



Northeastern

November 29, 2019

Dear Vice President for Research Search Committee Members,

I would like to be considered for your position of Vice President for Research at the University of Vermont. Based on my extensive experiences at the University of Illinois and Northeastern University, I believe that I have the scholarly and academic management, fiscal, and fundraising skills to help the University of Vermont continue to develop and diversify the portfolio of your research and scholarly activity both within and across disciplines. As I describe below, I am excited about the opportunity to further integrate the University of Vermont's many strengths in research, scholarship, and education, so that it continues to lead the nation and the world in novel research pursuits that address grand societal challenges.

My experiences at the University of Illinois have been extensive and far-reaching, touching many parts of the campus and contributing to its tripartite land-grant mission. I served as a faculty member in a number of departments, colleges and interdisciplinary programs, including Psychology, Mechanical and Industrial Engineering, the Institute of Aviation, and the campus wide Neuroscience Ph.D. program. My efforts in interdisciplinary scholarship were recognized with an endowed chair (as a Chancellor's Swanlund Chair), the Directorship of the campus' Biomedical Imaging Center, and the Directorship of the Beckman Institute for Advanced Science and Technology (an institute created largely through the gifts of an alum).

Beginning with my first faculty position at Illinois, my research and scholarship has been consistently interdisciplinary, bridging many diverse schools of thought and perspectives. Over the years, I served on a multitude of departmental and university committees on diversity, academic programs, research initiatives and institutes, and the selection of university endowed chairs. I was also involved in the development and nurturance of interdisciplinary Masters and Ph.D. programs, such as Human Factors, which ranked first in the nation for many years.

I also served in a number of academic leadership positions while at Illinois which enabled me to contribute to, or chair, various research, academic and public engagement programs. These ranged from undergraduate program development, fundraising for the establishment of new scholarships and fellowships to support undergraduate, graduate and post-doctoral research

training – and with colleagues, the development of an innovative town-gown program called the Citizen Scientist program in which retired members of our community worked in laboratories alongside faculty, post-docs and students. A number of these programs stemmed from the various initiatives I led at the Beckman Institute (see: <https://beckman.illinois.edu>) since its inception. For example, as Co-Chair of a Main Research Theme for 10+ years, I helped to coordinate and represent the research and scholarship of more than a quarter of the Beckman Institute's faculty, staff and students. Upon Paul Lauterbur's (2003 winner of the Nobel prize in Physiology or Medicine) retirement, I served for six years as the Director of the Biomedical Imaging Center in which we dramatically increased the number of imaging systems and services available to campus researchers as well as their academic and corporate collaborators. During this time, I also built strong relationships with the regional medical center (Carle Hospital and Clinic) – relationships that continue to this day and recently culminated in a new Engineering oriented Medical School. These experiences prepared me to ultimately serve as the Director of the Beckman Institute (2010 to 2016).

Given the breadth of the Beckman Institute — with faculty and students from 50+ departments and 10 colleges — I worked closely with many department heads, Deans, and other institute directors to ensure the success of interdisciplinary research and scholarship at Illinois. I intentionally found ways to bring diverse STEM and non-STEM units into the mix, for example, by seeding partnerships that included colleagues in Dance, Theatre, English, the Krannert Center for Performing Arts, journalism, and many others, thereby making our projects not only fascinating and truly interdisciplinary, but also genuinely relevant to the lives of real people and communities. These initiatives included the development of numerous programs that entailed collaboration with many large research centers, training programs, mentoring, fellowships, and coordination of academic and research programs that incorporated hands-on training and experiential learning.

In addition to working with colleagues to help shape the vision for research and its coordination with academic programs as Director of the Beckman Institute (essentially a Dean level position at the University of Illinois), I was also responsible for managing the complex budget that was derived from increasing endowments, increased research funding, but decreased state support over the years. Indeed, state support was cut each year that I served as Director. Despite these financial challenges, by working closely with the 230+ faculty, staff, department heads, and deans involved with the Beckman Institute, we were able to increase external grant funding by more than 50% between 2010 to 2016. Funding from the Beckman Foundation also increased substantially during my tenure as the Foundation was most pleased with the innovations coming out of our institute. Through collaborative work, and aggressive proposal writing and fund-raising, we were able to establish several new prominent research ventures and interdisciplinary centers, funded by government and industry, (including the \$ 50,000,000 Abbott Center for Nutrition, Learning and Memory. Given the challenges presented by today's funding climate, this type of success in consistently securing large grants is only possible because of the very collaborative environment that I and many others worked diligently to foster over the years at the University

of Illinois. It would be my intention to develop and nurture such a collaborative environment within and between Colleges, Institutes and Centers at the University of Vermont, and in conjunction with other national and international research institutes and funding agencies.

