

Cover Letter

February 22, 2025

Dr. John Arthington

Chair, Search and Screen Committee
Department of Animal Sciences
University of Florida
Gainesville, FL 32611

Subject: Application for *Professor and Chair - Soil, Water, and Ecosystem Sciences Department (SWESD)* position available at University of Florida (UFL)

Dear Dr. Arthington and Search Committee,

I am writing to express my enthusiastic interest in the position of Professor and Chair for the Soil, Water, and Ecosystem Sciences Department (SWESD) at the University of Florida. With a proven background in agricultural research, strategic management, and administrative leadership, I am excited about the opportunity to contribute to the department's growth and advancement of its mission of promoting sustainability, resilience, and innovation in agricultural systems. I earned my Ph.D. in Soil Science from the University of Missouri-Columbia in 2009 and subsequently conducted postdoctoral research at The Ohio State University under the mentorship of Dr. Rattan Lal. In 2012, I joined South Dakota State University (SDSU) as an Assistant Professor, where I was later tenured and promoted to Associate Professor. Presently, I serve as a National Program Leader (NPL) for USDA-NIFA, overseeing multiple research programs related to soil health, water systems, and agricultural resilience.

In my role as an NPL at USDA-NIFA, I manage a broad portfolio of research programs, including Soil Health, Agricultural Microbiomes, and the Human Health and Soil Health Study, with an annual budget exceeding \$30 million. I have successfully secured approximately \$8.2 million in external research funding at SDSU through federal and private grants. Furthermore, I have fostered interdisciplinary collaborations, integrating soil science with crop sciences, social sciences, economics, and policy development to create sustainable management systems. My experience aligns with SWESD's focus on addressing global challenges such as climate change, food security, and water quality. Throughout my career, I have consistently demonstrated leadership by promoting a culture of teamwork, inclusivity, and strategic innovation. I have led large interdisciplinary teams, mentored early-career faculty and students, and overseen the successful completion of significant research projects such as USDA-CAP. My management experience has also extended to budgeting, securing funding, and ensuring the efficient allocation of resources to support both short- and long-term departmental goals. These experiences have equipped me with the skills to align SWESD's academic, research, and outreach activities with the university's broader mission.

My administrative philosophy centers on effective leadership, collaboration, and fostering an inclusive, diverse work environment. I believe that a department thrives when its faculty, staff, and students are empowered to innovate and collaborate in pursuit of shared goals. I aim to provide a leadership framework that supports the professional growth of faculty and staff, encourages cross-disciplinary partnerships, and fosters open communication within the department. Additionally, I place a high value on diversity, equity, and inclusion (DEI), ensuring that all team members are respected, valued, and supported in their endeavors. This inclusive

approach is critical to the development of innovative solutions that address the complex challenges facing agricultural systems today.

As Department Chair, I would focus on advancing the department's research agenda by fostering interdisciplinary collaborations that address critical issues such as climate adaptation, soil health, and water conservation. I believe that research should be community-centered, addressing both local needs and global challenges. My vision for the department's research is to enhance partnerships with local, state, and federal agencies, as well as industry and non-profit organizations, to enhance the real-world impact of our work. I also aim to elevate the department's teaching and extension missions by promoting innovative pedagogical strategies that engage a diverse range of students and stakeholders, from undergraduate to lifelong learners.

I am deeply committed to fostering a supportive and dynamic environment where both faculty and students are inspired to pursue cutting-edge research that addresses the most pressing agricultural challenges of our time. I envision a department that not only excels in its research but also actively engages with external stakeholders, including industry leaders, policymakers, and local communities, to ensure our work has real-world applications that directly impact sustainable agricultural practices. Central to this vision is the expansion of the department's global footprint, where we can strengthen international research collaborations to address transnational issues such as climate change, food security, and soil degradation. I also aim to ensure that our extension programs are accessible to diverse communities, both locally and globally, by leveraging innovative outreach strategies and creating educational resources that meet the unique needs of underserved groups. As Department Chair, one of my key objectives will be to prioritize research at the intersection of soils, water, ecosystem sciences, and human health. This critical area will drive advancements in sustainable agriculture and public well-being. By fostering interdisciplinary collaboration among soil, water and ecosystem professionals, environmentalists, and economists, I aim to create opportunities for faculty and students to engage in innovative work that can transform agricultural practices and improve human health outcomes. This initiative will position the department as a leader in addressing agricultural sustainability.

In summary, I am confident that my extensive research, administrative, and leadership experience aligns with the mission and strategic goals of the SWESD at UFL. My commitment to promoting diversity, advancing sustainable agricultural practices, and creating a collaborative, inclusive academic environment will allow me to lead the department.

Thank you for considering my application. I have enclosed my CV and am happy to provide any additional materials or references upon request. I am excited about the opportunity to contribute to the department's success and look forward to discussing how my vision, leadership, and expertise can further elevate the department's work in research, teaching, and extension.

Sincerely,

Sandeep Kumar

National Program Leader of Soil Health

Institute of Bioenergy, Climate and Environment

USDA National Institute of Food and Agriculture

Ph. +1 573-489-2262. Email: kaundal@gmail.com