

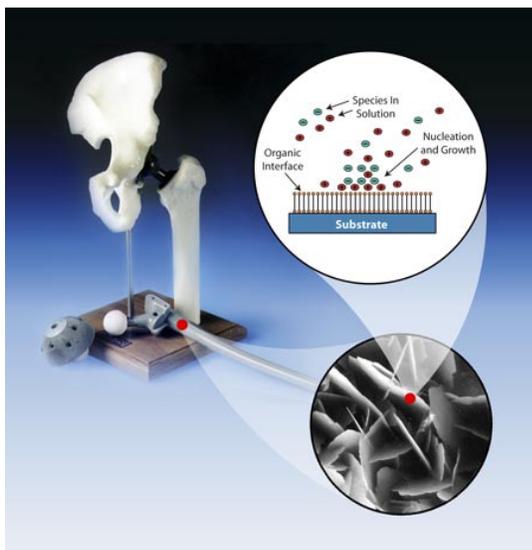
EMSL Director Honored by American Chemical Society

Allison Campbell, Director, has been selected by ACS to receive the 2005 Regional Industrial Innovation Award for her work in bioceramic coatings. Under Campbell's guidance, researchers at PNNL have developed a biomimetic process called surface-induced mineralization (SIM) that addresses the poor interfacial bonding between a metal implant and bone tissue in artificial joint implants, such as hip and knee replacement.

Each year, there are nearly 500,000 hip implants and 300,000 total knee replacement procedures done worldwide to help patients regain their mobility and quality of life. However, despite innovations in implant materials and design, the average useful implant lifetime remains only 10-20 years. Advances like SIM can eliminate the need for revision surgeries, saving patients a great deal of pain, risk, and expense.



Allison Campbell



Schematic of the surface induced mineralization (SIM) Process

Licensing of the technology was achieved between PNNL and Bacterin, Inc. in 2003 to move the technology from the laboratory and into industry application.

The [ACS Regional Industrial Innovation Awards](#) are given to individuals and teams “whose creative innovations have contributed to the commercial success of their company and, consequently, to the good of the community and society.”

Campbell will be recognized for this award at the ACS Northwest Regional Meeting in Fairbanks, Alaska in June, 2005.

For more information, contact [Kevin Kautzky](#) – (509) 376-9200.