

## HEALTH UPDATE

## Harvesting stem cells less invasive with UM-tested device

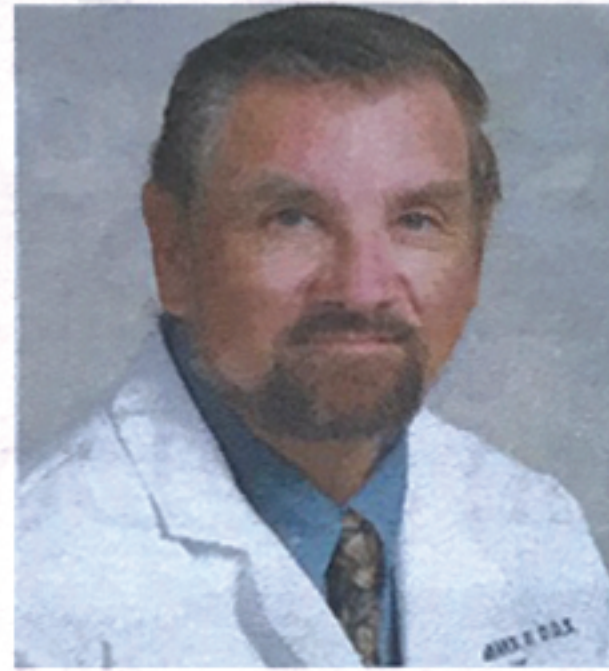
BY CATHERINE LACKNER

A device developed and tested by Robert E. Marx, M.D., University of Miami Miller School of Medicine professor and chief of oral and maxillofacial surgery, is expected to make harvesting stem cells safer and less invasive, hence less complicated and painful.

Christened the MarrowMarxman, the FDA-registered device, manufactured by the medical instrument company Lenkbar of Naples, FL, will enable patients to go home sooner, which reduce costs and inconvenience.

Since 2008, Dr. Marx has studied an unbreakable, flexible device that will remain in the bone marrow to move along the inner cortex in bone, where more of the stem cells can be harvested.

"It's an improvement over the



*'We can replace an entire jaw without taking bone from anywhere else in the body.... The cells will regenerate in the area we took them from within 36 hours.'*

**Robert Marx**

current technology because it focuses on the area where most of the stem cells exist, and takes more cells than any other device," Dr. Marx told Miami Today on Tuesday. "We can replace an entire jaw without taking bone from anywhere else in the body. The beauty part is that the cells will regenerate in the area we took them from

within 36 hours; the patient won't miss them."

"In more than 500 cases over 11 years so far, the technology we are working on has shown the ability to more safely harvest selectively more stem cells than any device has been able to do," he said in a release.

Patients come from other parts of

the US, their own clinicians having heard Dr. Marx's numerous lectures and demonstrations of the device around the country. A global patient base is likely to develop as well, strengthening Miami's position as a medical tourism destination. Dr. Marx has recently come from lectures in Scandinavia and is set to depart for the United Kingdom, he said.

"UM and Miami have become centers of excellence for the application of stem cell technique as well as research," Dr. Marx said. "We're a teaching center that practices translational medicine, which means that straight clinical practice comes right out of research to benefit patients now."

The annual World Stem Cell Summit will take place on Miami Beach in January. "The world's best people will be there," Dr. Marx said.

Colleagues have applauded the new device. "We are now ready to regenerate new tissue and do it with minimally invasive techniques," said Theodore I. Malinin, M.D., emeritus professor of orthopedics at the University of Miami Miller School of Medicine, in the release.

"Today, with this type of a device ... we now have the ability to harvest greater numbers of stem cells, with greater safety," said Dr. Malinin, the former medical director of the University of Miami Tissue Bank.

"Out of 500 cases Marx saw, complete bone regeneration with no long hospital visits or foreseeable days in the ICU – that's what we want, said H. Thomas Temple, M.D., professor of orthopedics at the Nova Southeastern University School of Medicine, in the release. "These are important results."