New Biological Engineering Department Head Named at USU | College of Engineering

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News Release — LOGAN, UTAH, February 6, 2019 — Utah State University’s Department of Biological Engineering is under new leadership. Industry veteran and professor D. Keith Roper took the helm at the department at the beginning of the spring semester. Roper brings a wealth of experience and leadership to the position and says he’s eager to usher in exciting changes.

“Biological engineering at Utah State is at the frontier of discoveries and technological innovations in agriculture, bioprocessing and medicine,” says Roper. “Our researchers use biology, physics, math and chemistry to design materials, devices and processes that leverage photosynthesis, fermentation, immune response and other biological capabilities to improve crops, produce biochemicals and develop medical treatments. I look forward to supporting our department in these advances.”

Before joining USU, Roper held the Charles W. Oxford Chair of Emerging Technologies at the University of Arkansas in Fayetteville where he researched nanomaterials, taught chemical engineering and was associate director for the microelectronics/ photonics graduate program. He worked at the National Science Foundation as an engineering education program director and was a program leader of engineering research centers. He also researched bioengineering and taught chemical engineering at the University of Utah.

Roper began his career as an engineering associate and research fellow at Merck Research Laboratories where he developed vaccines and gene therapy. Later he developed an anti-cancer drug process with Frontier Scientific and was chief technology officer at Celux Scientific. He is a fellow of the American Institute for Medical and Biological Engineering and a councilor for the Institute of Biological Engineering. He has published 89 peer-reviewed research manuscripts and holds three U.S. patents. Roper is associate editor for Transactions on Nanotechnology published by IEEE — the Institute of Electrical and Electronics Engineers.

As head of the Biological Engineering Department, Roper will oversee the academic and research affairs of one of USU’s most active engineering programs. The department offers bachelor’s, master’s and PhD degrees and is home to eleven award-winning faculty members — many of whom are leading researchers in their respective fields. Roper will also serve as director of the NanoBio Photonics Laboratory at USU.

Roper has coalesced a partnership of land-grant institutions nationwide to apply cutting-edge science and engineering tools to address increasingly complex problems related to agricultural productivity. This activity supported a successful workshop last month at the Plant and Animal Genome Conference in San Diego. He and other collaborators from eight land-grant institutions discussed how new technologies can help growers and food producers address an array of issues affecting agriculture including water scarcity, disease, drought and the use of herbicides, insecticides and fertilizers.

USU’s biological engineering program is ranked No. 25 nationwide by U.S. News and World Report. Students and faculty study a range of topics in bioprocessing, bioenergy and biomedical engineering. Employers of USU’s biological engineering alumni include energy and chemical companies, equipment and systems manufacturers, pharmaceutical companies, national security and defense organizations and academic institutions.

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