



## Laurencin to present Kavli lecture during 2016 MRS Spring Meeting plenary session

Cato T. Laurencin of the University of Connecticut has been selected to present the Fred Kavli Distinguished Lectureship in Materials Science during the 2016 Materials Research Society (MRS) Spring Meeting to be held March 28–April 1 in Phoenix, Ariz. He is the Albert and Wilda Van Dusen Distinguished Endowed Professor of Orthopaedic Surgery, professor of Chemical and Biomolecular Engineering, professor of Materials Science and Engineering, and professor of Biomedical Engineering at the University of Connecticut.

Laurencin’s presentation is titled “Regenerative Engineering—Convergence Built upon Materials Science.” Regenerative engineering is defined as a convergence of advanced materials science, stem cell science,

physics, developmental biology, and clinical translation. Biomaterials play a centrally important role.

Work in the area of musculoskeletal tissue regeneration has focused on a number of biomaterial technologies. Polymeric nanofiber systems create the prospect for biomimetics that recapitulate connective tissue ultrastructure allowing for the design of biomechanically functional matrices, or next-generation matrices that create a niche for stem cell activity. Polymer and polymer-ceramic systems can be utilized for the regeneration of bone. Through the use of inducers, small molecules fostering induction, the design of regeneration-inducing materials can be realized. Hybrid matrices possessing micro- and nano-architecture can create advantageous systems for regeneration, while the use of classic principles of

materials science and engineering can lead to the development of three-dimensional systems suitable for functional regeneration of tissues of the knee.

Laurencin earned his BSE degree in chemical engineering from Princeton University and his MD degree from Harvard Medical School. He simultaneously earned his PhD degree in biochemical engineering/biotechnology from the Massachusetts Institute of Technology. Laurencin’s research focuses on regenerative engineering, biomaterials, nano-technology, drug delivery, and stem cell science. He received the PIONEER Award from the National Institutes of Health, and two Emerging Frontiers in Research and Innovation (EFRI) Awards from the National Science Foundation for his work in regenerative engineering. In 2012, *National Geographic Magazine* highlighted his work on regenerating tissues in its “100 Discoveries That Have Changed Our World” edition.

Laurencin is a Fellow of MRS, the American Chemical Society, and an International Fellow in Biomaterials Science and Engineering. He is a member of the editorial boards of 20 journals, and is the editor-in-chief of *Regenerative Engineering and Translational Medicine*.



## De Jonge, Ross, and Wang to receive MRS Innovation in Materials Characterization Award

Niels de Jonge, INM–Leibniz Institute for New Materials; Frances M. Ross, IBM T.J. Watson Research Center; and Chongmin Wang, Pacific Northwest National Laboratory are being honored with the Materials

Research Society (MRS) Innovation in Materials Characterization Award “for seminal contributions to the imaging of specimens in liquids using transmission electron microscopy, revolutionizing the direct observation of materials

processes, batteries during operation, and biological structures.” They will be presented with the award at the 2016 MRS Spring Meeting in Phoenix, Ariz. The award is endowed by Toh-Ming Lu and Gwo-Ching Wang.