CURRICULUM VITAE

Mary Ann Rankin The University of Maryland, College Park mrankin@umd.edu 301-887-7136 cell

EDUCATION

Neural Systems and Behavior Course, Marine Biological Laboratories, Woods Hole, Ma. (Summer, 1980)

Harvard University, Postdoctoral fellow (NIH) with Dr. Lynn M. Riddiford (1972-1974) University of Iowa, Ph.D. with Hugh Dingle 1972

Imperial College Field Station, Ascot, England, NSF pre-doctoral fellow with J. S. Kennedy (summer, 1970)

University of Puerto Rico Marine Biological Station, La Parguerra, Puerto Rico (Summer, 1969) Louisiana State University in New Orleans, B.S. in Biology and Chemistry (1965-1966) Adams State College, Alamosa, Colorado (1962-1965)

ADMINISTRATIVE AND PROFESSIONAL EXPERIENCE

Senior Vice President and Provost, University of Maryland, College Park, 10/1/2012 to 1/29/2021

Chief Executive Officer and President, National Math and Science Initiative, 8/1/2011 to 9/30/2012

Dean, College of Natural Sciences, 9/1/1994 to 7/31/2011

Chairman, Division of Biological Sciences, University of Texas, Austin, 9/1/1989-8/31/94 Professor of Zoology/Integrative Biology, University of Texas, Austin, 9/1986 to 9/30/12

Associate Professor of Zoology, University of Texas, Austin, 9/1981 to 8/1986

Assistant to the Dean of Natural Sciences, 1982-83

Administrative Intern, College of Natural Sciences, 1981-82

Assistant Professor of Zoology, University of Texas, Austin, 1/1975 to 8/1981

Summer Investigator, Marine Biological Laboratories, Woods Hole, MA, 1978, 1980, 1981,1983, 1985

OVERVIEW OF RELEVANT ADMINISTRATIVE EXPERIENCE

- 1. Administrative Experience Summary: Prior to starting my current sabbatical, I served as Senior Vice President and Provost at the University of Maryland, College Park, from October 1, 2012 to January 29, 2021. Most of my prior professional career was in association with the University of Texas at Austin, first as a faculty member in Zoology, then as chairman of Biological Sciences, then—for nearly 17 years—as Dean of the College of Natural Sciences. Prior to moving to Maryland, leave was granted from UT Austin for one year to allow me to serve as Chief Executive Officer and President of the National Math and Science Initiative (NMSI, http://nms.org), a non-profit organization based in Dallas Texas that is focused on replicating proven programs in STEM education at national scale.
- 2. **Board Service Summary**: After twenty years, I continue my service as a member of the Board of Directors of the Southwest Research Institute, a private, non-profit engineering research organization in San Antonio, TX. I served for 6 years on the National Science Foundation EHR Advisory Committee. Currently, I serve as a member of the National Math and Science Initiative Board and have recently rotated off the Educational Advisory Board of

Howard Hughes Medical Institute (HHMI) after a 6-year term. I also serve on a number of other small non-profit organization boards and advisory groups.

3. **The University of Maryland at College Park** is the state's flagship university and one of the nation's preeminent public research universities. A global leader in research, entrepreneurship and innovation, the University serves about 41,000 students (~31,000 undergraduates, ~10,000 graduate students; 41% minorities), with 9,000 faculty and staff, and 250 academic programs. Its faculty includes two Nobel laureates, five Pulitzer Prize winners, 56 members of the national academies and scores of Fulbright scholars. The institution has a \$2.4B operating budget, 1250 acres of land, secures about \$550M annually in external research funding, and has major partnerships with NIST, NASA, NSA, NOAA, FDA and numerous other federal agencies.

As Provost, I oversaw the university budget, facilities planning, all academic programs and colleges, as well as admissions, records, libraries, international affairs, and financial aid. Since joining UMD, I participated in a number of programs significant to the future of UMD, including working closely with former UMD President Loh to successfully move Maryland from the ACC to the Big Ten and the CIC (the Committee on Institutional Cooperation—now the Big Ten Academic Alliance, which is the academic consortium of Big Ten schools, plus University of Chicago).

I have also headed a team that evaluated a potential partnership with the Corcoran Gallery of Art and School of Art and Design and guided very successful partnerships with The Phillips Collection (http://www.baltimoresun.com/news/opinion/editorial/bs-ed-um-phillips-20151011-story.html) and the DeVos Institute for Arts Management (http://devosinstitute.umd.edu).

Other significant projects include instituting a major analysis to improve university budgeting procedures and other business processes, initiating multiple business improvement efforts via our Administrative Modernization Program (https://amp.umd.edu) and our ERP initiative, ELEVATE (https://elevate.umd.edu), establishing a partnership with Coursera (https://umdrightnow.umd.edu/news/massive-online-courses-through-coursera-come-university-maryland), forming a new Teaching and Learning Transformation Center for the university (http://umdrightnow.umd.edu/news/umd-launches-hub-innovative-teaching-and-learning-strategies), forming a new Academy of Innovation and Entrepreneurship (http://umdrightnow.umd.edu/news/umd-launches-new-academy-innovation-and-entrepreneurship), working with the UMD President Loh and former UMD Chancellor Kerwin to create close programmatic connections with the University of Maryland Baltimore campus, particularly the medical school, via the MPower initiative (http://mpower.maryland.edu), revamping the UMD facilities planning procedures, restructuring and expanding UMD faculty affairs office and services.

