One Banker’s View of Orthopedics
By Kelly O’Hara Dyer

“It’s my belief that the next wave of innovation in orthopedics is going to happen outside of big companies, where biologics technologies will be developed. It may take time, but they are ultimately going to threaten metal implants.” So says one of the most prolific investment bankers with an orthopedic industry focus, 45-year-old Chris Velis.

Velis, who is an unabashed fan of orthopedic companies and technology, is also chairman and CEO of Medical Capital Advisors, based in Boston, and has shepherded more than 37 orthopedic-based deals to successful conclusion over the years. He’s brokered a wide array of orthopedic transactions including licensing agreements, joint venture partnerships and mergers and acquisitions, and he’s also played a key role in developing exit strategies for more than 150 medical venture funds.

Velis’ interest in, and passion for, the med-tech sector has deep roots. His father, a physician, died from cancer while Velis was still in high school and he says now that “during that time, I lost complete interest in being around hospitals. As part of that, I didn’t pursue medicine academically.”

He graduated from the University of Massachusetts-Amherst and later received an MBA from Boston University in 1992, but his familial interest in medicine never went away. He spent years at various investment banks handling other transactions, often in information technology, but he says that something was missing.

“I did feel a degree of emptiness in me in the IT world, as interesting and exciting as some of the developments were,” Velis says. “I had to pause periodically and say, ‘where is the direct connection here to helping people?’ It’s very satisfying to have more than an economic driver behind what you do every day.”

Velis gradually made the transition to the medical sector, a space in which he’s thriving.

Velis’ most recent deal, announced in January 2012, is the somewhat unusual pairing of the Musculoskeletal Trans-
plant Foundation (MTF), the world’s largest tissue bank, with a subsidiary of CONMED Corp., CONMED Linvatec.

As part of the exclusive arrangement, Linvatec will serve as the worldwide marketing representative for MTF’s sports medicine allograft tissues and the worldwide distribution of MTF’s Cascade Platelet-Rich Plasma (PRP) product, which uses a patient’s own blood components to aid healing.

Velis chuckles a bit when he hears the deal between MTF, a company that specializes in the harvest of donor cadaveric allograft tissue, and CONMED, best known for its sports medicine arthroscopy products, characterized tongue-in-cheek as the unlikely marriage between a hardware company and a “software” company.

“If you do think of it as a hardware/software company relationship, hopefully what we’re creating here is an Apple,” he says, “something that’s both innovative and unique.”

MTF was founded by a group of doctors who were facing a shortage of cadaveric allograft tissue, primarily for oncology procedures. The nonprofit organization’s mission is “not only to provide these tissues and to make them safe, but to sort of be a steward of this gift of tissue,” says Velis. “It’s also to do research and to provide grants to researchers who are trying to advance orthobiologics, tissue science and regenerative medicine, in particular as it relates to orthopedics.”

In past years, MTF had distributed their tissue primarily through partners, including Orthofix, Synthes and Spineology for spine applications, and through Ethiicon for breast reconstruction tissues. According to Velis, the expense of building this distribution channel became increasingly challenging and he was called in to help the board examine options.

“The question for them really became, should they be building their own distribution channel or would the money needed for that be best directed toward research and the mission of creating technology that advances patient care?” he says.

After spending a year analyzing various options, Velis and the MTF board initially decided to create a new company to handle distribution and fund it with private equity. However, as Velis says now, “the process became competitive enough that strategies started banging on the door. Ultimately, we and the board decided that the best outcome was to partner with CONMED because they have complementary technologies, they call upon surgeons, they’re one of the largest and strongest companies in the business of sports medicine and so we paired them up.”

As part of the deal, several different aspects of the pairing needed to be negotiated.

“The deal that was structured was very complex in that there were multiple components to it, unlike a typical merger,” Velis says. “First there was the asset purchase of the sales force that was MTF’s sales and marketing organization. That went over to CONMED. Then there was a perpetual distribution agreement that CONMED acquired to have the right to sell MTF’s sports medicine products globally, and third, there was financing for a cartilage development program. The cartilage development program is being completed in clinical stages, and CONMED is funding those as long as the data comes back and is positive.”

