

Strategic Faculty Recruitment Initiative in One Health – Intelligent Medicines – College of Health and Human Sciences

Purdue University Main Campus | Indianapolis and West Lafayette, IN

Tenure-Track/Tenured Faculty Positions at Assistant and Associate Ranks

As part of this strategic recruitment initiative, faculty are being recruited into the Department of Health and Kinesiology and the School of Health Sciences in the College of Health and Human Sciences. The Department of Health and Kinesiology (HK) seeks candidates with expertise in biomechanics, movement science, neuromuscular function, or related disciplines whose research advances Intelligent Medicine for musculoskeletal health and mobility. We are particularly interested in investigators who integrate advanced sensing technologies, artificial intelligence, computational modeling, and digital health approaches to understand human movement, develop digital biomarkers and digital twins, and create innovative solutions for the prevention, diagnosis, treatment, and rehabilitation of musculoskeletal or neurological conditions. Applications aimed at improving mobility, physical function, and personalized healthcare through data-driven and AI-enabled approaches are especially encouraged. The School of Health Sciences (HSCI) is a world leader in identifying mechanisms of disease, thereby discovering novel therapeutic targets. Applicants who can improve human, animal, and environmental health through the integration of technology, data, and systems thinking are most desired. Particularly desired are applicants who use image-guided methods (MRI, PET, CT, optical) to develop therapeutic applications (radiotherapy, immunotherapy, phototherapy), or study environmental health through the integration of technology, data, and systems thinking, with strong alignment towards intelligent medicine.

Purdue University invites applications for multiple tenured or tenure-track faculty positions as part of a multi-department strategic faculty recruitment initiative in Intelligent Medicines. This strategic recruitment will help advance Purdue's One Health initiative (<https://www.purdue.edu/onehealth/>) which seeks to tackle complex challenges with real-world impact at the intersection of human, animal, and plant health. This recruitment initiative builds on previous strategic faculty recruitment initiatives in: (1) Integrated Health; (2) AI-Driven Biomolecular Design, and (3) Advanced Chemistry. In addition, a parallel strategic faculty recruitment initiative in Healthy and Resilient Living Systems is ongoing. Through academic programs, research, facility infrastructure and industry partnerships, Purdue is making giant leaps in improving health outcomes for all living things and driving economic growth regionally and globally. This strategic faculty recruitment initiative focused on Intelligent Medicines is expected to build on prior recruitment initiatives and existing Purdue research and academic strengths, to transform research and impact human, animal and environmental health by bridging silos and fostering collaboration across disciplines.

The Intelligent Medicines theme seeks to create a framework that improves human, animal, and environmental health through the integration of technology, data, and systems thinking. This faculty recruitment initiative is disease agnostic and aims to

establish new capabilities in AI-enabled therapeutic development, non-animal models of disease, advanced manufacturing, intelligent health systems, digital twins, robotics, human factors, supply chain resilience, and health technology innovation. By combining strengths in device innovation, computational intelligence, manufacturing systems, and healthcare operations, Purdue intends to create a highly visible flagship that strengthens industry engagement, expands workforce development opportunities, and attracts significant external funding.

Faculty Responsibilities

- Establish a vigorous, externally funded research program
- Contribute to the education and mentoring of graduate and undergraduate students. Teach undergraduate and/or graduate level courses. Course modality is generally in person. The potential may exist for teaching online/distance courses during the academic year.
- Collaborate across disciplines to solve complex global one health challenges

Integration within the Purdue One Health Community

Collectively, the strategic faculty recruitment initiatives represent a forward-thinking investment in Purdue's research infrastructure and academic excellence. Faculty hired as part of these One Health strategic faculty recruitment initiatives will be supported as part of the overall One Health community. Together, these faculty members are expected to work across diverse disciplines, enhance Purdue's external funding potential, and drive innovation at the intersection of health, environment, food, and economics. In addition to joining an academic unit, faculty hired under this initiative will have the opportunity to join a vibrant ecosystem of interdisciplinary centers and institutes, that span the [hard tech corridor](#) between Indianapolis and West Lafayette including:

- Center for Aging and the Life Course (CALC)
- Purdue University Research Center in Economics (PURCE)
- Center for Rural and Migrant Health
- Center for Health Analytics and Therapeutic Intelligence
- Purdue Institute for Cancer Research (PICR)
- Purdue Center for Musculoskeletal Engineering
- Institute for Digital Forestry
- Institute for Digital and Advanced Agricultural Systems
- Institute for a Sustainable Future
- Indiana Water Resources Research Center

The integrated, cross-disciplinary nature of One Health is essential for addressing today's most urgent health challenges and ensuring Purdue's continued leadership in research, education, and community impact.

Qualifications

- A doctoral degree in Health and Kinesiology or from a discipline (Sports Medicine, Biomechanics, or Biomedical Engineering) that matched with the needed expertise; or a discipline relevant to this search within the School of Health sciences (e.g., Medical Physics, Toxicology, Biochemistry, Chemistry, Physics, Physiology), or related field
- A record of research excellence and productivity commensurate with rank
- Demonstrated potential or record of interdisciplinary collaboration and impactful scholarship
- Commitment to teaching and student mentorship

Application Process

To apply, please submit a cover letter, CV, research statement, teaching statement, and contact information for at least three references. Review of applications will begin on November 5, 2026, and continue until positions are filled. Applications should be submitted at: https://careers.purdue.edu/job/Professor-Assistant/44312-en_US/. A background check is required for employment in this position.

Purdue University is an equal opportunity/equal access university.