### Research

from page D4

said Iezzi. For example, in retinitis pigmentosa, the photorecuptors, which turn light into the
initial impulses that the retina
then interprets, degenerate, and
so the retina loses its ability to
be sensitive to light. One goal of
the retinal implant is to replace
the function of those photoreceptors. These devices are micromachined, meaning that they're
fabricated using microscopic
scale [and] a variety of laser
techniques unique to his lab.

Because our implant uses
electric current and is such
fine device, Iww enced to work
with special materials capable of
delivering electrical current in
such a small package. So, one of

the other aspects of Greg's lab is that they work with and develop and grow their own new materi-als for bio-compatible tissue interfacing."

#### Local researcher

Local researcher

Another Livonia resident,
Pepe Siy, Ph.D., WSU nasociate
professor of electrical and computer engineering, has worked
with Auner since the smart sensor lab's inception and designed
the integrated circuitry of the 2
mm x 2 mm chips - the hardware. A millimeter (mm) is onethousandth of a meter and
approximates a paper clip's
thickness. (A meter equals 39.37
inches.)

"We want to help people to see at least something," Siy said. "It will not be exactly as the way is sighted person; sees it, but it will enable them to see, most likely, printed characters or impress return then seenary or images, rather than scenery or colors. It will enable them to colors. It will enable them to navigate... gives them a visual defense... to avoid hitting a wall in their environment. It will also help them to see some characters if they want to do any reading."

Auner and Raymond lezzi agree that it will be a few years before research can be conducted with human beings.

"The devices we're working with are not ready to go into humans," Iezzi said. "But there

are some companies in the United States that are working on devices that have undergone some human testing. And, in due time, our devices will eventually be tested in humans after they've been thoroughly tested in the laboratory.

Current laboratory testing includes floating the devices in cellular culture models.

"We grow neurons and [then] test the responses of these neurons to the stimulation by these devices," I ciri said. "Once we have adequate in vitro testing, then the devices will be [observed during] in vivo testing, which would then lead to human testing."

Several considerations are being reviewed by the team before they move to the next

stage of research and development.

The technology is really rather distant in terms of a realizable device for a blind patient, leazi says. There still are rudit and brain? What's the best way to stimulate the retina and brain? What's the seed of the most deal in terms of biocompatibility so the device doesn't break down after being in the body for five, 10, 20 years? All these basic questions need to be answered before devices are going to be put into people. That

can take a number of years While we hear about a re-While we hear about a variety of tests that are being done in humans elsewhere, ... still the compatibility, safety and effica

Similar retinal and cortical research is being done at the Illinois Institute of Technology, Massachusetts Eye and Ear Infirmary and North Carolina State University.

"Despite the technical challenges, labe like Dr. Auner's are making this research possible, giving hope to millions of patients worldwide," Ierzi said.

### Donations from page D4

dvance, 11 possible.
"It is important to be regis-

"We hold several blood drives tered, so that the Red Cross can plan for specific numbers," for the blood drive. Residents are Sprout said. "This planning will dvance, if possible.
"It is important to be registed in the time of donation."

Call (734) 655-2980 to register for the blood drive. Residents are sprout said. "This planning will donor waits at the time of donation."

#### Board chairman

Board Chairman
Daniel G. Fredendall was
recently elected board chairman
of Orchard, Hiltz and McCliment, Inc. (OHM). Fredendall
joined OHM in 1986 to manage
the firm's transportation engineering services department. In
1990 he was promoted to associate and in 1993 was elected to

the firm's board of directors as director of engineering. OHM is a Livonia-based engineering company.

**BUSINESS NEWSMAKERS** 

#### New appointment

New appointment
William G. Costick has been
appointed to the board of directors of Orchard, Hiltz and McCliment, Inc. (OHM). Costick will
remain in his position as director

ness development. Prior to joining OHM in 1999, Costick served as city manager of Farmington Hills for 15 years. He was previously deputy city manager in Troy, and as city manager in Flushing. OHM is based in Livo-nia, and has branch offices in

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# REMOVING EXPERIENCES

# THE ORTHODONTIC GROUP 19850 Middlebelt • Livonia • (248) 442-8885

JOSEPH J. WEISS, M.D. RHEUMATOLOGY 18829 Farmington Road Livonia, Michigan 48152 Phone: (248) 478-7860 CALF SWELLING NOT A BLOOD CLOT

is vasity different between a blood clot in the call and a torn muscle in the leg. If y

INTRODUCÍNG,

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ment, Inc. (OHM). Costick will remain in his position as director Hills and Auburn Hills.

MICHIGAN "SENIOR"? WEFK

The Second Control of the second Contr FUN...FOOD...FREE PRIZES...FRESH AIR It all begins FRIDAY, AUGUST 24TH

9:00 a.m. Official Ceremonies - Burgh Park

- Join Mayor Donald Fracassi in proclaiming Michigan "Senior" Week
- The Southfield Celebration
- ☐ Meet Miss "Senior" Michigan Val Benson
- ☐ Visit the Southfield Fire Hall
- ☐ Enjoy the Southfield Historic Museum

\*FREE: Official Michigan "Senior" Week Ribbons

PUT ON YOUR WALKING SHOES, TAKE A DEEP BREATH - WE'RE OFF AND RUNNING, WALKING, STROLLING, SITTING, EATING, DRINKING, LAUGHING AND SHOPPING!

Immediately following the ceremony, ALL seniors are invited to Walk for the Health of It! Mayor Donald Fracassi will lead the Civic Center Walk-Along.

> \*FREE: Water Bottles and Bottles of Water to all walkers. \*FREE: Parking at Burgh Park

9:30 a.m. Whew!! We need a break... Stop at The Heatherwood for a delicious complimentary "Continental Breakfast Break" Enjoy coffee, juices, danish and more!

REGISTER TO WIN: Shopping Basket filled to the brim with food, fun and entertainment Up and at 'um - let's go to...

10:00 a.m. The Trowbridge "Craft Bazaar" - Shop 'til you drop! Over 25 local vendors will 3:00 p.m. be displaying and selling Jewelry, Ceramics, Clothing, Candles, Baskets, Soaps

#### REGISTER TO WIN: a 13" Color TV \*FREE: Lemonade and Popcorn

When you are ready, it's off to...

10:00 a.m., The Providence Adult Day Health Center

REGISTER TO WIN: Dinner for Two • \*FREE: Potato Chips and Peanuts Just around the corner and up the hill you will want to stop by...

10:00 a.m The Southfield Adult Recreation 50+

and much, much more.

REGISTER TO WIN: A Trip for two to Frankenmuth

FREE: Candy Goody Bags

TAKE OFF YOUR WALKING SHOES, PAT YOURSELF ON THE BACK - YOU MADE IT! LET'S ALL CELEBRATE YOUR SUCCESS AT...

2:30 p.m. The Heatherwood for a complimentary "HAPPY HOUR" Relax, laugh, enjoy 4:30 p.m. Cocktails and Hors d'oeuvres and dance to the tunes of Rod Bork and the Music Makers.

\*Free prizes while supplies last.







248-350-1777



