



Letter from the Chairman

L. Scott Levin, MD, FACS



July 1, 2014, at 06:00, will mark my completion of five years as Chairman of the Department of Orthopaedic Surgery at the Ruth and Raymond Perelman School of Medicine at the University of Pennsylvania. As I look back on the last five years, I take tremendous pride in the accomplishments of our faculty, residents, fellows, researchers, medical students, staff, and Allied Health personnel who have contributed to our continued success. The missions of our academic medical center that encompass clinical care, education, and research are all flourishing. However, our work is never done.

I also pause to reflect on surgical lessons learned. In 1982, I served as an intern in general thoracic surgery under the leadership of Dr. David C. Sabiston, Jr. Dr. Sabiston was legendary for emphasis on “attention to detail” and his commitment to excellence, always setting the bar higher despite great achievements by his department. I believe this defines my style of leadership.

Over the years, I have also shared with you my enthusiasm for the lessons of Jim Collins, author of *Good to Great*. One of the key principles that Collins emphasizes in all of his books is the importance of “getting the right people on the bus before the direction of the bus can be established.”

Over the last five years, the momentum and trajectory of the Department has been positive, with recruitment of young faculty and retention of world-class, established surgical scholars. Currently there are 31 clinical faculty and 6 tenure-track PhD research faculty. This represents double digit percentage growth in both clinical and basic science research faculty members. We now have “the right people on the bus.”

It is important to realize that growth for the sake of growth alone is often detrimental to the balance of a department or enterprise, particularly if there is little need for extra clinical or research faculty. The trajectory of Penn Orthopaedics has been positive. Due to our excellence in clinical care, patient demand for our expertise has increased. We have recruited faculty with specialized talents and enthusiasm for our clinical missions. We have continually diversified and added to our basic science capabilities in the McKay Orthopaedic Research Laboratory.

My philosophy has been not only to build “depth” on our bench but also to hire individuals with unique skills that will help differentiate Penn Orthopaedics in a competitive market locally and attract attention to our clinical, research and educational advancements nationally and internationally. This year, Foteini Mourkioti, PhD, will join us from Stanford. She is an expert in muscle physiology and will be instrumental in establishing liaisons with other basic science departments at Penn to study muscle function in a variety of musculoskeletal conditions.

In keeping with our rapid growth of the Adult Reconstructive Service, we recently recruited Atul Kamath. He returns to Penn, having completed his Adult Reconstructive fellowship at the Mayo Clinic, followed by the prestigious Maurice Mueller Traveling Fellowship. He will complement our Adult Reconstructive Service and add a hip preservation service to the division. He will also work closely with Wudbhav Sankar, further strengthening the Penn/CHOP partnership. This will attract patients not only locally but nationally and internationally for hip preservation and care from “cradle to adulthood.” This partnership is supported by John Dormans, Chief of CHOP Orthopaedics, along with other combined Penn/CHOP programs in sports medicine, tumor, and hand surgery.

As part of our hip preservation program, we have introduced a unique treatment for avascular necrosis of the hip, particularly in young patients. CHOP and Penn are now offering vascularized fibular grafting for avascular necrosis of the femoral head in young patients. The vast experience popularized by Jim Urbaniak from Duke is now available in Philadelphia. Dr. Sankar and I are receiving referrals from the northeast region for this unique and important adjunct for hip preservation.

We have recruited Dan Farber to work with Keith Wapner and Wen Chao in the Foot and Ankle Section. Dr. Farber comes from the University of Maryland, where he was highly regarded as a tremendous educator, and is in charge of the national fellowship program for AOFAS. He has more than ten years experience in practice and has already been embraced as a great educator and clinician by our residents and faculty members.

