



# Legacy Heart Institute Heartbeat

News from Legacy Heart Institute, which includes: Emanuel, Good Samaritan, Meridian Park, Mount Hood and Salmon Creek Hospital.

WINTER 2006

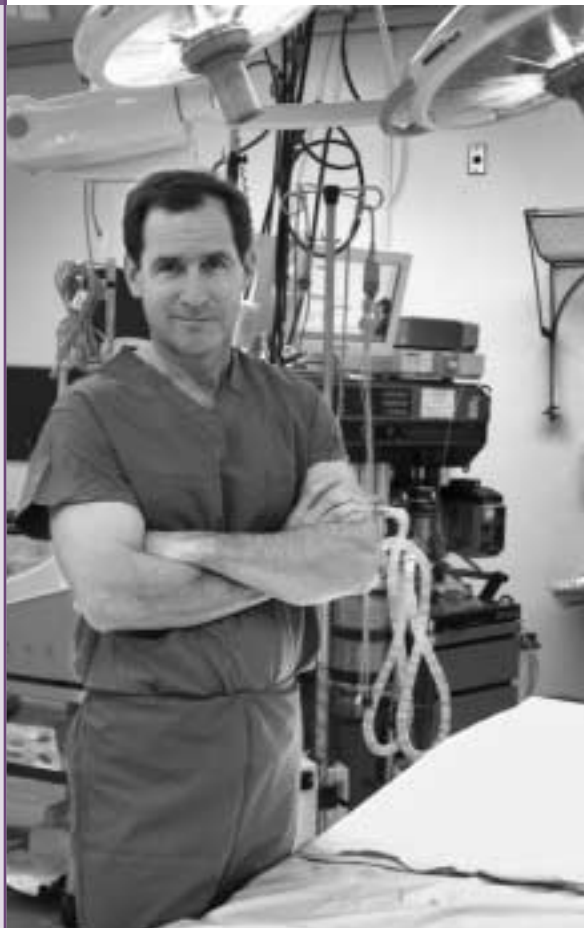
## Good Samaritan makes top 100 for heart care

Legacy Good Samaritan Hospital has gained recognition as one of the nation's finest hospitals for cardiovascular care, winning notice in *Modern Healthcare's* top 100 U.S. hospitals for heart care.

Legacy Good Samaritan, making the list for the third time in six years, was the only hospital named in the Portland metropolitan area. The study, released exclusively to *Modern Healthcare* by Solucient, a health-care information and research company based in Evanston, Illinois, identifies hospitals that are setting benchmark levels of performance in a range of cardiovascular services.

"This study confirms what we know—that we're on the leading edge of treatment and care for heart disease," says Ronald Schutz, M.D., medical director of Legacy Heart Institute. "It's also a tribute to the dedication that the physicians and staff take to providing the highest level of care."

## Surgeon applies innovation to atrial fibrillation treatment



Thomas Molloy, M.D.

Four years ago Thomas Molloy, M.D., a cardiovascular surgeon with Legacy Heart Institute, was the first surgeon in the world to use microwave energy on the beating heart to treat atrial fibrillation. Legacy Good Samaritan Hospital is the only center in the Pacific Northwest where the procedure is now performed without opening the chest.

Dr. Molloy, Legacy division chairman of cardiothoracic surgery, says the technique is referred to as the "Maze" Procedure. "We create controlled lines of scar tissue on the heart to create a maze-like pattern that blocks the erratic electrical signals that cause the arrhythmia," he says. "The scar tissue creates new pathways for electrical signals to follow, which stops the atrial fibrillation."

Atrial fibrillation, or AF, is an arrhythmia affecting more than three million Americans. It is often poorly treated with medications and is associated with diminished exercise tolerance and sense of well being, as well as significantly increased risks of death and stroke.

Surgeons traditionally treat AF through open-chest surgery. The Maze Procedure does not require opening the chest, instead using minimally invasive techniques. "The microwave energy alters a strip of the heart muscle preventing the conduction of irregular

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## Legacy Salmon Creek opens with high-tech care

The Pacific Northwest's newest hospital, Legacy Salmon Creek Hospital, is offering heart services to Vancouver and the other communities in southwestern Washington. The hospital's capabilities in cardiology are developing, and Legacy Salmon Creek is poised to provide the latest generation of technology for a range of cardiovascular care.