My 8+ years at UMD have been relatively intense due to the implementation of major structural and operational changes that have provided new opportunities, such as the move to the Big Ten Conference and into the Big Ten Academic Alliance and the MPower partnership with University of Maryland, Baltimore. The Maryland legislature passed a law mandating a "strategic partnership" between UMD, College Park the University of Maryland, Baltimore which has led to closer collaboration with UMB professional schools, including programming a facility on the College Park campus focused on joint research projects studying brain health and human performance.

In addition to the new Brain Health/Indoor practice facility with UMB, we have brought on line four major new teaching and research buildings, the Edward St. John Center for Learning and Teaching, (a state-of-the-art instructional facility focused on innovation in collaborative learning environments located in the central part of campus that will serve approximately 12,000 students each day); a 185,000 gft² new bioengineering building completed Fall 2018; and a 215,000 gft² computer science complex, completed December 2018. A new Chemistry Building, and new building for the School of Public Policy and the "Do Good" initiative and two additional engineering buildings are being programmed for construction in the next 2-3 years. We are also in the process of major renovations of two buildings that were vacated when new space for computer science and the division of Information Technology came online.

Major research initiatives were initiated through my guidance and direction, including programs in cybersecurity, data analytics, neuroscience, quantum computing, virtual and augmented reality, language science, and climate, environment, and sustainability

- 4. As President and CEO of the National Math and Science Initiative (NMSI), I oversaw major partnerships with ExxonMobil, Dell and the Carnegie Foundation and developed new relationships with Lockheed Martin, BAE, Department of Defense, and others; supervised extension of NMSI programs into major new regions of the country including Alaska, Hawaii, Arkansas, Indiana, Colorado and Oklahoma; completed a merger with another non-profit STEM teacher training organization, Laying the Foundation; and created a new partnership with Howard Hughes Medical Institute that has resulted in funding UTeach program replication for STEM teacher training across the US. NMSI provided a wonderful opportunity to make a difference in STEM education for our country, working in partnership with leaders in the White House and the Armed Forces while seeing firsthand how a major corporation like ExxonMobil does business and how our public education system works in many different states and major cities. I had the honor of being named one of the 100 most influential women leaders in STEM that year.
- 5. The UT Austin College of Natural Sciences is a diverse college of science, with programs ranging from fashion design to theoretical physics and cosmology. At the time I stepped down we were expending about \$130M in research funding annually, and serving about 9400 undergraduate majors and 1800 graduate students with a faculty of about 365 tenured/tenure track members. The college budget was about \$260M with an endowment of about \$280M. As Dean, with the help of wonderful colleagues, I reorganized major academic programs, built several large interdisciplinary research units that improved UT's national profile in key fields, built 11 new buildings or building wings, revamped the undergraduate curriculum to focus on student success initiatives and undergraduate involvement in research (http://fri.cns.utexas.edu), and developed a teacher-training program that has become a model for replication across the country (UTeach, https://uteach.utexas.edu). Many of the programs that I initiated served several colleges or in some cases the entire university community.

ACCOMPLISHMENTS FOCUSED ON ACHIEVING UNIVERSITY EXCELLENCE

Transforming Teaching to Enhance Learning

 Creation of the Freshman Research Initiative (FRI) at the University of Texas – its development and replication through Howard Hughes Medical Institute (HHMI); and its UMD version, First-Year Innovation & Research Experience (FIRE)

The Freshman Research Initiative (FRI), which was initiated at UT Austin while I was Dean of the College of Natural Sciences, is an undergraduate research program that fundamentally altered the paradigm of undergraduate education in science at UT, offering large numbers of first-year students the opportunity to progress in their degree plans while performing cutting-edge, original and publishable research rather than taking traditional lab courses. FRI Students do actual research, with faculty and Ph.D.-level research educators, learn to use state-of-the-art lab equipment, develop technological innovations, and publish in peer-reviewed journals. The result is higher graduation rates and GPA's, with the students being better prepared for the future and more likely to excel in STEM careers. The FRI program was transported to UMD, with support from Howard Hughes Medical Institute (HHMI), and with a broadened scope to include students and projects across the entire university – not just science. UMD's broadened version of FRI – called FIRE (First-Year Innovation and Research Experience) – provides first-year students in multiple disciplines with authentic research experience, broad mentorship and institutional connections that improve academic success, self-confidence, and professional development.

Additional teaching and learning improvements at UMD

In partnership with its founding director Dr. Dean Chang, I established the **Academy of Innovation and Entrepreneurship that** has provided training and coaching for large numbers of students over the years in pursuing fearless ideas and creating new business opportunities. Entrepreneur Magazine ranked UMD as one of the best colleges for entrepreneurs in 2018; Princeton Review has listed UMD in the top ten in I & E for three years.

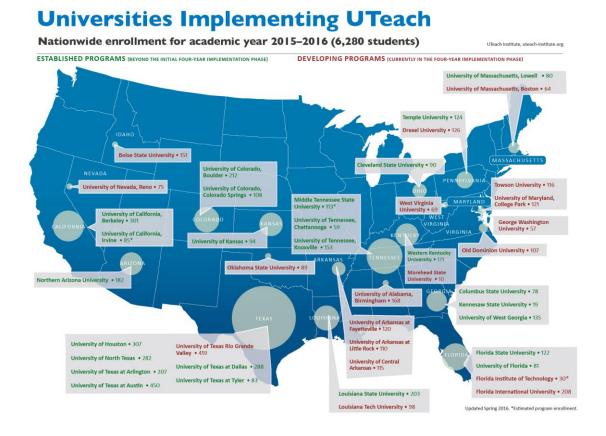
I established the **Teaching and Learning Transformation Center (TLTC)** in 2014, which provides faculty with support and training in the best pedagogical practices and oversees several student success initiatives. This was particularly important in assisting faculty and students in the recent, rapid move to online instruction with the onset of the COVID-19 pandemic.

