

Top-of-the-Line

# Technology

Did you know that the traditional symbol of orthopedics is a bent tree that has been braced to make it grow upright? In fact, early orthopedic specialists treated children suffering from spine deformities using braces to make the child "straight." The origin of the term "orthopedics" actually has its roots in the Greek words ortho (straight) and pais (child).

Medicine has come a long way since those early attempts at helping children straighten up. The treatment of orthopedic conditions is a brave new world that embraces the use of innovative technology, techniques and tools to deliver unprecedented outcomes. Orthopedists at Methodist Hospital were among the first to use many of these innovations.

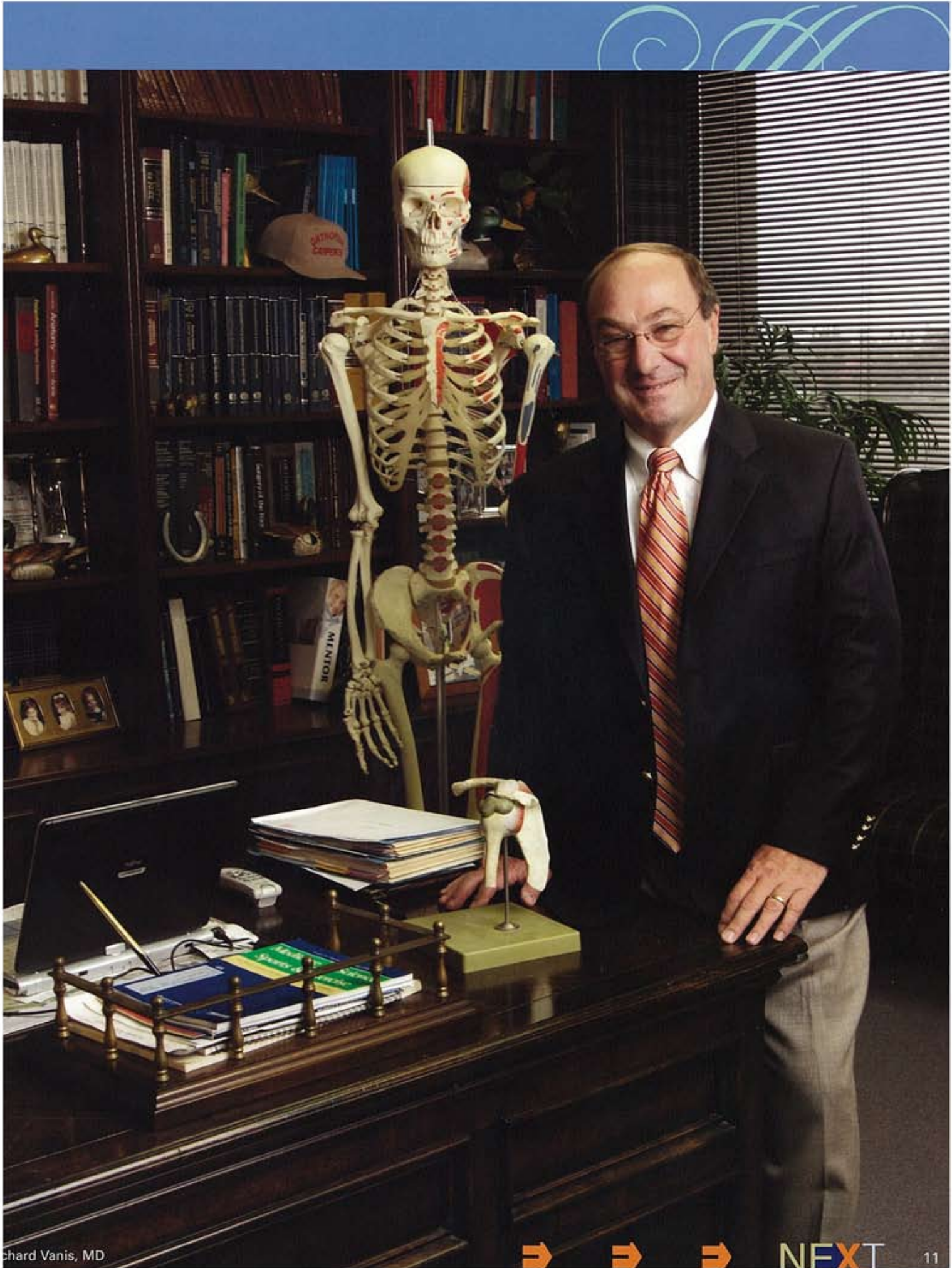


"Computerized navigation systems are one of the most fascinating advancements in orthopedic surgery," says Richard Vanis, MD. Surgeons use the system during joint replacement procedures to direct incisions with greater precision and accuracy. "Using computerized navigation, we can derive optimal alignment of prostheses with minimal deviation. The result is the most anatomically correct placement you can get when using an implant."

Prosthetic materials have also evolved over the years. While older models were made out of metal, the newest ones are ceramic or polyethylene plastic. "The latest prostheses are much higher density, so they are more durable and last longer," Dr. Vanis notes. There is also a great deal of variation in sizes of implants and sockets, allowing for a more gender-specific result.

In some cases, joint replacement may be done using a mini-incision technique, resulting in less pain and a quicker recovery. The incision used in this technique is only three inches long, versus the eight-inch scar that results from open surgery. Another innovation, a cell-saver device called OrthoPAT, minimizes blood loss during and after surgery. The equipment allows joint replacements to be performed without donor blood, making the procedure much safer for patients.

Thanks to these innovations, most orthopedic patients at Methodist Hospital can be back on their feet sooner than ever.



Richard Vanis, MD