SUMMARY

University Distinguished Professor

March 24, 2025

The University Distinguished Professorship (UDP) is Virginia Tech's pre-eminent faculty rank bestowed by the Board of Visitors upon members of the university faculty whose scholarly attainments have attracted national and/or international recognition. An extensive nomination and vetting process involves department and college honorifics committees, a specially convened university committee, the executive vice president and provost, and the president. Incumbents carry the rank of University Distinguished Professor until resignation or retirement from the university, subject to the usual standard of continuous high performance. The rank is conferred only by the university Board of Visitors and is altered by that body alone, on the recommendation of the president. Each academic year the president and provost determine if there will be one or more appointments to the rank of University Distinguished Professor and, if appropriate, issue a call to the academic deans for nominations. There is no quota by college, school, or department. The appointment to University Distinguished Professor carries with it an annual operating account for use by each professor.

Following the established protocol and consistent with the recommendations received from a university committee and the executive vice provost, President Sands recommends the appointment of Dr. Shuhai Xiao as University Distinguished Professor. Dr. Xiao is a genuinely outstanding scholar, making exceptional contributions in his field to the betterment of people and communities around the globe. His achievements and contributions have garnered national and international recognition.

UNIVERSITY DISTINGUISHED PROFESSOR

Dr. Shuhai Xiao is a professor in the Department of Geosciences in the College of Science at Virginia Tech, an internationally recognized leader in paleontology and geobiology, and the world's leading paleontologist of the eras when animals and plants originated and first diversified. His pioneering research has fundamentally advanced our understanding of early life evolution, deep-time environmental changes, and the co-evolution of life and Earth. Dr. Xiao's studies of the Ediacaran-Cambrian transition have provided groundbreaking insights into early animal evolution and the conditions that led to the diversification of complex life on Earth. His innovative research combines field-based geological studies, geochemical analyses, and cutting-edge imaging techniques to reconstruct ancient ecosystems and the biogeochemical cycles that shaped them.

Dr. Xiao is a prolific scholar whose contributions have significantly impacted his field. He has authored nearly 300 peer-reviewed publications in the highest-caliber scientific journals, including 10 papers in *Nature*, six in *Science,* 10 in the *Proceedings of the National Academy of Sciences*, and 17 in *Geology*. In addition, he has co-authored two books, three field guides, one edited book, three edited journal volumes, 15 book chapters, 287 conference abstracts, and 11 book reviews and reports. His research has been cited more than 22 thousand times, demonstrating its broad influence on both fundamental and applied geosciences. His work has been continuously supported by substantial external funding from agencies such as the National Science Foundation, NASA, the National Geographic Society, the Guggenheim Foundation, and the Department of Energy and it has been featured in the mainstream media, including ABC, BBC, CNN, PBS, *The Economist*, *der Spiegel*, the *New York Times*, and *The Washington Post*.

Dr. Xiao's scientific achievements have been recognized with numerous prestigious honors. He was elected to the National Academy of Sciences in 2023, one of the highest distinctions for a scientist in the United States. He is the recipient of the Raymond C. Moore Medal by the Society of Sedimentary Geology in 2024, the ICS Medal by the International omission on Stratigraphy in 2023, and the Mary Clark Thompson Medal from the National Academy of Sciences in 2021. He is the recipient of many other notable awards, including the Charles Schuchert Award from the Paleontological Society, the Distinguished Career Award from the Geological Society of America, a Guggenheim Fellowship, and the Virginia Outstanding Scientist Award. Dr. Xiao is a Fellow of the American Association of the Advancement of Science, a Fellow of the Geological Society of America, and a Fellow of the Paleontological Society.

In addition to his exceptional research, Dr. Xiao is a dedicated educator and mentor. His commitment to fostering the next generation of geoscientists is reflected in his mentorship and his ability to engage students through innovative and interdisciplinary approaches to learning. He has advised 60 undergraduate students in their career, research, and academic aspirations; he has supervised 15 Ph.D. students, seven master's students, and 21 visiting scholars. His Ph.D. students are now faculty at universities that include Cornell, Towson, the University of Toronto, the University of Missouri, Peking University, and Nanjing University. Dr. Xiao is highly regarded for his engaging teaching style and

his ability to inspire both undergraduate and graduate students to explore the intersections of geology, biology, and environmental science.

Dr. Xiao has also provided outstanding service to the scientific community and Virginia Tech. He has served on editorial boards of major scientific journals, organized international conferences, and contributed to key professional organizations such as the Paleontological Society and the Geological Society of America. His leadership has strengthened Virginia Tech's global reputation in geosciences and interdisciplinary research. Furthermore, his service on high-profile national and international scientific committees has shaped the direction of geobiology and paleontology research worldwide.

Dr. Xiao's distinguished career has left an indelible mark on the geosciences, making Virginia Tech a hub for cutting-edge research in paleontology and Earth system evolution. His extensive publishing record, his recognition through numerous prestigious awards, and his election to the National Academy of Sciences firmly establish him as one of the foremost experts in his field. His impactful scholarship, selfless service, and dedication to teaching and mentoring distinguish him as an exemplar of *Ut Prosim* and as an outstanding ambassador for Virginia Tech in the broader scientific community.

RECOMMENDATION:

That Dr. Shuhai Xiao be appointed University Distinguished Professor, effective March 25, 2025.

March 25, 2025