More recently I led the University in a reinvention of the university's **Honors College** and a redesign of the large **University Honors Program** to provide a much-enhanced honors experience for the 1000+ students in that program and generally better connections with campus departmental honors programs for all students.

o Creation, fund-raising, and replication of the UTeach program

UTeach is a teacher preparation program for STEM majors, conceived while I was Dean of the College of Natural Sciences at UT Austin, with the goal of attracting strong science and math majors to high school teaching and training them to use the most effective teaching practice. The Figure below shows UTeach replication at 44 universities across the country in partnership with ExxonMobil, Dell, Howard Hughes Medical Institute (HHMI) and the National Math and Science Initiative (NMSI). With colleagues in Education and CMNS. We founded **Terrapin Teachers**, a Maryland replication of the UTeach program, in 2015 with support from HHMI

and NMSI. I was inducted into the American Academy of Arts and Sciences in 2017, in part for my role in developing UTeach nationally.



Leading Major Fund Raising Campaigns and Overseeing the Planning and Construction of Major Building Complexes

Well-planned learning and research spaces facilitate active learning and engagement of students in research—a hallmark of the Maryland educational experience. As Dean at UT Austin, I oversaw 11 major capital projects but the two most difficult and impactful were:



- The UT Bill and Melinda Gates Computer Science Complex and Dell Computer Science Hall—a complex that houses 60 faculty offices, 40 offices for visitors and technical staff, space for 350 graduate students, and almost 1,860 assignable square meters (20,000 square feet) of flexible research laboratory and teaching space (cost: \$120M), and
- o The UT Norman Hackerman Building, a 300,000+ gft² building that replaced a derelict experimental science building, provides space for an integrated and interdisciplinary approach to education, research and development for the College of Natural Sciences, including neuroscience and the Center for Learning and Memory, organic & inorganic chemistry teaching



and research, and health IT learning labs (cost: \$165M).

The many UT projects were excellent preparation for similar building and expansion efforts that I encountered almost immediately upon becoming Provost at UMD.



- The first UMD project added an additional wing to the Edward St. John Learning and Teaching Center, to accommodate general chemistry teaching labs and enable another decades-overdue project—a tear-down/rebuild of the oldest wing of UMD's chemistry building (cost: \$114M completion: December 2021).
- o The second task was to incorporate a badly needed modern animal care and imaging facility in an additional floor of the new Bioengineering Building. The building contains research and instructional labs, classrooms and offices and includes an added 6th floor designated as a campus vivarium (cost: \$168M vivarium completion: March 2019).



Similar expansion efforts continue at UMD, including

o The Brendan Iribe Center for Computer Science & Engineering that houses the



Department of Computer Science and the University of Maryland Institute for Advanced Computer Studies. It supports the growth of the department teaching and research programs, improves the ability of students and faculty to work together and with industrial and community partners. The Iribe Center contains office, instructional and research space, including state-of-theart hacker/maker space in which students, faculty, and outside partners share knowledge and ideas via

workshops, presentations and lectures (cost: \$138M – Completion: December 2018), and

• A \$176 million project for renovating and expanding Cole Field House (a famous old

basketball arena) to include the Terrapin Sports Performance Center, and the Center for Brain Health and Human Performance was initiated in 2015. Substantial financial support was received from Under Armour founder and CEO and UMD alum Kevin Plank. The Sports Performance Center will open April 2021.



Completion of the research and clinical complex is scheduled for June 2022.

• Working with Advisory Councils, Boards of Visitors, and Governance Boards

Working with committed, successful, creative individuals from the private-sector is something I enjoy and have done very successfully, raising approximately \$800,000,000 in private donations at UT Austin during two capital campaigns. Similarly with governance boards, it is important to build case statements that reflect the values and goals of the board and the University community and enlist the board's support in achieving success.

At UMD I worked with the President, Deans and Vice President for University Relations to support development operations wherever possible. I have been personally involved in the two major gifts for buildings and program support in computer science (\$35M) and public policy (\$30M), major gifts to fine arts and the Smith School of Business (\$20M), Architecture, Planning and Preservation (\$3M), and numerous other major gifts for chairs, scholarships and capital projects currently in progress. I also work with the President and his leadership team in developing case statements, presentations and personal connections with Regents and Trustees to create a sense of shared mission and involvement.

• Strategic Planning, Administrative Modernization, Budget redesign, and Major Business Software Replacement at UMD

In early 2015, we began work to revise UMD's foundational, 10-year 2008 strategic plan, entitled Transforming Maryland: Higher Expectations. The result was the 2016 Strategic Plan Update, which is an action-oriented plan that has provided the fundamental benchmarks around which the university proceeds for continued improvement. The Update sets forth a vision of the university as an institution unmatched in its capacity to attract talent; to create knowledge to address the most important issues of our time; and to produce the leaders of tomorrow. It was created following a series of community vision sessions, focus groups, online surveys and open forums and was endorsed by the University Senate on April 7, 2016. See http://www.provost.umd.edu/sp15/2016StrategicPlanUpdateFinal.pdf.

Beginning shortly after my arrival at UMD following the update to the University's Strategic Plan, I launched a much-needed multi-year budget re-design project to create consistent and complete budgeting, reliable financial data, improved transparency, and standardized fringe benefit rates. Over the course of 3 years, we allocated over \$20 million from provost office and general funds to the academic colleges to stabilize academic program budgets. Strategic planning led to the establishment of the Administrative Modernization Program (AMP) aimed at improving campus operations, and programs such as TerpEngage (a Salesforce-based software upgrade) to improve student advising and other communications across campus. The long-term mission of the AMP is to maintain a cross-campus view of business activities and provide core support for people, processes and tools to enable continuous improvement and "working smarter," ensuring that resources are being effectively and efficiently leveraged to support UMD's academic mission. In addition to budget revamping and Salesforce installation, AMP has changed purchasing practices, fleet management, and travel support. Space utilization and course scheduling and internship organization are next on the agenda. AMP also led to the very large and recently launched ERP initiative (ELEVATE) that will upgrade our operations software infrastructure to a cloud-based system (Workday) in HR, Finance and Student Services.