Perhaps the biggest change in our department’s evolution has been the formation of our musculoskeletal service line within Penn Medicine. I have had the privilege of helping develop this service line with Lori Gustave, our Chief Operating Officer. The service line includes integration of orthopaedics, rheumatology, neurosciences, pain management, musculoskeletal imaging, physical medicine and rehabilitation, and physical and occupational therapy. The silo concept of an orthopaedic department in an academic system has evolved into a service line that extends across multiple departments in our health system for optimization of patient care, cost containment, efficiency of care, and the provision of increased value in musculoskeletal care delivery.

In parallel with the development of the service line will be a history-making addition for our department, founded in 1889 by DeForest Willard. In August 2014, our new Musculoskeletal Center will open at 3737 Market Street, a 14-story building predominantly dedicated to musculoskeletal care. The identity of the Department will be further defined by giving us our own space in a brand new building designed for advanced musculoskeletal care and use of cutting-edge technology,

such as the “Just in Time” delivery systems of Toyota as well as Microsoft and Apple software innovations.

To complement our new Musculoskeletal Center, a new trauma center is being constructed on the campus of Penn Presbyterian Medical Center, across the street from the Musculoskeletal Center. These new buildings will serve to redefine Penn Orthopaedics not only in 2014, but for decades to come. The planning of these buildings included creating new aspects of patient care as it relates to information systems, patient flow (such as same day appointments), as well as clinic and operating room efficiency. We will redefine our purpose and goals that further differentiate us not only in the greater Delaware Valley but nationally and internationally. Examples of amenities in this building will be two unique features that are unprecedented for any musculoskeletal center. First, we will establish the Penn Human Performance Laboratory, which will include gait analysis, virtual reality, motion sensors, video analysis, and equipment to measure body mass index. Our patients will be tested preoperatively as well as postoperatively after musculoskeletal intervention. This lab will be fully integrated into our Musculoskeletal Center and will give patients a unique opportunity to perform at their “personal best” following nonoperative or operative treatment. Proceeds from this year’s Philadelphia Antique Show will benefit Penn Orthopaedics and will be used to provide funds for equipment in the Penn Human Performance Laboratory.

In addition to our strong clinical performance, which has facilitated reinvestment into our research and educational missions, we have also been successful at philanthropy. Lutz Biedermann of Biedermann Motech has pledged \$3.25 million to Penn Orthopaedics over five years to establish the Max Biedermann Biomechanics Laboratory. Similar to the relationship of the Perelman Center for Advanced Medicine and the Translational Research Center, Penn Orthopaedics will duplicate the physical relationship between our research labs and our clinics, basically adjacent to each other, one floor apart. This will locate our residents, fellows, and faculty in close proximity to our research labs. The lab is established to provide biomechanical testing and answers to questions regarding implants, fracture fixation, and a multitude of other musculoskeletal conditions. We will have the ability to answer questions almost immediately and literally walk across the hallway and share this knowledge with our patients. Both the Human Performance Laboratory and the Biedermann Biomechanics Laboratory will be integrated into the Musculoskeletal Center. Not only will this enhance care and advance the practice, this will also demonstrate to our patients the unique aspects of Penn Orthopaedics. Hans Joerg Wyss has also pledged \$3.25 million over five years to support orthopaedic genomics and limb transplant research. His foundation’s endorsement of our Department is a true honor.

As successful as the Department has been, the performance of the Penn Health System has been strong. The future changes that we know are coming in healthcare are welcome. Our integrated health system and the ability of support to be transferred from the hospital system to the medical school as well as clinical departments will continue under

the leadership of Larry Jameson, our Dean, and Ralph Muller, our CEO. Strategically Penn has purchased Chester County Hospital, and we will expand our orthopaedic profile to this region of Delaware Valley with the support and guidance of CEO Michael Duncan.

