Dedication of the
JOHN C. MALONE PROFESSORSHIP
and the installation of
JOHN W. KRAKAUER, M.A., M.D.

Monday, October 31, 2016
The Johns Hopkins Hospital
Chevy Chase Bank Auditorium
DEDICATION OF THE
JOHN C. MALONE PROFESSORSHIP
PROGRAM

WELCOME AND INTRODUCTION
Paul B. Rothman, M.D.
The Frances Watt Baker, M.D., and Lenox D. Baker, Jr., M.D.
Dean of the Medical Faculty
Chief Executive Officer, Johns Hopkins Medicine

PRESENTATION OF THE PROFESSORSHIP TO THE UNIVERSITY
T.E. Schlesinger, Ph.D.
Benjamin T. Rome Dean
G.W.C. Whiting School of Engineering
The Johns Hopkins University

ACCEPTANCE OF THE PROFESSORSHIP
Ronald J. Daniels, J.D., LL.M.
President, The Johns Hopkins University

COMMENTS ABOUT THE RECIPIENT
Omar Ahmad, Ph.D.
Director of Innovative Biomedical Engineering
Co-Director, KATA, Department of Neurology
Faculty, Division of Cerebrovascular Neurology
Johns Hopkins University School of Medicine

RECIPIENT REMARKS
John W. Krakauer, M.A., M.D.
John C. Malone Professor
Professor of Neurology and Neuroscience
Director, KATA, Department of Neurology
Director of the Brain, Learning, Animation, and Movement Lab
Johns Hopkins University School of Medicine

CLOSING REMARKS
Gregory D. Hager, Ph.D.
Mandell Bellmore Professor, Department of Computer Science
Director, Malone Center for Engineering in Healthcare

RECEPTION TO FOLLOW
The Tradition of Endowed Professorships

The first endowed professorships, often called endowed chairs, were established nearly 500 years ago with the creation of the Lady Margaret chairs in divinity at Oxford and Cambridge. These chairs were sponsored by Margaret, Countess of Richmond, and mother of Henry VIII in 1546. Henry VIII established the Regius Professorships at both universities in five subjects: divinity, civil law, Hebrew, Greek, and physics—what we now know as medicine and the basic sciences. Later, private individuals joined in providing chairs, such as the Lucasian Chair of Mathematics, which Isaac Newton held beginning in 1669. The honor associated with appointment to an endowed position has remained unchanged since then.

At Johns Hopkins University, endowed professorships are especially important to our ongoing mission of teaching, research, and patient care. Our foundation for success is built upon endowment, which allows for the hiring and retention of the best faculty. The men and women who hold endowed professorships conduct some of our most significant research, attract bright and dedicated students who want to work with acknowledged leaders, and bring considerable prestige to the Johns Hopkins name.

Dr. Malone has been remarkably generous in his support of Johns Hopkins University, including a naming gift for the construction of Malone Hall. The building, which opened in 2014, is designed to advance cutting-edge collaborative and translational research and has set a new standard for academic and research facilities at the university. Dr. Malone has long believed in the promise of improving health care by connecting engineering technologies with medical advances and has made a commitment to providing endowed professorships to faculty members who are improving health care. This professorship is one important manifestation of the many ways in which the Johns Hopkins School of Medicine and the Whiting School of Engineering pursue collaboration through integration. The Biomedical Engineering Department that sits in both schools, the launch of the Malone Center for Engineering in Healthcare in 2015 that brought together engineers, clinicians, and researchers from across Johns Hopkins, and multiple Bloomberg Distinguished Professors with joint appointments are a few examples of the ongoing, strong partnership.
**John W. Krakauer, M.A., M.D.** is internationally recognized for his study of the human motor system in health and disease. Dr. Krakauer’s scientific achievements to date include bringing a motor learning paradigm called visuomotor rotation into the neuroscience mainstream, discovering the proportional recovery rule for stroke, characterizing a sensitive period of heightened plasticity after stroke, developing new conceptions of motor skill, and coming up with the notion of implicit motor motivation. His research has been funded by the National Institutes of Health, National Science Foundation, and various other agencies and foundations. In 2015 he received the Salute to Science Award from the Mind Science Foundation. He is routinely invited to speak at scientific meetings and at venues that focus on innovation, such as Microsoft, Apple, Google, TEDx, The Charlie Rose Show, NPR, and the Aspen Institute.

Dr. Krakauer is also very interested in the interface between neuroscience and the areas of philosophy, sport, and art. In the case of philosophy, he has co-written papers on the notion of motor skill and its relation to the rest of cognition. He has also written about the brains of elite athletes and is frequently interviewed by the media on this topic, especially when major sporting events come around, such as the World Cup and the Olympics. At one point in an interview with the Lancet, when he was asked what he might like to have done other than his current profession, he answered: “In order of decreasing plausibility: art historian, literary critic, tennis player, dancer for the Alvin Ailey Company.”

Before coming to Johns Hopkins in late 2010, Dr. Krakauer was a tenured professor in the Departments of Neurology and Neuroscience at Columbia University. He currently serves as Professor of Neurology and Neuroscience, Co-Director of the Brain, Learning, Animation, and Movement Lab and co-Director of KATA. He received his BA from Cambridge University, and his MD from Columbia University College of Physicians and Surgeons. He completed his internship in Internal Medicine at the Johns Hopkins Hospital and his residency in neurology at the Neurological Institute of New York at Columbia University. He subsequently completed a research fellowship in motor control at Columbia’s Center for Neurobiology and Behavior and a clinical fellowship in stroke at the Neurological Institute at Columbia University Medical Center.

One major thrust of KATA is the creation of video gaming and animation based on the real physics of animal movement. The idea is that skilled animal movement is beautiful and highly pleasurable, and that these features are hugely heightened when the animal’s movement is under the control of our own movements. A simulated dolphin and other cetaceans were developed by KATA to interface with an FDA-approved 3D exoskeletal robot, and are being used in an ongoing funded multi-site rehabilitation trial for early stroke recovery. This work combines animation, engineering and neurology, and has been covered extensively by the media, including profiles of Dr. Krakauer in *The New Yorker*, *National Geographic* and *Vogue*.

Dr. Krakauer is co-founder of the video gaming company Max and Haley (M&H), and of the creative engineering Hopkins-based project named KATA. KATA and M&H are both predicated on the idea that mission-focused customized software and hardware can revolutionize the care of patients with neurological injury and disease in the hospital and at home.