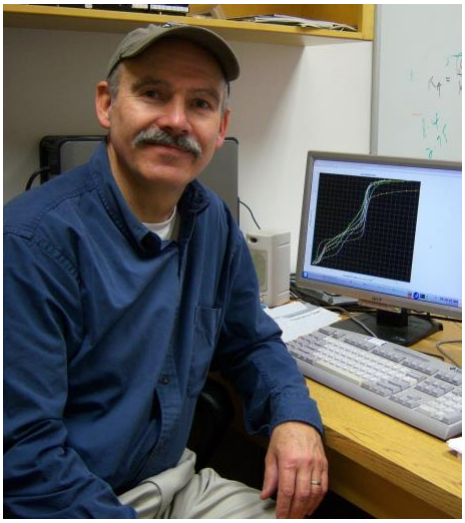
University of Lethbridge

News Release

For Immediate Release — Thursday, March 29, 2018

University of Lethbridge attracts world-leading research scientist through Canada 150 Research Chairs program

One of the world's leading biophysics scientists is coming to the University of Lethbridge as part of the Canada 150 Research Chairs program.



Dr. Borries Demeler, a world-renowned expert on analytical ultracentrifugation (AUC), is one of 25-plus scientists who will receive funding under the Canada 150 Research Chairs program. The Federal Government invested $117.6 million in Budget 2017 to this one-time program designed to attract the world's most talented researchers and scholars to Canada.

"It is a privilege to celebrate our new Canada 150 Research Chairs, whose contributions to research will help support a stronger economy and a growing middle class. Their arrival also represents a brain gain for our country; a country that is earning its reputation for being open, diverse and welcoming to the scientists and strivers of the world," says The Honourable Kristy Duncan, Minister of Science and Minister of Sport and Persons with Disabilities, who announced the latest group of Canada 150 Research Chairs at a morning reception in Ottawa.

Demeler, a professor in the Department of Biochemistry and Structural Biology at the University of Texas Health Science Center, San Antonio (UTHSCSA), will receive $350,000 per year for seven years to bring his sophisticated analytical lab to Lethbridge. The U of L is the first Alberta university to receive funding for a Canada 150 Research Chair, and Demeler will begin his contract with the University on Aug. 1, 2018.

"This truly promises to be one of the most impactful additions we've made to our faculty," says Dr. Erasmus Okine, the University's vice-president (research). "Scientists of his calibre are rarely available, and the opportunities his research program will create here at the U of L and for Canadian researchers in general are incredible. We're very

fortunate to be part of the Canada 150 Research Chairs program and are thrilled to welcome Dr. Demeler to southern Alberta."

Demeler's work is in the field of hydrodynamics, specifically focused on software and hardware developments in analytical ultracentrifugation and computational biophysics. The impact of his multidisciplinary research program is reflected in over 300 national and international research collaborations his group has engaged in over the past six years. He has led the development of advanced high-performance computing platforms involving parallel supercomputing and cloud-based Science Gateways, an infrastructure that is now implemented worldwide with servers in the United States, Germany, India and Australia. Moreover, his work is critical for the quality control and mechanistic studies of next-generation therapeutics for many diseases impacting the lives of Canadians.

"Simply put, he is one of the foremost leaders in developing tools that allow very accurate and robust studies of therapeutic proteins, antibodies and other molecules," says Dr. Trushar Patel, a researcher and professor in the U of L's Department of Chemistry & Biochemistry. "Researchers here who are studying molecules that are linked with diseases such as cancer and bacterial and viral infections are excited that Dr. Demeler is joining the U of L. His relocation to Lethbridge will strengthen our position in biophysical research on a global scale and foster collaborations resulting in high-impact publications and the training of next-generation researchers with highly sought-after techniques for the biopharmaceutical industry."

Moving his research lab to Canada is a homecoming of sorts for Demeler who, after moving to the U.S. from his native Germany as a teen, earned his Bachelor of Science from University of Montana in Missoula. He then moved to Oregon where he earned a PhD in biochemistry and biophysics at Oregon State University. He's spent the last 24 years at UTHSCSA.

"During my undergraduate time, I fell in love with Montana, especially the Rocky Mountain front, and built many lifelong friendships, in particular with members of the Montana Blackfeet tribe just across the border from Lethbridge," says Demeler. "I always longed to return to this part of the world and established a second home in Western Montana to enable frequent visits. The right professional opportunities never materialized to allow a permanent move back to this region – until now."

Demeler's passion for science outreach activities, working with minority populations and the interdisciplinary nature of his research program are particularly well aligned with the U of L mission.

"I believe in the importance of engaging students from a young age and I always found it very rewarding to recruit high school students from the San Antonio area for summer internships in my laboratory and open their minds to the world of biophysics,

hydrodynamics and computational sciences," he says. "I also hope to continue to be able to recruit students from minority pools, in particular from the local Blackfeet Nation, among whom I have many friends, stemming from my time at the University of Montana and while serving in the American Indian Science and Engineering Society."

His lab, known as the Center for Analytical Ultracentrifugation of Macromolecular Assemblies (CAUMA), will essentially establish a hydrodynamic research centre at the U of L, expanding this important method of research to new research groups throughout the country. He plans to set up a regional biophysics alliance with investigators at the University of Montana and share instrumentation, expertise and teaching between the two schools.

Demeler is also excited about the collaborative opportunities with on-campus groups such as the Alberta RNA Research and Training Institute (ARRTI), the Department of Physics and Astronomy and possibly the Canadian Centre for Behavioural Neuroscience (CCBN).

"I am intrigued by the possibilities of working at a liberal arts institution where an inclusive and progressive climate is encouraged," he says.

To view online: http://www.uleth.ca/unews/article/world-leading-research-scientist-recruited-through-canada-150-research-chairs-program

-- 30 --

Contact:

Trevor Kenney, News & Information Manager
403-329-2710
403-360-7639 (cell)
trevor.kenney@uleth.ca