Our research program under the direction of Louis Soslowsky, PhD, has never been stronger. The continued success of peer-reviewed funding (which is the gold standard for a tenure-track scientist) continues to be exemplary with Lin Qin obtaining her first R01 this year. Sherry Liu has been awarded an R03 grant, and Robert Mauck and Louis Soslowsky have been awarded additional R01 grants, adding to their already outstanding portfolios. We welcome the addition of Foteini Mourkioti to McKay Laboratory this July. We have also recruited George Dodge, PhD, in the research track in McKay to further contribute to our efforts at the VA. Under the direction of Robert Mauck and George Dodge, musculoskeletal research at the Translational Musculoskeletal Research Center (TMRC) at the VA has put the Philadelphia VA on the national map. VA grants totaling over \$4 million support our faculty, which includes Neil Sheth, Paul Ducheyne, John Esterhai, Robert Mauck, Jason Burdick, George Dodge, David Steinberg, Milt Zgonis, Andrew Kuntz, Louis Soslowsky, and Joe Bernstein. This VA Center of Excellence in Musculoskeletal Research is multidisciplinary and includes our rheumatology colleagues who partner with us in the TMRC. Our world class cartilage program under the basic science leadership of Robert Mauck and the clinical leadership of Jim Carey allowed us to host the third annual Cartilage Repair Symposium in April, which attracted international faculty such as Peter Verdonk, MD, PhD, from Belgium, who served as Keynote Speaker.

Along with our NIH and VA merit grants, I am pleased to announce our vascularized composite allotransplantation (VCA) program, which is funded by a \$2 million grant from the Department of Defense to support VCA and research studies aimed at improving transplant procedures in those suffering from traumatic injuries, such as limb loss and severe burns. This is done in conjunction with Wayne Hancock (CHOP) and Matt Levine, Abraham Shaked, and Kim Olthoff from the Transplant Institute and represents a huge advance in the development of our VCA program.

Our faculty also has continued to be recognized for their contributions and achievements. For example, Keith Baldwin was named the Health Policy Chair for the Orthopaedic Rehabilitation Association. Gwo-Chin Lee has been awarded membership in the Knee Society. Kristy Weber is serving as President of the Musculoskeletal Tumor Society, and I am serving as Regent of the American College of Surgeons, in addition to my other responsibilities in the Hand Society and as President of the World Society of Reconstructive Microsurgery and Treasurer of the International Hand Composite Allotransplantation Society. Brian Sennett was awarded the Penn Master Clinician Award this spring.

Our international outreach continues to thrive. Vincent Arlet was awarded over \$200,000 in funding for outreach to foreign countries to deliver spine care. Dr. Arlet routinely travels to Trinidad, and our trauma division (Derek Donegan,

Jaimo Ahn, and Samir Mehta) travels to Nicaragua for outreach care and humanitarian efforts, accompanied by our residents. The Biedermann family has pledged half a million dollars for these efforts, which will greatly enhance our residents' experiences abroad.

Our educational program under the direction of Craig Israelite and assistant and associate program directors, Jaimo Ahn and Samir Mehta, has continued to be outstanding. In order to enhance our resident education, the Department has purchased mini iPads for all residents that have been programmed with our core curriculum, lectures and didactics from our faculty and visiting Grand Rounds speakers, as well as manuals for implants and prostheses. Implementation of an online curriculum has been a great advance in the efficient education of our residents. With over 800 applicants, our recently matched class includes a diverse workforce of women and underrepresented minorities from institutions

such as Harvard, Johns Hopkins, and other schools that make our residency sought after on a regular basis. Our finishing residents are getting the finest fellowships, often their first choice in trauma, adult reconstruction, shoulder, and other specialties based on their interest and inspiration from our excellent faculty.

Finally I want to recognize our Vice Chairman, Brian Sennett. This past year under his leadership, Penn Sports Medicine was chosen to be the official Sports Medicine Provider of the Philadelphia 76ers with Dr. Sennett serving as Head Team Physician.

We are going not only from good to great, but indeed from "excellence to eminence," which is the motto of Amy Gutmann, President of the University of Pennsylvania. I am honored to lead this team. Please do not hesitate to contact me if you have suggestions for continued improvement in our missions.