THE EXPERIMENTAL SURGERY PROGRAM offers graduate programs leading to M.Sc. and Ph.D. degrees. The program allows excellent opportunities for training under the supervision of professors located in the research institutes of the various McGill teaching hospitals. A broad range of research topics are covered from repair and generation to cancer cell biology and sexual dysfunction. Specific research interests include studies of wound healing and scarring, tissue engineering, signal transduction, cartilage repair and osteoarthritis, islet cell differentiation and islet transplantation, cardiac muscle repair and regeneration, immunopathogenesis of liver xenograft rejection, osteoinduction and biomechanics, sepsis and multi-organ failure, biology of cancer, sexual dysfunction, prostate cancer, and surgical health outcomes.

EXPERIMENTAL SURGERY GRADUATE STUDENT SOCIETY (ESGSS)

The student society was created in 2012 and serves to:

- Provide a social forum in which students can interact
- Provide services and organize events to enhance the overall academic and social experience within the Experimental Surgery Graduate Program

Contact us at esgss.pgss@mail.mcgill.ca

SPECIAL THANKS TO

Department of Surgery
Experimental Surgery Graduate Program
Post-Graduate Student Society

www.mcgill.ca/experimentalsurgery

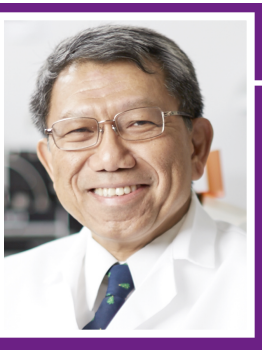
ANNUAL EXPERIMENTAL SURGERY GRADUATE PROGRAM RESEARCH DAY

Experimental Surgery
Department of Surgery
McGill University

DR. ROCKY S. TUAN

Distinguished Professor
Director, Centre for Cellular and Molecular Engineering
Arthur J. Rooney, Sr. Chair Professor of Sports Medicine
Executive Vice Chairman, Department of Orthopaedic Surgery
Associate Director, McGowan Institute for Regenerative Medicine
Director, Centre for Military Medicine Research
Professor, Departments of Bioengineering and Mechanical Engineering & Materials Science
University of Pittsburgh, Pittsburgh, Pennsylvania

Thursday, February 2nd, 2017
Thomson House, 3650 McTavish, Montreal



ROCKY S. TUAN PhD

Distinguished Professor
Director, Centre for Cellular and Molecular Engineering
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Professor, Departments of Bioengineering and Mechanical Engineering & Materials Science
University of Pittsburgh, Pittsburgh, Pennsylvania

ROCKY S. TUAN, PHD, received his PhD in 1977 from the Rockefeller University in New York, under the mentorship of Zanvil A. Cohn, MD. His postdoctoral research fellowship was at Harvard Medical School in Boston, first with Melvin J. Glimcher, MD in the Department of Orthopaedic Surgery at the Children's Hospital, and then from 1978 to 1980 with Jerome Gross, MD, in the Developmental Biology Laboratory at the Massachusetts General Hospital. In 1980, Dr. Tuan was appointed as Assistant Professor in the Department of Biology, University of Pennsylvania in Philadelphia, and was promoted to Associate Professor in 1986. In 1988, Dr. Tuan joined Thomas Jefferson University, Philadelphia, to be the Director of Orthopaedic Research and Professor and Vice Chairman in the Department of Orthopaedic Surgery with a joint appointment in the Department of Biochemistry and Molecular Biology. From 1992-1995, Dr. Tuan was the Academic Director of the MD/PhD program at Jefferson, and in 1997, he established the nation's first Cell and Tissue Engineering PhD program at Jefferson, with the mission of training the next generation of "cross-cultural" biomedical scientists committed to regenerative medicine and the development of functional tissue substitutes. In the fall of 2001, Dr. Tuan joined the Intramural Research Program of the National Institute of Arthritis, and Musculoskeletal and Skin Diseases (NIAMS), National Institutes of Health (NIH), as Chief of the newly created Cartilage Biology and Orthopaedics Branch. In 2004, Dr. Tuan received the Marshall Urist Award for Excellence in Tissue Regeneration Research of the Orthopaedic Research Society. In the Fall of 2009, Dr. Tuan was recruited by the University of Pittsburgh School of Medicine to be the Founding Director of the Center for Cellular and Molecular Engineering, and as Arthur J. Rooney, Sr Chair Professor and Executive Vice Chairman of the Department of Orthopaedic Surgery, with a joint appointment as Professor in the Department of Bioengineering. Dr. Tuan is currently Co-Director of the Armed Forces Institute of Regenerative Medicine, a U.S. Department of Defense funded, national, multi-institutional consortium focused on developing translational regenerative therapies for battlefield injuries. Two recent appointments include (1) Associate Director of the McGowan Institute for Regenerative Medicine, and (2) Founding Director of the Center for Military Medicine, both at the University of Pittsburgh. At the University of Pittsburgh, he was appointed Distinguished Professor of Orthopaedic Surgery in 2014, and received the Chancellor's Distinguished Research Award in 2015. Dr. Tuan has published over 450 research papers, has lectured extensively, and is currently Editor of the developmental biology journal, BDRC: EMBRYO TODAY, and Founding Editor of STEM CELL RESEARCH AND THERAPY.

Dr. Tuan directs a multidisciplinary research program, which focuses on orthopaedic research as a study of the biological activities that are important for the development, growth, function, and health of musculoskeletal tissues, and the translation of this knowledge to develop technologies that will regenerate and/or restore function to diseased and damaged skeletal tissues, particularly related to trauma and injuries. Ongoing research projects are directed towards multiple aspects of skeletal and related biology, including skeletal development, stem cells, growth factor signaling, bone-biomaterial interaction, extracellular matrix and cell-matrix interaction, nanotechnology, biomaterials, 3D printing, mechanobiology, regenerative medicine, and tissue engineering, utilizing an integrated experimental approach combining contemporary technologies of biochemistry, cell and molecular biology, embryology and development, cellular imaging, and engineering.

EVENT PROGRAM

Thursday, February 2, 2017
Thomson House - Ballroom

8:00 - 8:30	Breakfast

SESSION 1

8:30 - 9:00	Welcome, Opening Remarks
9:00 - 10:00	Invited Speaker - Dr. Rocky S. Tuan, PhD *APPLICATION OF ADULT STEM CELLS AND 3D BIOMIMETIC SCAFFOLDS FOR SKELETAL TISSUE ENGINEERING AND REGENERATION*
10:00 - 10:15	Coffee Break

SESSION 2

10:15 - 11:00	Research Presentations (Oral)
11:15 - 11:50	Research Presentations (Quick Shot Talks)
12:00 - 13:15	Lunch

SESSION 3

13:15 - 14:00	Research Presentations (Oral)
14:10 - 14:45	Research Presentations (Quick Shot Talks)
14:45 - 15:00	Coffee Break

SESSION 4

15:00 - 15:30	Research Presentations (Quick Shot Talks)
15:40 - 16:00	Closing Remarks
16:30 - 18:30	Meet the Mentor (Basement Lounge) Topics: - How to be a successful Graduate Student - Innovation, IP Protection, & Commercialization - Writing a Successful Academic CV - How to Get Published - Balancing the Clinic Practice and Research - Exploring Careers: Academic and Non-Academic Careers

AWARDS DINNER

18:30	Dinner & Awards Ceremony Thomson House, Ballroom, 3650 McTavish

All students, post-doctoral fellows, faculty and research staff of the Department of Experimental Surgery are cordially invited