



**SHARPMINDS SKILLED HANDS**

**Department of Surgery**

**38<sup>th</sup> Gallie Day**

**Friday May 4, 2012**

**Gallie-Bateman & McMurrich**

**Research Presentations**

**MaRS Centre South Tower**

**Lower Concourse, 101 College Street**

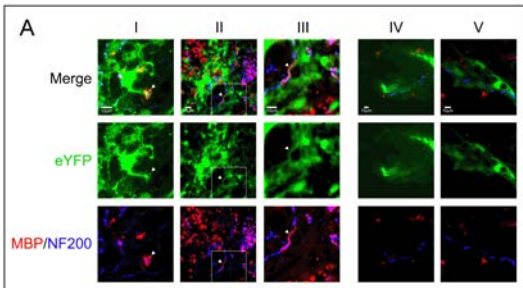
**Gordon Murray Lecturer**

**Pr Philippe Menasché**

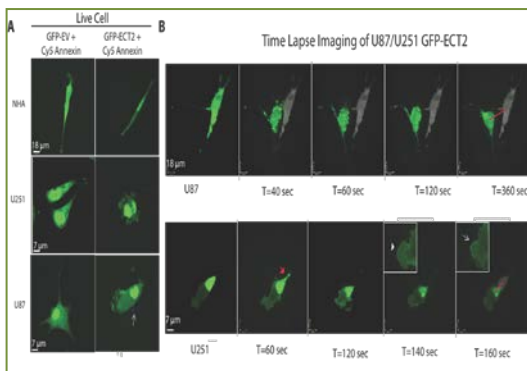
**Unité de Chirurgie Cardiaque**

**Hôpital Européen Georges Pompidou**

**Paris, France**



**Hawryluk et al:** (A) I-III demonstrate injured spinal cord tissue transplanted with wild-type neural precursor cells (NPCs) while IV-V demonstrate tissue transplanted with *shiverer* NPCs unable to make myelin basic protein (MBP). III is a subset of II shown at higher power, as denoted by the white box. For I-III white arrows demonstrate sites suggestive of remyelination by transplanted cells. IV and V demonstrate that *shiverer* NPCs also closely approximate axons but that these axons are devoid of MBP staining, though MBP staining is seen elsewhere in the images. This suggests that *shiverer* NPCs might block remyelination by endogenous cells.



**Weeks et al:** Ectopic expression of GFP-ECT2 results in MAT. **A.** Live-cell imaging of NHA and astrocytoma cells transfected with GFP-ECT2 or GFP-EV and treated with annexin-V. Ectopic expression of GFP-ECT2 was sufficient to induce cytoplasmic localization in NHAs, however the morphology of NHA GFP-ECT2 cells remained unchanged, similar to GFP-EV controls. Expression of GFP-ECT2 in U87 and U251 astrocytoma cell lines resulted in cell rounding, cortical instability and bleb formation compared to GFP-EV. White arrow demarks annexin-V debris (dark blue), however cells remained negative for annexin-V. **B.** Time-lapse-imaging of U87 (upper) and U251 (lower) cells transfected with GFP-ECT2 resulted in an amoeboid migration pattern. Gray overlay image represents original cell location at T=0 and the red line represents total distance travelled over time-lapse sequence. In U251 cells expressing GFP-ECT2, ECT2 expression was noted at the trailing edge (T=60, red arrow), and within the sites of bleb retraction (inset of T=160, white arrow) but not in the expanding bleb (inset of T=140, white arrowhead).

