## CALENDAR

FOR ALUMNI & FRIENDS

## **HEALTH SCIENCES**

ALUMNI RECEPTIONS FLORIDA MARCH 11 Winter Academy Palm Beach MARCH 13 Winter Academy Naples FOR INFORMATION: Pat Carver at 412-648-9741 cpat@pitt.edu

## MEDICAL ALUMNI ASSOCIATION REUNION WEEKEND

MAY 15–18 Reunion Classes: 1955, 1960, 1965, 1970 1975, 1980, 1985, 1990 1995, 2000, 2005

MAY 15, 11 a.m. Graduation Luncheon Alumni Hall, J.W. Connolly Ballroom

MAY 15, 5 p.m. Grand Opening Reception Pittsburgh Athletic Association

MAY 15, 6:30 p.m. An Evening at the Symphony Heinz Hall for the Performing Arts "The Sound of a Modern Symphony"

MAY 15, 7 p.m. Scope and Scalpel Central Catholic High School, McGonigle Theater

MAY 16, 9 a.m. Breakfast with the Dean and Today's Medical Student Scaife Hall, 11th Floor Conference Center

MAY 16, 6 p.m. Reunion Gala: Dinner and Dance Twentieth Century Club

MAY 17, 2 p.m. Scope and Scalpel 6oth Reunion Celebration Central Catholic High School, McGonigle Theater

MAY 18, 11:30 a.m. Farewell Alumni Reunion Brunch Wyndham Pittsburgh University Center

MAY 18, 4 p.m. Class of 2015 Graduation Ceremony Soldiers & Sailors Memorial Hall & Museum For information: Jen Moritz at 412-648-9059 jlm337@pitt.edu





## FOR REAL! TWEEN SCIENCE

Right now, about 84,000 people in the United States are waiting and hoping for new livers, hearts, and other essential organs to

save their lives. Unfortunately, their hopes for a better future rely on tragedy for others—organs are donated by people who have agreed to share theirs when they die. But even when organs become available, they need to be good matches in blood type, size, and other factors in order for the operation to succeed. This is why many patients wait years for new organs; it's a problem with no easy solution.

But what if doctors could instead make new organs for people as needed? It sounds like something you might expect to find in the infirmary at Hogwarts, but scientists are actually inventing ways to "print" organs. Researchers can scan the patient to determine the size and shape of the failing organ, and then use a 3-D printer loaded with collagen (a structural protein that gives shape to otherwise amorphous blobs of cells) instead of ink, to create a custom-made organ scaffold. Doctors can then "plant" cells from the patient—often from bone marrow—onto the scaffold and let them multiply.

Researchers don't yet know how to print fully functioning organs like a lung, which is made up of several different types of cells and requires complicated networks of blood vessels to work properly. (So hold on to your broomsticks, Quidditch enthusiasts.) Yet they are making progress. Some have grown skin and other tissues from tailor-made scaffolds to treat patients for burns, birth defects, and injuries. (Pitt's Rocky Tuan has grown living cartilage.) Some are starting to use 3-D printed scaffolds as guides in surgery. And others have conjured up 3-D generated models to better understand molecular structures and how the body works its magic. *—Jenifer Lienau Thompson* 

For more on bio-conjuring gadgetry: See this TED talk tinyurl.com/664neeu and this *New Yorker* story, tinyurl.com/opq3stj

For more kids' stuff: www.howscienceworks.pitt.edu