My position at Northeastern University as the Senior Vice Provost for Research and Graduate Education was multifaceted – and essentially encompassed what would be at most universities both the Vice Chancellor for Research and the Dean of the Graduate College positions. This position entailed assisting the Provost and President in leading the campus and included making decisions about the investment of resources in new academic programs, centers and institutes, the hiring of new faculty, consideration of promotion and tenure, the provision of research administration support to the colleges, and the review of Deans. As the Senior VP for Research I also served as the Founding Director of a brand new \$250,000,000 interdisciplinary research center (see: <https://www.northeastern.edu/isecl/>) which has involved the establishment and support of many new interdisciplinary collaborations. I also represented Northeastern University on the Executive Council of the Massachusetts Green High-Performance Computing Cluster (see: <https://www.mghpcc.org/about/governance/>) with my colleagues from MIT, Harvard, Boston University, the University of Massachusetts, and the state of Massachusetts. This has been a very effective private-public partnership for the development and use of high-end computing resources.

During my time as the SVPR, we established six new institutes, through a rigorous vetting process and with considerable seed funding. Over 200 faculty from diverse disciplines now collaborate in these Institutes spanning Global Resilience, Coastal Sustainability, Experiential Robotics, Cyber Security and Privacy, Chemical Imaging of Living Systems, and the Wireless Internet of Things.

To make all of these research ventures successful, my team and I reorganized the procedures for pre- and post-award processing to decrease manual work and increase the campus' ability to rapidly track grant and contract submissions from initial preparation to closeout. I also took a leadership role in revising policies and software systems to increase efficiency and decrease costs of managing a substantial research and education portfolio at Northeastern University. We also improved our Intellectual Property system and pipeline, establishing the very first gap fund at Northeastern University which is now supporting the translation of research findings into innovative products that can be marketed.

Notably, external research support increased by more than 38% since I began as the Senior VP for Research at Northeastern. All of these innovations occurred within the context of a hybrid RCM financial model which required adjustments to encourage cross-college collaborations.

As part of my role as Senior Vice Provost for Graduate Education, I led the establishment of a variety of new Masters and Ph.D. programs, with the majority of these programs including an experiential component. As Northeastern has only recently become a Research 1 University, much of our

work on graduate education has centered on the establishment of a new “Ph.D. Network” (see: <https://phd.northeastern.edu>) along with a dramatic improvement of the financial support that graduate students and post-doc’s receive to support their studies and research. I attribute much of the success of these initiatives to the strong leadership team I developed, composed of two Vice Provosts for Graduate Education and a cadre of Associate Deans of Academic Affairs that represented all corners of the university. I have also been involved in fundraising in concert with development officers at Northeastern, which has involved new partnerships across the US, Europe, and Asia.

Throughout my academic career, the promotion of diversity and inclusion, in all of its forms (including gender, racial, sexual identity, ability, and economic diversity), have been important to me. As a low income, first generation college student and an emancipated minor at age 16, I have never forgotten the assistance that I received to attend college—at what is now called Stony Brook University. In fact, I was very fortunate to be able to thank Stony Brook’s leadership personally for their support when President Sam Stanley awarded me an honorary Ph.D. in May 2017.

I consistently ensure that diversity receives prominent consideration in all of our student recruitment, staff and faculty hiring, and development across the units that I have been responsible for at Illinois and Northeastern. Additionally, I diligently work to cultivate a culture of inclusion, respect, acceptance, cooperation, and integrity—along with excellence—in all of units I am privileged to be a part of or lead.

You likely want to know about my research, that has been conducted over the past three plus decades. As you can see from my CV, even though I have served as a research administrator for the past fourteen+ years, my scholarly record of grants and journal articles, has been consistently very strong. The great majority of my research has been in healthy aging and cognitive neuroscience, including the examination of lifestyle choices on cognitive and brain health and making use of the latest technological advances to study cognitive functioning, for example, functional MRI. However, I have also been involved in studying aging in the “wild” including driving, pedestrian safety (e.g., street crossing), and other activities that are essential to the well-being of older adults. I have continued to examine substantive theoretical issues, such as executive function and attention, in the context of lifespan changes. While I believe that it is important for a VP for Research to keep their hand in research, at least to a limited extent, at this stage of my career, my main interest is in promoting and mentoring young and mid-career faculty, students, and post-doc’s, to help nourish their grantsmanship and scholarship. I also enjoy developing and supporting interdisciplinary collaborations, especially as they compete for center or other large multi-investigator grants. I feel that I can best support faculty research and scholarship through the role of Vice President for Research.