**Friday May 4, 2012 MaRS Centre, Lower Concourse**  
**7:30 a.m. Continental Breakfast and Registration**

**7:45 Poster Setup – Collaboration Centre Main Concourse**  
**Session Committee: Val Cabral and Andrea McCart**

**8:00 Opening Remarks - Auditorium**

**Dr. James T. Rutka, R.S. McLaughlin Professor and Chair**  
**Dr. Benjamin A. Alman, Vice Chair Research**

**Gallie-Bateman and McMurrich Research Presentations**  
**Session Chair: Thomas Lindsay**

**8:15 Julia Izrailit: "TRB3 regulates MAPK- and SMAD-dependant Notch activation in breast cancer"** (Supervisor: Michael Reedijk)

**8:30 Carlo Santaguida (SSP): "The role of TRPM7 channels in traumatic brain injury"** (Supervisor: Michael Tymianski)

**8:45 Uswa Shahzad: "Transmyocardial revascularization induces mesenchymal stem cell engraftment in ischemic hearts"** (Supervisor: Terrence Yau)

**9:00 Nathan Perlis (SSP): "Radical cystectomy with perioperative chemotherapy vs. selective bladder preservation with radiation therapy for muscle-invasive bladder cancer: A decision analysis"** (Supervisor: Antonio Finelli)

**9:15 David Shih: "Genomic copy-number profiling identifies actionable targets in medulloblastoma subgroups"** (Supervisor: Michael D. Taylor)

**9:30 Poster Judging – MaRS Centre Café & CR2 – Main Concourse**

**10:30 SYMPOSIUM: "Building Better Bodies: Regeneration and Tissue Engineering and Surgery"**

**Chair: Benjamin A. Alman, A.J. Latner Professor, Vice Chair Research**

• **Abdallah Daar**, Chief Science & Ethics Officer, Grand Challenges Canada; Professor of Public Health Sciences and of Surgery, U of T  
**"Grand challenges and regenerative medicine"**

• **Rita Kandel**, Chief, Dept of Pathology & Laboratory Medicine, Mount Sinai Hospital; Professor, Laboratory Medicine and Pathobiology, U of T

**"Biological joint repair: From therapeutics to joint replacement"**

• **Michael Sefton**, University Professor, IBBME, Michael E. Charles Professor, Dept of Chemical Engineering & Applied Chemistry, U of T  
**"Vascularization of tissue constructs"**

• **Thomas Waddell**, Pearson-Ginsberg Chair, Division of Thoracic Surgery, Thomson Family Chair in Translational Research, Dept of Surgery, U of T

**"Regenerative medicine approaches for lung and airway diseases"**

**12:00 pm Lunch and Poster Viewing**

**1:05 GORDON MURRAY LECTURE: "Stem cells for the treatment of heart failure: What is still missing for a prime time use?"**

**Pr Philippe Menasché**, Unité de Chirurgie Cardiaque  
**Hôpital Européen Georges Pompidou, Paris, France**

**2:05 Poster Judging – MaRS Centre Café & CR2 – Main Concourse**

**Gallie-Bateman and McMurrich Research Presentations**  
**Session Chair: Donna McRitchie**

**3:05 Boris Zevin (SSP): "An evidence-based framework for the design, validation and implementation of a simulation based surgical training curriculum"** (Supervisor: Teodor Grantcharov)

**3:20 Atiqa Malik: "Recurrence of inguinal hernia in general and hernia specialty hospitals in Ontario, Canada"** (Supervisor: David Urbach)

**3:35 Francis Zih (SSP): "Polo-like kinase 4 enhances cancer cell motility and invasion"** (Supervisor: Carol Swallow)

**3:50 Claudia Faria: "Targeting the cMET pathway to treat medulloblastoma - towards a personalized therapy in pediatric brain cancer"** (Supervisor: James Rutka)

**4:05 Jonathan Yeung (SSP): "Ex vivo lung perfusion for evaluation and repair of donor lungs for transplantation"** (Supervisor: Shaf Keshavjee)

**4:20 Closing remarks: James T. Rutka, Benjamin A. Alman**

**Friday May 4, 2012 - Fairmont Royal York Hotel, Imperial Room**  
**Reception – 7 pm ^ Dinner & Awards Ceremony – 8 pm**  
**100 Front Street West - Admission \$125 per person**  
**[surgery.admin@utoronto.ca](mailto:surgery.admin@utoronto.ca) or 416-978-2623**

\*\* GD is an accredited group learning activity as defined by the Maintenance of Certification Program of The Royal College of Physicians & Surgeons of Canada



**Surgery**  
**UNIVERSITY OF TORONTO**