• Recruiting and Retaining Excellent Academic Talent

Nothing is more important for building excellent programs than high quality faculty and leaders. Investments in strong faculty result in outstanding returns in dollars and program advances.

Outstanding leaders are transformational in generating excellence at every level. I am proud to have played a major personal role in the recruitment of several major leaders at UT Austin and more recently at UMD. Since becoming provost, I have hired extraordinary new deans and research leaders in Public Policy, Agriculture and Natural Resources, Undergraduate Studies, Business, Information Studies, Architecture, Planning and Preservation, Behavioral and Social Studies, Molecular Biology and Biotechnology, Education, Libraries, and Public Health. I launched searches to replace two more deans in 2020-21. In every case these new leaders have been outstanding and several have made major differences in program development, fundraising, and strategic planning for their units. Hiring great people and helping them be as successful as possible is one of the most rewarding aspects of university administration.

• Diversity Matters

A focus on diversity and inclusion has always been a driving interest of mine. Several of the very successful student achievement initiatives that we created at UT Austin were aimed at helping low income and minority students succeed in STEM careers. For example, the TIP program was an enrichment program aimed at helping students from disadvantaged backgrounds become high achievers in their first 1-2 years at UT Austin. With the help of the Cullen Foundation, TIP expanded to include students in Liberal Arts as well as Natural Sciences with added capstone experiences in the junior and senior years. The Freshman Research Initiative was initially also aimed at students entering the Natural Sciences with less than optimal STEM preparation. Intentionally drawing students immediately into research programs led by some of UT's most outstanding scientists, it was extremely successful in stimulating student interest in research, significantly improving graduation rates and GPA's, retention in science majors, continued participation in research and innovation and continuation in postgraduate work in STEM.

At the University of Maryland, the challenge was to increase the number of under-represented minority faculty members at all ranks. I was PI on an extremely successful NSF Advance grant (https://advance.umd.edu/) that established a highly effective suite of programs supporting not just women in STEM disciplines but under-represented minority junior faculty in all disciplines. I also established a program to incentivize hiring of minority junior faculty across the campus and a second, more aggressive program aimed at incentivizing targeted senior hires.

• Working Closely with the University of Maryland, Baltimore, to Establish the MPOWER Partnership

Since its inauguration in FY 2012, the MPOWER Partnership has produced outstanding research and educational partnerships with rapidly growing benefits. The partnership

encompasses fields as diverse as bioscience, engineering, social science, computer and mathematical science, law, public health and agriculture. New joint faculty

appointments and collaborations have produced more than 250 proposals to federal agencies and nearly 60 awards with anticipated funding of over \$100 million. More than \$200 million in proposed funding is now in the federal review pipeline in fields ranging from child development to robotics to nanomedicine. With the passing of legislation during the 2016 legislative session, the College Park and Baltimore campuses were officially joined as partners in one university. Thus, the MPower partnership is now legislatively mandated to intensify, with close articulation in academic and research initiatives, more joint appointments, and collaborations.

• Planning and Implementing a New Partnership with the Phillips Collection (TPC)

The Phillips Collection (TPC) – America's first museum of modern art and home to one of the most distinguished collections of impressionist, modern and contemporary art in the world – maintains a rich schedule of special and traveling exhibitions, contemporary art commissions, public programs, and new



acquisitions. Launched in October 2015, the partnership involves collaboration with existing galleries on campus and includes a University of Maryland Center for Art and Knowledge, physically located at the Phillips Collection Annex in Washington, D.C; collaborative graduate and postdoctoral fellowships; UMD co-hosts a number of events and special traveling exhibitions with TPC.

Working with University and City Planners to Implement the "University District 2020 Vision"

The "University District 2020 Vision" was created in 2012 through the College Park City-



University Partnership to establish a shared set of ideas and values for the campus and local residents to improve the quality of life for all who live and work in the community. The collaboration has rapidly begun to revitalize downtown College Park, and the goal of creating a vibrant, walkable, mixed-use hub of activity with new retail, office and housing options is clearly within reach. Development projects already underway include: a public charter school serving grades 6-12 in an innovative and

rigorous blended-learning environment; a four-star hotel on the east side of Baltimore Avenue across from the main entrance to campus; the Purple Line Light Rail, which will traverse the campus and further connect UMD throughout the Washington, D.C. metropolitan area. In 2015, UMD was designated by the Association of Public and Land-grant Universities (APLU) as one of 18 public institutions recognized for its strong commitment to economic engagement in the state and region. Also in 2015, UMD was given the top national award for its economic engagement programs, representing the first BIG Ten institution to win the APLU top 'connections' award.

EXTERNAL PANELS AND ADVISORY COMMITTEES AND BOARDS

Board of Directors: Southwest Research Institute 2000--present, Chair of the Board, 2006-2008

Board of Directors National Math and Science Institute 2012 to present

Board of Advisors Educational Advancement Foundation 2012 to 2016

Education Advisory Board, Howard Hughes Medical Institute 2012 to 2019

Education and Human Resources Division, NSF Advisory Committee 2007--2013

Austin Lyric Opera Board 2008-2012

Board of Advisors RRE Solar, 2010

Editorial Board: Journal of Insect Behavior 1992-2002

Governing Board Member: Association for Aerobiological Research 1993-1998

STUDENT SUPERVISION

• Ph.D. Degrees Supervised

Nathan Jones: Physiological Correlates of Migration in Melanoplus sanguinipes. December 2010.