As a result of my consistently strong research program, and research administrative experience, I have been invited to serve on a number of national and international committees including the President’s Council of Advisors on Science and Technology (Obama administration) as well as

panels sponsored by the National Academy of Medicine, the National Research Council, the National Institute on Aging. In June 2017, I was appointed Chair of the National Academy of Science workshop on Understanding Pathways to Successful Aging: Behavioral and Social Factors Related to Alzheimer's Disease. And, I am continually invited to serve as an external reviewer for NIA programs and funding. This year, I was asked to become a member of the committee charged with reviewing the NIA. To amplify the University of Vermont's visibility as an intellectual leader on critical national and international issues, my intention would be to continue these types of national service. It would also be my intention to encourage the appointment of additional members of the University of Vermont faculty on national and international committees, both to help guide research programs on important theoretical and translational issues and to ensure that the research being conducted at Vermont becomes part of the discussion on important policy issues both in the USA and beyond.

You are likely curious about why I would consider a move at this moment in time. Simply put, I love public education and would like to assist another strong public university thrive in the face of the challenges that public higher education is facing. I have always valued public higher education, and believe that ensuring access to education, and sharing what we learn through research and creative endeavors, are probably the most important things we as a nation can do to position future generations for healthy and prosperous lives. I know, firsthand, that many of us would never have the opportunity to attend a university without public universities. I personally am indebted to public higher education for the foundation it provided me as a learner, educator and researcher. Public higher education has only become more important to me given the decisions of many states to reduce funding. I believe my recent experience in a leadership role at private higher education that prides itself on educational innovations, along with my substantial experience as a faculty member and administrator at Illinois as a premier land-grant university, would be very useful in reimagining how public higher education can evolve to do even better to provide future generations—our students—with a world class education.

I believe that it would be presumptuous, at this time, for me to offer a multitude of concrete suggestions for changes in the University of Vermont's research portfolio. Indeed, my intention would be to spend the first few months at UVM learning more about research, from undergraduate experiences through interdisciplinary research among colleges and institutes and then working with colleagues at all levels of the university to formulate next steps for the further development of research. However, over the past several years I have had the pleasure to be involved with the Wellness Environment at the University of Vermont, visiting the campus each year and interacting with the increasing numbers of students and faculty in the program. The more that I have gotten to know about this evolving program, the more that I have been impressed with the many benefits of the comprehensive wellness program for students physical and mental health and intellectual development. Dr. Hudziak and his colleagues have not only developed an impressive educational program but have also embedded research and program evaluation that is beginning to highlight how such an important program can be improved and exported both nationally and

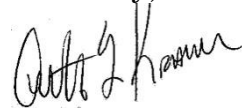
internationally. If I were to be appointed VP for Research, it would be my intention to help foster more such interdisciplinary programs that break new theoretical ground, improve education and health and ensure translation beyond the university.

I've also has the opportunity to read several of your UVM annual Inquiry reports and have been impressed with the breadth and depth of research and scholarship across the university. I also saw the recent press release on the faculty members who were named to the 2019 list of the world's most influential researchers. As VP for Research, some of my higher-level goals would include increasing the proportion of undergraduates who participate in research and scholarship (currently 40% according to the 2019 Inquiry report), assisting the university in moving towards an R1 Carnegie classification, substantially increasing the number of faculty named to the annual list of world's most influential researchers, and increasing the diversity of researchers and scholars from undergraduates to faculty.

In closing, I would welcome an opportunity to discuss the Vice President for Research position with you and explore how my background and experience could support the goals and strategic vision of the University of Vermont. I would also be happy to discuss how we can make the research goals, briefly discussed above, a reality. You can reach me at either 217-898-0590 (cell phone) or a.kramer@northeastern.edu.

Thank you for your consideration.

Sincerely,

A handwritten signature in black ink, appearing to read 'Art Kramer', written in a cursive style.

Art Kramer

Director, Center for Cognitive and Brain Health

Professor of Psychology and Mechanical & Industrial Engineering