



Frank A. Pintar, PhD, Appointed Founding Chair of Biomedical Engineering

We are pleased to announce the appointment of Frank A. Pintar, PhD, as Founding Chair of the Marquette University and Medical College of Wisconsin (MCW) Department of Biomedical Engineering, effective October 1, 2018, pending approval by the MCW Board of Trustees and Marquette leadership. Dr. Pintar currently serves as Professor in the Marquette University and MCW Department of Biomedical Engineering, and Director of the Neuroscience and Biomechanics Research Laboratories at the Clement J. Zablocki VA Medical Center. He also holds a secondary appointment in MCW's Department of Neurosurgery.



Frank A. Pintar, PhD

Biomedical engineering is a multidisciplinary approach with unique influence, integrating education, research, patient care, industry and marketplace – and where ideas are translated into real solutions. In July 2016, Marquette and MCW partnered to create the Marquette University and MCW Department of Biomedical Engineering, which has brought together the engineering education and research expertise of Marquette and the medical research, technology and clinical expertise of MCW to provide an inclusive education model for the next generation of engineers, scientists and physicians. Marquette's longstanding Department of Biomedical Engineering expanded to the new Department, offering both undergraduate and graduate degrees. The new Department is an integrated medical and engineering research program that is fully engaged to enhance clinical outcomes. Most importantly, this shared biomedical engineering program presents many opportunities, investments and returns for various stakeholders – from students, faculty, institutional and college leaders, to institutions, donors/investors and industry partners.

Dr. Pintar was identified as the top candidate for this role after a comprehensive national search process. We would like to extend our gratitude to Ann Nattinger, MD, MPH, and Gerald Harris, PhD, PE, co-chairs of the search committee – as well as to the full committee membership – for their unwavering dedication of time, insights and thoughtfulness in undertaking this key recruitment effort.

Dr. Pintar received his Bachelor of Science degree in electrical engineering from Marquette University in 1982, and his Doctor of Philosophy degree in biomedical engineering from Marquette in 1986.

Dr. Pintar had held dual positions with both Marquette and MCW since 1987. He joined Marquette as an Instructor in the Department of Biomedical Engineering, and from 1988-1993, served as Adjunct Assistant Professor of Biomedical Engineering. Dr. Pintar was promoted to Adjunct Associate Professor in 1993, and in 1999 to Adjunct Professor. Concurrently, from 1987-1992, Dr. Pintar served as Assistant Professor in the MCW Department of Neurosurgery. He was promoted to Associate Professor in 1993 and from 1997-2017, was Professor of Biomedical Engineering in the MCW Department of Neurosurgery. In 2017, Dr. Pintar assumed his current position in the new Marquette and MCW Department of Biomedical Engineering.

Since 1990, Dr. Pintar has been a biomedical engineer and investigator with the Neuroscience Research Laboratory and Biomechanics Research Laboratory, Research Service, at the Zablocki VA Medical Center. In 1991, Dr. Pintar was appointed to his current position as Director of the

Neuroscience and Biomechanics Research Laboratories. From 2008-2013, Dr. Pintar served as Research Division Chief, MCW Department of Neurosurgery, and from 2013-2017 was the Department's Vice Chair for Research.

From the earliest part of his career through the present, Dr. Pintar has had an ongoing interest in the biomechanics of the spine as it relates to surgical stabilization techniques. He has received funding from various federal and private funding agencies including the NIH, CDC, Department of Transportation (FAA and NHTSA), Department of Veterans Affairs and Department of Defense.

In 2016, Dr. Pintar was co-principal investigator on a five-year, \$6.8 million grant from the US Army Medical Research and Materiel Command (USAMRMC) to analyze military helmet-mounted equipment on neck injury potential; assess the immediate and long-term outcomes of cervical spine artificial discs in civilian and military-relevant loading environments; quantify the differences between men and women for spinal injury thresholds and safety criteria; and evaluate advanced measurement technology for the assessment of brain injury in military populations. The emphasis of his most recent grants has been the physics of trauma to the human body with a primary interest in head and spine injuries. This work entails deriving engineering definitions of human tolerance to injury for the primary reason of prevention, and the research endeavors that have been produced from his laboratories has been directly used to define the safety design standards of today's automobiles, airplanes and military vehicles.

In 2011, Dr. Pintar was named a Fellow of the American Institute for Medical and Biological Engineering. He is particularly proud of the work he has done to advance the field of automotive engineering and safety, as demonstrated by his receipt of the 2012 Award of Merit from the Association for Advancement of Automotive Medicine and the 2013 Arnold W. Siegel International Transportation Safety Award from the Society of Automotive Engineers. Additionally, Dr. Pintar was named as a 2014 Fellow of the Society of Automotive Engineers. In 2017, Dr. Pintar was one of 12 inaugural members of MCW'S Society for Research Excellence – a new collective of select faculty with a demonstrated commitment to discovery, mentorship, leadership, and advancement in research.

Dr. Pintar has served in numerous national elected and appointed leadership and committee positions, including member of the Research Review Committee, Cervical Spine Research Society; member of the Board of Directors, Association for the Advancement in Automotive Medicine; session chair, Real World Injuries Session, World Congress of Biomechanics; reviewer, Head and Spinal Cord Injury Modeling Review Board, Department of Defense; and member of the Board of Directors, Stapp Advisory Committee.

Dr. Pintar has published more than 300 refereed journal publications and more than 600 publications in total. He has presented at more than 90 local, regional, national and international lectures and workshops. He has served on the editorial board of *Stapp Car Crash Journal* and has been a reviewer for 20 national and international journals, including the *Journal of Neurotrauma*, *Clinical Biomechanics*, *Journal of Biomechanics*, *Journal of Biomedical Engineering*, *Journal of Orthopaedic Research*, *Journal of Bone and Joint Surgery* and *The Lancet*.

Dr. Pintar's MCW committee memberships have included the Steering Committee of the Neuroscience Graduate Training Program; Faculty Benefits and Career Development; Executive Committee of the Injury Research Center/Comprehensive Injury Center; Information Services Faculty Advisory Group; Rank and Tenure Committee; Research Computing Center Advisory Committee; and Professional Enrichment Committee.

The VA Medical Center Neuroscience and Biomechanics Laboratories occupy more than 35,000 square feet and employ nine PhD scientists and 35 staff who conduct ongoing federally funded research projects. Dr. Pintar was involved in the expansion of the laboratory facilities that include an

acceleration servo sled and a vehicle crash test facility. Over the years, Dr. Pintar has served as a research mentor to more than 30 graduate students, post-docs, residents, fellows and junior faculty in the medical school and engineering school.

We want to express our gratitude to Lars Olson, PhD, Interim Chair of the Department of Biomedical Engineering, for stepping into this leadership role In July 2016 and for his commitment to ensuring the development and success of this new department. Dr. Olson will continue as Interim Chair through September 30, 2018.

Please join us in congratulating Dr. Pintar on this important new leadership role.

Sincerely,

Joseph E. Kerschner, MD
Dean, School of Medicine
Provost and Executive Vice President
Medical College of Wisconsin

Kristina M. Ropella, PhD
Opus Dean, Opus College of Engineering
Professor of Biomedical Engineering
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