Kyung-Jin Min: Neuroendocrine Regulation of Migration and Reproduction in the Grasshopper Melanoplus sanguinipes Fabricius. December 2003.

John Kent Jr.: Genetics of Migratory Behavior and Physiology in Melanoplus sanguinipes. May 1999.

Laura Genovise Hansen: Role of Juvenile Hormone Esterase in Overwintering Success of the Boll Weevil, Anthonomus grandis. December 1998

Tina Taub: Hormonal control of Diapause and Migration in the boll weevil, Anthonomus grandis. August 1994.

Juditha Burchsted: Flight-enhanced reproduction in the migratory grasshopper Melanoplus sanguinipes. August 1990.

Huei-Jung Wu: An Analysis of Nest Surface Structure of Pogonomyrmex barbatus Smith, the Harvester Ant. May 1987.

M. Lynne McAnelly: The Role of Migration in the Life History of the Grasshopper, Melanoplus sanguinipes. December 1984.

Darrell Moore: The Honeybee Circadian Clock: Regulation of Foraging and General Locomotor Behavior in Apis mellifera. December 1983.

Tom Schultz: The Ultrastructure, Physiology and Ecology of Epicuticular Interference Reflectors in Tiger Beetles (Cicindela). December 1983.

Susan Rankin: The Physiology of Migration and Reproduction in the Ladybird Beetle, Hippodamia convergens Guerin-Meneville. August 1980.

• M.A. Degrees Supervised

Elaine Bishop: The Effects of Density on Development and Reproduction in Insects. May 1980.

Yueh-mei Teng: Hormonal Control of Lipid Mobilization During Flight in Melanoplus sanguinipes. May 1993.

Sheryl Schaefer: Physiological Relationships Between Migration and Reproduction in Melanoplus sanguinipes. May 1999.

Postdoctoral Students Supervised

Tina Taub, 1994-1997 Jack Kent, Jr., 1999-2000 J.A. Burchsted, 1990-1993 Anthony Zera, 1984-1987 Sema Ergezen, 1985 (Fulbright Fellow) Zhaorigetu Chen, 2004-2008 Linden Higgins, 1993- 1998 E.N. Hampton, 1986-1988 Margaret Saks, 1984-1987 M. Lynne McAnelly, 1985

PUBLICATIONS

- 1. Rankin, M., Caldwell, R.L., and Dingle, H. (1972) An analysis of a circadian rhythm of oviposition behavior in Oncopeltus fasciatus. J. Exptl. Biol. 56: 353-359.
- 2. Caldwell, R.L. and Rankin, M.A. (1972) The effect of a juvenile hormone mimic on flight in the milkweed bug, Oncopeltus fasciatus. Gen. and Comp. Endocrinol. 19: 601-605.
- 3. Caldwell, R.L. and Rankin, M.A. (1974) Segregation of flight, feeding and reproductive activities in the milkweed bug, Oncopeltus fasciatus. J. Comp. Physiol. 88: 383-394.

- 4. Rankin, M.A. (1974) The hormonal control of flight in the milkweed bug, Oncopeltus fasciatus. In Experimental Analysis of Insect Behavior. L. Barton Browne (ed.). Springer-Verlag, NY. pp. 317-328.
- 5. Rankin, M.A. and Riddiford, L.M. (1977) The hormonal control of migratory flight in Oncopeltus fasciatus: The effects of the corpus cardiacum, corpus allatum and starvation on migration and reproduction. Gen. and Com. Endocrinology 33: 309-321.
- 6. Rankin, M.A. and Riddiford, L.M. (1978) The significance of hemolymph juvenile hormone titer changes in the timing of migration and reproduction in adult Oncopeltus fasciatus. J. Insect Physiol. 24: 31-38.
- 7. Rankin, M.A. (1978) The hormonal control of migration in Oncopeltus fasciatus. In The Evolution of Migration and Diapause in Insects. H. Dingle (ed.). Springer-Verlag, NY. pp. 5-32.
- 8. Templeton, A. and M.A. Rankin (1978) Genetic revolutions and control of insect populations. In The Screwworm Problem: Evolution of Resistance to Biological Control. R.H. Richardson (ed.) University of Texas Press, Austin. pp. 83-112.
- 9. Rankin, M.A. and Rankin, S.M. (1979) Physiological aspects of insect migratory behavior. In Movement of Highly Mobile Insects: Concepts and Methodology in Research. R. Rabb and G. Kennedy (eds.) University Graphics, North Carolina State University, Raleigh. pp. 35-63.
- 10. Rankin, M.A. and Jackle, H. (1980) Hormonal control of vitellogenin production in Oncopeltus fasciatus. J. Insect Physiol 26: 671-684.
- 11. Rankin, M.A. (1980) Effects of precocene I and II on flight behavior in Oncopeltus fasciatus, the migratory milkweed bug. J. Insect Physiol. 26: 67-74.
- 12. Rankin, S.M. and Rankin, M.A. (1980) The hormonal control of migratory flight behavior in the convergent ladybird beetle, Hippodamia convergens. Physiol. Entomol. 5: 175-182.
- 13. Rankin, M.A. and Rankin, S.M. (1980) Some factors affecting flight activity of the convergent ladybeetle, Hippodamia convergens. Biol. Bull. 158: 356-369.
- 14. Woodard, H.D. and Rankin, M.A. (1980) Effect of precocene II on circadian rhythms of feeding and mating behavior in the milkweed bug, Oncopeltus fasciatus. Experientia 36: 554-555.
- 15. Moore, D., Penikas, J., and Rankin, M.A. (1981) Regional specialization for an optomotor response in the honeybee compound eye. Physiol. Entomol. 6: 61-69.
- 16. Rankin, M.A. (1981) Hormonal control of insect behavior. In Yearbook of Science and Technology. McGraw-Hill, NY. 3pp.
- 17. Moore, D. and Rankin, M.A. (1982) Direction sensitive partitioning of the honey bee optomotor system. Physiol. Entomol. 7: 25-36.
- 18. Moore, D. and Rankin, M.A. (1983) Diurnal changes in the accuracy of the honeybee foraging rhythm. Biol. Bull. 164: 471-482.
- 19. Rankin, M.A. and Singer, M. (1984) Insect movement: Mechanisms and Effects. Chapter 7, In Insect Ecology, C.B. Huffaker and R. Rabb, (eds.). Wiley and Sons, NY. pp. 185-216.
- 20. Moore, D. and Rankin, M.A. (1985) An analysis of circadian locomotor rhythms in the honeybee. Physiol. Entomol. 10: 191-197.
- 21. Schultz, T.D. and Rankin, M.A. (1985) Developmental changes in the interference reflectors and colorations of tiger beetles (Cicindela). J. Exp. Biol. 117: 111-118.
- 22. Schultz, T. and Rankin, M.A. (1985) The ultrastructure of epicuticular interference reflectors of tiger beetles (Cicindela). J. Exp. Biol. 117: 87-110.
- 23. Rankin, M.A. (1985) Endocrine physiology of migration on insects. In Migration: Mechanisms and Adaptive Significance. M.A. Rankin (ed.). Contributions in Marine Science 27 (supplement): 817-840.