Cardiovascular services include cardiac catheterization, diagnostic electrophysiology and pacemaker implantation.

A state-of-the-art cardiac rehab unit will open in early 2006, complete with both inpatient and outpatient services and a fully equipped new gym.

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## Emanuel lab adds equipment for children's procedures

Legacy Emanuel Hospital features a newly redesigned and equipped pediatric catheterization lab to accommodate state-of-the-art imaging technology. One of the uses is helping James Kyser, M.D., a pediatric cardiologist with Legacy Emanuel Children's Hospital, repair holes in children's hearts using a minimally invasive pro-

cedure called ASD (atrial septal defect) device closure.

With surgical repair of atrial septal defects (the traditional treatment of holes in the upper chambers of the heart), children undergo open heart surgery, which requires at least one day in the pediatric intensive care unit (ICU) followed by three to four days

in the hospital. Dr. Kyser says that most kids who have ASD devices inserted will go home later the same day.

With the guidance of transesophageal echocardiography, the anatomy of the ASD is identified. The device is delivered through a long catheter inserted in a vein in the leg and is guided through the bloodstream to the hole in the heart. The device is double umbrella shaped and made of a hybrid material of nickel and titanium that allows it to be flexible and sturdy at the same time.

This construction allows the device to be collapsed into a small catheter suitable for children as young as 6 months old. The catheter is positioned across the ASD and one umbrella disc is delivered on each side of the defect, effectively sealing the hole. Over time, heart tissue grows in and around the device, requiring no further procedures or medications.

A similar procedure is used in adults with patent foramen ovale (PFO), a small communication between the upper chambers of the heart. Twenty percent of all adults have a PFO. Those who have certain



James Kyser, M.D.

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## Nurse specialist offers skill for electrophysiologists

Legacy Health System has added a new position to assist with physicians treating arrhythmia. Joy Khamsoukthavong, R.N., started in June as a clinical nurse specialist for Legacy Arrhythmia Services at Legacy Health System.

She works primarily with John McAnulty, M.D., medical director for Legacy Arrhythmia Services, and she also supports the other electrophysiologists from Pacific Heart Associates and NW Cardiovascular Institute in the inpatient and outpatient settings.

Khamsoukthavong coordinates and provides education to patients and family members who are undergoing electrophysiology studies and/or device implants such as defibrillators and pacemakers. In the outpatient setting,

she follows up on these patients and helps triage patient issues.

Although Khamsoukthavong's role mainly focuses on arrhythmia patients, she also assists with the general cardiology patient population. In addition, Khamsoukthavong is involved in administrative work.

Khamsoukthavong has been a nurse since 1998. All of her background is in cardiac care; the last five years she worked in an intensive care unit. In 2004, she received her degree as a clinical nurse specialist.

"This position is a wonderful opportunity to learn new things. I get to work closely with patients, staff and physicians," she says. "Dr. McAnulty is a great teacher." ❧

## Research studies

### LUNAR: Reducing the risk of coronary disease

This study compares two FDA-approved medications for people with chest pain and/or shortness of breath.

Principal investigator: Sandra J. Lewis, M.D.

### A randomized controlled trial comparing two drug-eluting stents

This study compares the safety and effectiveness of an investigational drug-coated stent compared to a currently approved drug-coated stent.

Principal investigator: Bradley Titus, M.D.

### FREEDOM: Future revascularization evaluation in patients with diabetes mellitus

This investigation compares two treatment methods in diabetics: coronary artery bypass surgery and drug-eluting coronary stents. While bypass surgery is more invasive, stenting has certain limitations among diabetics. Two FDA-approved stents will be used in this trial, funded by the National Heart Lung and Blood Institute.

Principal investigator: John H. Lemmer, Jr., M.D.

### RESTOR-MV: Off-pump repair of the mitral valve

Severe cases of mitral valve regurgitation may trigger atrial fibrillation. This study tests a device designed to reduce the anterior-posterior leaflet dimension of the mitral valve and stabilize the wall of the lateral ventricle.

Principal investigator: Thomas Molloy, M.D.