The cartilage development program is particularly interesting to Velis as part of what he sees as the future of orthopedics, the inevitable advance of orthobiologies in the industry.

“The initial data is very, very positive that the bone and the other tissue forms regenerate and that they’re going to get some healing of these necrotic lesions. In the very best case scenario, it’s hoped that this will stop further degeneration of the knee and perhaps save people from total joint implants or delay those joint implants until much later than life. I think the technology will evolve to other joints, but the initial studies are on the knee.

 “[The deal is] $147 million for 50 percent of the revenue, so it’s essentially $147 million for half of the cash flow of the business. I think it’s fair to say that the entire value of the enterprise was perhaps closer to $300 million,” he says.

From a number of vantage points, Velis spends a lot of time watching developments in the ortho sector. For instance, as a 45-year-old athlete who pursues a daunting mix of cross-fit, running, weight and cardio training, as well as holds a black belt in the Japanese martial art Gōjū-ryū, Velis has had the opportunity to witness the innovation of orthopedics from the top of an operating table.

“About five years ago, Joe McCarthy [director of the Kaplan Center for Joint Reconstruction at the Newton Wellesley Hospital] repaired my torn labrum with a hip arthroscopy and I
have not had an ounce of pain since,” Velis says. He also had a meniscal repair this past summer from “Brian Jolley at the Lahey Clinic. He immediately took me out of pain and that recovery went very, very well.”

When Velis isn’t spending time with his wife and three young boys, 9, 7 and 5, he is busy maintaining a close relationship with large strategic med-tech companies, often listening to them describe technologies they wish they had access to.

As a result of that unprecedented access to future market demand, Medical Capital Advisors also runs a very early stage development fund called GrayMatter Health Ventures.

Through GrayMatter, Velis and a group of other investors have started several medical technology companies, including Auris Surgical Robotics and Audax Medical Technology LLC. Auris is developing surgical robotics and visualization technology for surgical applications that require very fine movements. Audax is developing regenerative orthobiologics for applications in bone, cartilage and soft tissue.

For Auris, “we licensed technology and partnered with Columbia University and then eventually John Hopkins University,” says Velis. “We like to be involved with things that are at the very early stage. We heard one investor call it ‘before zero stage.’”

As a well-connected player in the orthopedics market, Velis sees big changes coming to the segment in the near future, some driven by macro trends such as population growth, and others driven by innovation that is moving away from what he characterizes as the “metal-bending world.”

“The first trend is global population demographics,” says Velis. “In India there really is no cap on population growth and so what you get is a massive population bubble of people who are under 20 years old. In 15 years, they’ll be 35, which is the point at which you start seeing a lot of orthopedic disease. I see a series of successive waves as population grows that are going to make the orthopedics market much, much larger than it is today for many dozens of years to come.

“The second trend I see, especially in more developed markets, is a more highly defined continuum of care where the line between early care and early degenerative care is starting to get very fuzzy. There are going to be a wide variety of technologies like Arthroface, and ConforMIS on the metal side to things like the MTF cartilage implant or the HistoGeneX implant…that are going to live in that in-between zone. And I am also seeing the emergence of more and more biologic technologies, regenerative technologies that either advance healing post-surgery or treatments that are used prior to or in conjunction with surgery or for maintenance afterwards.”

Perhaps most provocatively, Velis sees change barreling down the orthopedics sector with traditional implant manufacturers squarely in its sights.

“That those organizations are very focused around metal implants…implants that stay in the body,” says Velis. “Biologics are focused around cells and cellular response, and they’re two very different ways of thinking about healing. It’s my belief that the next wave of innovation in orthopedics is going to happen outside of big companies, where these biologics will be developed. It may take time, but they are ultimately going to threaten metal implants.”

Asked about how he feels his statements will resonate with readers, Velis shrugs.

“[big companies will] find this provocative, and if they don’t, they should pause. People are missing that this is a change in the orthopedic landscape.”