- 24. Rankin, M.A. (ed) (1985) Migration: Mechanisms and Adaptive Significance. Contributions in Marine Science 27 (supplement). 876 pp.
- 25. McAnelly, M.L. and Rankin, M.A. (1986) Migration in the grasshopper, Melanoplus sanguinipes (Fab.) I. The capacity for flight in non-swarming populations. Biol. Bull. 170: 368-377.
- 26. McAnelly, M.L. and Rankin, M.A. (1986) Migration in the grasshopper, Melanoplus sanguinipes (Fab.) II. Interactions between flight and reproduction. Biol. Bull. 170: 378-392.
- 27. Rankin, M.A., McAnelly, M.L., and Bodenhamer, J.E. (1986) The oogenesis-flight syndrome revisited. In Insect Flight: Dispersal and Migration, W. Danthanarayana (ed.), Springer-Verlag, pp. 27-48.
- 28. Rankin, M.A. (1989) Hormones and insect flight behavior. In: Insect Flight, Goldsworthy, G.J. and Wheeler, C. (eds.) CRC Press, Boca Raton, Fla. Chapter 7, pp. 139-164.
- 29. Zera, A.J. and Rankin, M.A. . (1989) Wing dimorphism in Gryllus rubens: genetic basis of morph determination and fertility differences between morphs. Oecologia 80: 249-255.
- 30. Zera, A.J., Strambi, C., Tiebel, K., Strambi, A., and Rankin, M.A (1989) Juvenile hormone and ecdysteroid titers during critical periods of wing morph determination in Gryllus rubens. J. Insect Physiol. 35: 501-511.
- 31. Saks, M., Rankin, M.A. and Stinner, R.E. (1988) Sexually Differentiated Flight Responses of the Mexican Bean Beetle to Larval and Adult Nutrition. Oecologia 75: 296-302
- 32. Moore, D., Siegfried, D., Wilson, R. and Rankin, M.A. (1989) The influence of time of day on the foraging behavior of the honeybee, Apis mellifera. J. Biological Rhythms 4: 305-325.
- 33. M.A. Rankin (1991) Endocrine effects on migration. American Zoologist, 31:217-230.
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HUFFINGTON POST BLOG ENTRIES BY MARY ANN RANKIN

(http://www.huffingtonpost.com/mary-ann-rankin)

- 1. Adding One Million More for America's Future. Posted: 02/28/2012 | 11:54 AM
- 2. Is Science a Girl Thing? Posted July 10, 2012 | 2:27 PM
- 3. Where Are the Science Teachers of Tomorrow? Posted June 12, 2012 | 5:46 PM
- 4. Adding One Million More for America's Future. Posted February 28, 2012 | 11:54 AM
- 5. If There's One Thing I've Learned, It Was Taught to Me. Posted February 12, 2012 | 5:09 PM
- 6. Why America Needs Good Teachers. Posted January 17, 2012 | 11:02
- 7. How Can We Get the American Dream Back for Our Kids? Posted December 27, 2011 | 8:50 AM
- 8. Giving Thanks for Service, Hope for Next Generation. Posted November 22, 2011 | 2:02 PM
- 9. Raise (Don't Lower!) the Bar for Math & Science Education. Posted November 22, 2011 | 2:02 PM | Updated January 15, 2012

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May 7, 2021

Via Email: apsearch@spaexec.com

Alberto Pimentel, Managing Partner Will Gates, Partner Sal Venegas Jr., Principal SP&A Executive Search 6512 Painter Avenue Whittier, CA 90601

Re: FSU-President

Dear Search Team:

It was a great pleasure to receive Will Gates' May 4, 2021 telephone call, requesting that I submit this letter of interest to complete my application for the position of President of Florida State University (FSU). I am also attaching copies of a comprehensive curriculum vitae, a bullet list of my administrative responsibilities and accomplishments, and a list of five academic references. I would be happy to suggest additional references from non-academic sources such as trustees, regents, donors or legislators if that would be helpful.