### Comparison of waveforms

This study compares two different waveform patterns for implantable cardioverter-defibrillators.

Principal investigator: Eric Putz, M.D.

If you have any questions about research at Legacy Health System, please call 503-413-1742 or e-mail [research@lhs.org](mailto:research@lhs.org)

## Emanuel, CONTINUED FROM PAGE 2

medical conditions that put them at risk for blood clots have an additional risk for strokes should the blood clot find its way through the PFO. A PFO device can be placed just like the ASD device to occlude the PFO and potentially reduce the risk of strokes. Depending on the medical condition, this procedure also can eliminate the need for life-long blood thinning medications such as Coumadin.

Dr. Kyser recently came to the Children's Cardiac Center of Oregon at Emanuel Children's Hospital from Rainbow Babies & Children's Hospital in Cleveland, Ohio, where, as a fellow, he participated in the first ASD-closure device ever inserted at that hospital in 2002. Legacy Emanuel Children's Hospital is affiliated with the Children's Cardiac Center of Oregon. ❧

## Heart care at Salmon Creek, CONTINUED FROM COVER

A new digital echocardiogram machine at Legacy Salmon Creek Hospital is helping revolutionize the speed and method used to view and diagnose patients' cardiovascular problems.

Michael Ontkean, D.O., who practices at Cascade Heart, is one of several cardiologists using Salmon Creek's new echocardiogram system to diagnose cardiovascular problems. "The echocardiogram equipment at Legacy Salmon Creek is digitized, allowing less degradation of images acquired at the patient's bedside and more efficient review of the images," says Dr. Ontkean.

Ronald Schutz, M.D., medical director of Legacy Heart Institute, says, "The digital output allows for more efficient review, interpretation, transfer and archiving of images. It will eventually be tied in with a Legacy-wide cardiology PACS system."

The Philips IE 33 digital echo uses digital technology rather than videotapes to capture and send images to reading stations, making it possible for cardiologists to access them almost immediately. The IE33 system performs 250 billion computational operations per second.

Legacy is targeting next spring to set up a system-wide PACS imaging network that will allow physicians to read the images wherever there is a computer with network access.

Dr. Schutz says Legacy Salmon Creek's future will include expanding the electrophysiology service with new, state-of-the-art 3D mapping equipment. "We are exploring the possibility of offering therapeutic electrophysiology interventions, such as radio-frequency ablations to treat abnormal heart rhythms," Dr. Schutz says. Emergency interventional cardiology procedures such as angioplasty and stenting for acute heart attack patients are other opportunities under consideration. ❧



## Heartbeat

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### 4 Legacy Heart Institute



#### Tourney raises thousands for heart

The annual Legacy Heart Institute golf tournament in September raised \$35,000, a record for the event.

Funds from the tournament will support equipment, staff and patient education and scholarships for cardiac rehabilitation. Sponsors:

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#### AF treatment, CONTINUED FROM COVER

impulses," Dr. Molloy says. Skilled teamwork in the operating room is necessary for the successful performance of the procedure, according to Dr. Molloy. The tiny incisions made for the procedure are covered with small bandages; most patients are able return to normal activity within a week.

Compared to the open-heart technique, the Maze Procedure is also less apt to result in complications or require a pacemaker. Many patients will still have episodes of AF for the first month after the procedure, but most will be in a regular rhythm within six months. Dr. Molloy's results with micro-wave ablation, published this last June in the *Annals of Thoracic Surgery*, indicated the success rate at midterm with microwave ablation was 86 percent. ❧

*Heartbeat* is published two times a year by the Legacy Heart Institute to provide information about activities at the Institute. We welcome your comments, suggestions and ideas. Call Legacy Heart Institute at 503-413-8888 or toll free 1-877-777-0112. Editorial content: Clay Hathorn and Macy Guppy; graphic design: Mike Staudinger

Legacy Health System, a nonprofit organization, includes Emanuel Hospital & Health Center, Emanuel Children's Hospital, Good Samaritan Hospital & Medical Center, Meridian Park Hospital, Mount Hood Medical Center, Salmon Creek Hospital, Legacy Clinics and CareMark/Managed HealthCare Northwest PPO. © 2006. Printed on recycled paper.