

Researchers Form Nano Bond

Ingenuity Sparks Strategic Partnership with UAlberta Professors

September 16, 2014 Edmonton, Alberta – If two heads are better than one, three heads will no doubt be revolutionary. That is what University of Alberta professors [Carlo Montemagno](#), [Thomas Thundat](#) and [Gane Wong](#) are aiming for.

“The path to discovery lies beyond conventional thinking and the siloed approaches that have hampered our progress thus far,” says Ingenuity Lab Director, Carlo Montemagno, PhD. “By acknowledging the interconnectedness of our systems and facilitating better research integration and the cross pollination of ideas, we give ourselves, and society as a whole, a much better chance of success.”

Whether it is in the oil patch or in the operating room, these heavy hitters will be merging their expertise and research together in the areas of single cell genomics research in breast and prostate cancer and novel physical, chemical and biological detection using micro- and nano-mechanical sensors.

“The purpose of an accelerator is to bring the right people together at the right time,” explains Thundat. “In doing so, we leverage unique knowledge and expertise and significantly boost our ability to develop tangible solutions to the world’s most complex challenges.”

The 10-year provincially funded initiative was launched in November 2013 and is attracting the best and brightest minds from around the world. With a research agenda focused on the province's most pressing environmental, industrial and health challenges, Ingenuity Lab is a partnership with the University of Alberta and Alberta Innovates Technology Futures and is expected to reach over \$100M in funds leveraged from industry partners over the next decade.

“Our hope is that this partnership will help reduce the existing gap between research and development, and end user application,” says Wong. “For example, we have a unique opportunity to engineer and equip industries with next generation tools and resources that will far surpass those currently available.”

The dynamic partnership promises to facilitate deeper learning, critical thinking and enhance networking opportunities. It will also contribute to our province's competitive advantage by maximising the utility of local resources and channelling existing expertise towards shared goals.

“We are fortunate to have such a dynamic team of influential leaders in our midst,” says Dr. Lorne Babiuk, Vice President of Research at the University of Alberta. “These outstanding individuals have made remarkable progress in their fields and continue to champion leading-edge research, teaching, and learning across our campus and beyond.”

Carlo Montemagno, PhD, is the Director of Ingenuity Lab, Professor in the Department of Chemical and Materials Engineering at the University of Alberta, AITF Strategic Chair of Bionanotechnology, Canada Research Chair in Intelligent Nanosystems and Program Lead of Biomaterials at the National Institute for Nanotechnology (NINT), and is a world-renowned expert in nanotechnology and is responsible for creating groundbreaking innovations in the areas of informatics, agriculture, chemical refining, transportation, energy, and healthcare. He is Canada Research Chair in Intelligent Nanosystems; named a Bill & Melinda Gates Grand Challenge Winner; and has been recognized with many other prestigious awards including the Feynman Prize; the Earth Award Grand Prize; and the CNBC Business Top 10 Green Innovator award.

Thomas Thundat, PhD, Professor in the Department of Chemical and Materials Engineering at the University of Alberta, has a wealth of experience in novel physical, chemical and biological detection using micro- and nano- mechanical sensors. His research is contributing to the development of sustainable techniques for oil sands recovery and he currently serves as Canada Excellence Research Chair (CERC) in Oil Sands Molecule Engineering. Thundat is one of just 26 professors across Canada holding CERC honours and has authored over 285 publications in refereed journals, 48 book chapters, and has more than 30 patents to his credit.

Gane Wong, PhD, holds joint appointments in the Department of Biological Sciences and the Department of Medicine at the University of Alberta, and is the Alberta Innovates Technology Futures/AITF Strategic Chair in Biosystems Informatics. He specializes in genomics and bioinformatics and is best known for starting the world's largest DNA sequencing organization in 1999. Based in China, BGI-Shenzhen has grown to include more than 5000 people to date and is poised to expand even further. Wong has an impressive portfolio of collaborators around the globe and wealth of experience in agriculture, neuroscience, infectious disease, and cancer research.

For more information or to arrange an interview please contact:

Alana Yim
Communications Director
Ingenuity Lab
P: 780-498-0870
E: alana.yim@ingenuitylab.ca
www.ingenuitylab.ca