The stellar leadership of FSU President John Thrasher will be a "hard act" for anyone to follow. Under his guidance, FSU took many extraordinary steps forward – increasing in national public university rankings, undergraduate graduation rate, first-year student retention and graduate school enrollment, and success in diversity and inclusion programs, just to name a few.

President Thrasher's superb accomplishments, coupled with FSU's extremely attractive location and strong, results-based support from the State of Florida have set the stage for FSU to move into the very highest echelon of research-1 universities in the world. Great expertise and research distinction already exist at FSU, including extraordinary opportunities afforded by the NSF-FSU MagLab and access to the world's most powerful magnets. This is coupled with extraordinary programs and achievement in entrepreneurship, the arts, film production, criminology, information and data science, medicine and the law. There are so many unique opportunities for additional achievement and excellence that the next president of FSU will be afforded one of the most exciting leadership opportunities in the country.

My philosophy for leadership is first and foremost, people. Endeavoring to attract the best people and give them – students, faculty, and staff – the environment, guidance and support necessary for success both within and beyond academia – has proven in each of my leadership positions to be the recipe for success and advancement.

My guiding principles are: honesty, integrity, transparency, and fidelity to core values. Choosing colleagues and partners with similar values and standards, and positioning them for success is essential to establishing those principles throughout an organization. To build trust and a community of shared values, I communicate often and clearly with university leaders and other stakeholders as well as with the broader university community, and strive to create mutually rewarding team relationships focused on specific opportunities and problems. Building trust and mutual commitment to shared goals and values is, I believe, one of the highest priorities for any successful leader. It is important for successful fundraising, strategic planning, change management, program development and job satisfaction – but it is absolutely critical during times of crisis such as the dual pandemics of COVID-19 and racial strife that we face in academia today.

My most successful and rewarding leadership experiences have all involved teambuilding with highly committed partners, open and collaborative strategic planning and priority setting with the campus, and support from donors and board leaders to make changes. Building major new research programs, for example, requires creating the infrastructure and environment to attract the best people—faculty, students, and staff—to positions in which they know they can succeed and be appreciated. Then, steadfast fulfillment of commitments, continued focus on excellence, and measurable achievement must follow. FSU has all these elements in place, and it is poised to grow its research and scholarship operations.

My qualifications for President of FSU derive from my previous educational leadership experience and success, including more than eight years as Senior Vice President and Provost of the University of Maryland, College Park, Chief Executive Officer and President of the National Math and Science Institute, and nearly 17 years as Dean of the College of Natural Sciences at the University of Texas at Austin. Details of those and other relevant qualifications are outlined in the enclosed curriculum vitae and bullet list of leadership achievements.

I look forward very much to talking with you about this wonderful opportunity, should you decide to consider me further.

Sincerely yours,

Mary Ann Rankin, Ph.D.

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Mary Ann Rankin List of References

• Dr. Wallace Loh, former President, University of Maryland, College Park

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Dr. Bruce Jarrell, President, University of Maryland, Baltimore

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• Dr. Sheldon Ekland-Olson, former Provost, University of Texas at Austin

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• Dr. David Cronrath, Associate Provost, University of Maryland, College Park

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Mary Ann Rankin

Bullet Point Summary of Key Leadership Accomplishments

- Senior Vice President and Provost, University of Maryland, College Park
 - Chaired UMD's Flagship 2020 Commission
 - Led the Commission's charge to chart a strategic 5-year (2017-2022) course for excellence in: Education; Research and Scholarship; Strategic Partnership with the University of Maryland, Baltimore; Arts and Humanities; Athletics; Greater College Park; Equity, Diversity and Inclusion; and Administrative Procedures
 - Authored the Commission's Final Report, Equal to the Best: 2016 Strategic Plan Update for the University of Maryland
 (https://www.provost.umd.edu/sites/default/files/inline-files/2016StrategicPlanUpdateFinal_o.pdf)
 - Instituted a UMD Budget Re-Design Project to create consistent, university-wide budgeting procedures to ensure equitable, appropriate and transparent uses of university funds
 - Instituted a UMD Administrative Modernization Office to oversee projects emerging from the 2020 Commission report and on-going projects for continuous improvement of business/operations practices (https://amp.umd.edu)
 - Initiated a major multi-year business systems transformation project (called ELEVATE, https://elevate.umd.edu) that will involve the modernization of UMD's Enterprise Resource Planning systems, including Finance, Human Capital Management and Student Information Systems. The project will improve business services in all these areas and will move all to a cloud-based *Workday* solution.
 - Established the Teaching and Learning Transformation Center (https://tltc.umd.edu) to provide faculty with support and training to enhance student learning experiences, including coaching in teaching methodologies for rapidly implementing teaching and learning experiences in response to the COVID-19 pandemic restrictions
 - Spearheaded new academic programs for advancing student opportunities
 - Established the First-Year Innovation & Research Experience (FIRE https://www.fire.umd.edu) Program, based on the Freshman Research Initiative Rankin originally developed at the University of Texas at Austin, which provides faculty-led and hands-on research projects for over 500 new students per year
 - Founded Terrapin Teachers (http://www.tt.umd.edu), a Maryland teachers program based on UTeach a program Rankin originally developed at UT Austin to address the need for high school teachers having additional STEM education in science and mathematics, and which was specifically recognized by the American Academy of Arts and Sciences (AAAS) during Rankin's 2017 induction into the AAAS
 - Reorganized and restructured UMD's Honors College (https://www.honors.umd.edu) into a more effective living and learning program that provides 4,000 students with an academic and residential experience and promotes interdisciplinary learning and functions as an "intellectual community within the larger university" by providing a small university experience in a large, research university environment

