, adding, "Those of you who think medical devices are finished, ignore the column in the *Journal*."

USC Health Sciences Public Relations and Marketing 1975 Zonal Ave. KAM 400 Los Angeles, CA 90033

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### In case of an emergency...

**Call the Emergency Information Phone: 213-740-9233** The emergency telephone system can handle 1,400 simultaneous calls. It also has a backup system on the East Coast.

Visit the USC Web: http://emergency.usc.edu This page will be activated in case of an emergency. Backup Web servers on the East Coast will function if the USC servers are incapacitated.