

**POSITION:** Assistant Professor of Agricultural and Biological Engineering in Synthetic Biology

**RESPONSIBILITIES:** This is an academic year, tenure track, research and teaching position. The successful candidate is expected to develop a nationally and internationally recognized program that elucidates and applies fundamental biological design principles at the molecular level to engineer living organisms and biological systems. Research may address structure, dynamics, and metabolism at the cellular, tissue, and organismal scale, and the control of products of the organism. Research activities may include system structures, dynamics and mechanisms that control the state of a cell, design of biomolecular products at the genetic level, and application of molecular and computational tools for design, assembly, characterization and engineering of whole genomes and complex systems at the cellular, tissue, and whole organism scales. Research efforts are expected to construct biological systems based on integration of molecular, cell, and systems biology, engineering design principles, and mathematical simulations that guide assembly of gene networks, enzyme metabolic pathways, and functioning cells or cellular components. Applications are expected in food, water, health, energy, bioproducts, environment, agriculture, and engineering. The successful candidate will demonstrate excellent potential to build an independent research program at the forefront of their field, as well as potential to educate and mentor students. The successful candidate will conduct original research, will advise graduate students, will teach undergraduate and graduate level courses in biological engineering, and will perform service both at the Department, College and University levels. Candidates with experience working with diverse groups of students, faculty, and staff and the ability to contribute to an inclusive climate are particularly encouraged to apply.

**QUALIFICATIONS:** Applicants must have a Ph.D. or equivalent doctoral level degree in Agricultural, Biological, Biomedical, Chemical or Biosystems Engineering or related field.

**THE COLLEGES:** The Department is part of the Colleges of Engineering and Agriculture at Purdue University that are deeply committed to the three land-grant missions (teaching, research, and extension), to international activities and perspectives that span all missions, and to supporting a diverse and inclusive environment focused on excellence. The College of Engineering is one of the world's leading colleges of engineering with undergraduate programs ranked #10 and graduate programs ranked number #8 by US News & World Report. The College of Agriculture is one of the world's leading colleges of agricultural, food, life, and natural resource sciences and ranked number 8 globally in the 2014 QS World University Rankings. The College of Engineering has 13 academic units, 408 faculty, 8020 undergraduate students, and 3100 graduate students. The College of Agriculture has 11 academic departments, 330 faculty, 2750 undergraduate students, and 685 graduate students. The Colleges' strategic plans can be accessed at <https://www2.ag.purdue.edu/Pages/strategicplan.aspx> and <https://engineering.purdue.edu/Engr/AboutUs/StrategicPlan/2009-2014>.

Purdue's main campus is located in West Lafayette Indiana, a welcoming and diverse community with a wide variety of cultural activities and events, industries, and excellent schools. Purdue and the College of Engineering have a [Concierge Program](#) to assist new faculty and their partners regarding dual career needs and facilitate their relocation. Purdue is an ADVANCE institution – [www.purdue.edu/dp/advance](http://www.purdue.edu/dp/advance).

**OPPORTUNITIES FOR COLLABORATION:** Numerous opportunities for collaborations throughout Purdue University exist. Collaborators will likely be found in Discovery Park (<http://www.purdue.edu/discoverypark>). The Purdue Moves Plant Science Initiative is a major investment in plant production and utilization that presents opportunities for collaboration (<https://ag.purdue.edu/Pages/PlantSciencesInitiative.aspx>).

**CLOSING DATE FOR APPLICATIONS:** Review of applications will begin October 15, 2014 and will continue until the position is filled.

**APPLICATION MATERIALS:** Submit applications online at <https://engineering.purdue.edu/Engr/AboutUS/Employment/Applications>, including curriculum vitae, teaching and research plans and names, addresses and phone numbers of three references. A background check is required for employment in this position.

**CONTACT:** Address inquiries to: Dr. Mike Ladisch, Search Committee Chair; Email: [abejob@ecn.purdue.edu](mailto:abejob@ecn.purdue.edu) or phone (765) 494-7022.

For additional information see <http://www.purdue.edu/ABE>

Purdue University is an EEO/AA employer fully committed to achieving a diverse workforce. All individuals, including minorities, women, individuals with disabilities, LGBTQ, and veterans are encouraged to apply.