- Established undergraduate major and minor degree programs to provide better opportunities for undergraduates to broaden their educational horizons, including the following
 - Minor in Business and Management currently serving nearly 500 students
 (https://www.rhsmith.umd.edu/programs/undergraduate/academic s/academic-minors)
 - Major in Information Sciences currently serving over 1,100 students (https://ischool.umd.edu/academics/bachelor-of-science-in-information-science-college-park)
 - Major in Public Health Sciences now 1,200 students and growing (https://sph.umd.edu/department/phs/bs-public-health-science)
 - Major in Public Policy, providing an exciting option for students drawn to careers in the nation's capital (https://spp.umd.edu/your-education/undergraduate/public-policy-major)
 - Major in Immersive Media Design, a degreed developed in collaboration with the Departments of Computer Science and Art directed to prepare students to use virtual reality technology to design and develop transformative content and tools in the fields from art, to games and entertainment, communication and training (https://imd.umd.edu)
 - Major in Sports Management, currently under development, to prepare students to serve in management positions in all segments of the sports industry
- Created academic institutes designed to better connect undergraduate education and student creativity with real world opportunities, including
 - Academy of Innovation and Entrepreneurship (https://innovation.umd.edu)
 - Run by an experienced and successful entrepreneur to provide students with coaching and training to turn their creative ideas into commercial success
 - UMD was ranked by Entrepreneur Magazine as one of the best colleges for entrepreneurs in 2018 and Princeton Review has listed UMD in the top ten for I & E for three straight years
 - Planned— Academy of Data Science, a program planned to meet the demand for data science instruction for the general university as well as two new undergraduate majors in data science —one is social data science and the other in STEM-based data science
- Established the new Brain and Behavior Institute (http://bbi.umd.edu) a collaboration between seven colleges at UMD, College Park and the University of Maryland School of Medicine to create innovative approaches to solve the most pressing problems of nervous system function and disease
- Reorganized the Office of Faculty Affairs (https://faculty.umd.edu) and implemented new programs to expand hiring of minority faculty and increase opportunities for faculty advancement through a better balance between research and innovation contributions, inclusiveness with other faculty and staff and teaching effectiveness

- Led efforts to enhance research and teaching capabilities through design of new construction and renovation of facilities
 - Added a new state-of-the-art animal care facility in the new Bioengineering building (https://eng.umd.edu/clark-hall)
 - Led the design of the new Edward St. John Learning and Teaching Center including adding a chemistry wing to the new to accommodate new general and organic teaching labs (https://esj.umd.edu)
 - Added a Cole Research Facility to the Cole Fieldhouse Renovation Project to house the new Brain and Behavior Institute
 - Advanced construction of a new Chemistry Building
 - Advanced construction of a new School of Public Policy Building
- Represented UMD in its partnerships with outside academic organizations, including:
 - Big Ten Academic Alliance (https://www.btaa.org)
 - MPowering the State —A partnership with the University of Maryland, Baltimore (https://mpower.maryland.edu/#overview)
 - Phillips Collection (https://umd-phillips.umd.edu)
 - Devos Institute of Arts Management (http://devosinstitute.umd.edu)
- Created fundraising programs, including the Maryland Promise Program (https://promise.umd.edu) to match and leverage funds from existing programs
- Created several million dollars in endowed chairs and oversaw matching of those endowment funds from the Maryland E-Nnovate matching fund program (https://commerce.maryland.gov/fund/maryland-e-nnovation-initiative-fund-(meif)

• Chief Executive Officer, National Math and Science Initiative (NMSI)

- Coordinated merger activities with Laying the Foundation, a pre-AP teacher development program, nearly doubling staff size
- o Expanded the AP pre-college program into Colorado and Indiana
- o Extended UTeach to universities in Maryland, Tennessee and Texas
- Recruited the Howard Hughes Medical Institute as an additional funder for NMSI educational programs

Dean of the College of Natural Sciences, University of Texas at Austin

- Created UTeach in 1997 as an innovative way to recruit undergraduate science, technology, engineering, and mathematics (STEM) majors and prepare them to become teachers (https://uteach.utexas.edu)
- Created the Freshman Research Initiative, the nation's largest university undergraduate research program (https://cns.utexas.edu/fri)
- o Created the Texas Interdisciplinary Plan, a four-year program that includes both Natural Sciences and Liberal Arts students with degree plans, which has been successful in helping students who graduate from small, rural high schools; have low socio economic status; are first in their family to attend college; or are members of an underrepresented group at the University (https://cns.utexas.edu/tip-scholars)
- Reorganized major academic programs in Biology, Human Ecology, Statistics and Scientific Computation

- Helped build several large interdisciplinary research units that improved UT's national profile in key fields (particularly ICMB, Center for Learning and Memory and the Institute for Neuroscience, Statistics and Scientific Computation)
- o Spearheaded construction of 11, new world-class science buildings
- Raised over \$800 million in private funding for academic programs, research centers and academic buildings
- Increased the percentage of women faculty in the College from about 15% in 1994-95 to 29% in 2011
- Increased women faculty salaries during term as Dean to slightly higher on average than those of male faculty

• Chair of the Department of Biology, University of Texas at Austin

- Reorganized the Department to improve the general biology curriculum and better organize the Biology graduate program recruitment and student support
- Obtained Howard Hughes Medical Institute and National Institutes of Health funding for curriculum improvement
- Revamped the freshman biology curriculum and requirements and significantly improved the administration and support for the biology graduate program