



John T. McDevitt will become the Brown-Wiess Professor of Chemistry and Bioengineering in July 2009.

Renown UT microelectronics innovator joins Rice's bioengineering program
John McDevitt to leverage Rice's global health focus

Steward of the "integrated nano-bio-chip" technology [John T. McDevitt](#) will become the Brown-Wiess Professor of Chemistry and Bioengineering when he joins Rice University in July 2009.

McDevitt's miniature, cost-effective, battery-powered diagnostic devices have tremendous long-term potential for a variety of clinical, environmental, and humanitarian applications – especially in developing countries and remote regions where traditional laboratory measurements are not practical.

In 1996, McDevitt developed the concept for and launched a research program directed towards microchip-based technology suitable for the rapid analysis of complex fluids. His

basic science and dedication to translation of research prototypes established one of the largest patent portfolios in the history of the University of Texas (UT) at Austin. Two centers, the Beckman Center for Chemical Sensors and the Army Research Office MURI Center for Biological Sensors, were established at UT to support these efforts.

"Dr. McDevitt is a remarkable chemist and dynamic leader with the ability to push nanoparticle technologies toward a variety of real-world applications," said Jennifer West, chair of Rice's Department of Bioengineering. "His diagnostic systems are complementary with the work of several research focus areas in our program and will enhance Rice's research and education efforts in nanoscale science and global health technology."

Currently, McDevitt is a principal investigator for a large, multi-site clinical program sponsored by the National Institute of Dental and Craniofacial Research (NIDCR), part of the National Institutes of Health. The project targets the development and application of next-generation salivary diagnostic devices for oral and systemic diseases such as cardiac, stroke and cancer applications. His research at Rice uses nanometer-sized building blocks to develop extremely tiny sensors that may be described as "lab-on-a-chip" systems.

McDevitt's research has been supported by significant funding from the NIH, the Bill and Melinda Gates Foundation, the Welch Foundation, the Doris Duke Charitable Foundation, the NSF, the Office of Naval Research, and others. His work has been highlighted in more than 160 peer-reviewed manuscripts; has been featured in *Science*, *Business Week*, and *Popular Science* as the Best of What's New in the Medical Devices category; and on NIH Web sites. He has authored more than 150 patents and patent applications. These innovations were selected as part of the Science Coalition's Best Scientific Advances in 1998, and he has received a number of notable awards including the Presidential Young Investigator Award, and the Exxon Education Award.

In 2004, McDevitt co-founded LabNow in Austin, TX based on the CD4 microchip technology developed in his laboratories that provides simple, rapid, and affordable methods for counting white blood cells in HIV/AIDS patients. The immune function nano-bio-chip device has successfully completed human trials in Boston hospital settings and in an HIV reference laboratory in Botswana, Africa. McDevitt serves on advisory boards for LabNow and the NIH.

“Developing breakthrough technology platforms that solve global health inequities, will require new international approaches that merge appropriate science and technology, international education, and entrepreneurship,” said McDevitt. “This is an incredibly exciting time to be joining Rice and I'm looking forward to playing an active role in helping to shape future collaborations with the Biomedical Research Collaborative and Texas Medical Center.

McDevitt received a bachelor of science in Chemistry from California Polytechnic State University, San Luis Obispo, CA in 1982; earned a doctoral degree in Chemistry from Stanford University in Palo Alto, CA in 1987; and joined UT in 1989, after completing a postdoctoral fellowship at the University of North Carolina at Chapel Hill, NC.