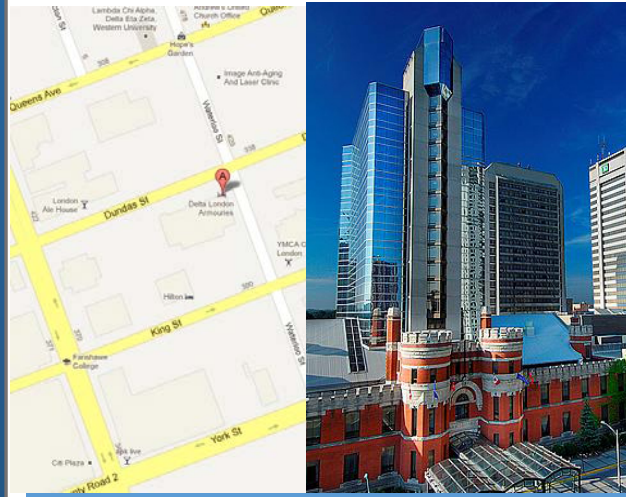


Program
Connective Tissue
Society
20th
Conference

CCTC 2014



Canadian Connective Tissue Society
20th Annual Scientific Conference, London, Ontario, Canada
Delta Armouries Hotel
June 8-10, 2014

Sunday, June 8

5:30-7:30 pm Registration, Delta Armouries Hotel
7:30-10:00 pm Social Event at Milos' Craft Beer Emporium, 420 Talbot
*Sponsored by International CCN Society and
Department of Dentistry, University of Western Ontario*

Monday, June 9

8:00-12:00 pm Registration, Delta Armouries Hotel
8:00-8:30 am Coffee available
8:30- 9:00 am Welcoming Remarks

Session 1: Connective Tissue Remodeling #1 (9:00 am-12:00 pm)

Session chairs Carl Richards and Priya Patel

9:00-9:30 am *Invited Speaker: Jeff Davidson* (Nashville, USA)

9:30-10:30 am Dominique Behrends (McGill)
Defective bone repair in mast cell deficient mice with c-Kit loss of function

Christina Raykha (Western)
Identification of β -catenin gene targets by ChIP Sequencing in Dupuytren's Disease

Gurpreet S Baht (Toronto)
Rejuvenating Fracture Repair

Shabana Amanda Ali (Toronto)
Cholesterol homeostasis mediates Hedgehog signaling in chondrocytes and osteoarthritis

10:30-11:00 am 'Fruit-tastic' Coffee Break and poster viewing

11:00-12:30 pm Kelly Gutpell (Western)
Non-invasive assessment of therapeutic approaches in a murine model of Duchenne muscular dystrophy

Erik Holm (Western)
Delineating the role of bone sialoprotein in bone development and mineralization

Luciene Lacroix (Toronto)
Osteoclasts from osteopetrotic Tc1rg1R740S mice have impaired autophagy and increased mTORC1 activity

Anusha Ratneswaran (Western)
PPARdelta promotes the progression of secondary osteoarthritis

H Mohammadi (Toronto)
Impact of inelastic behavior of collagen gels on cell mechanosensation

Pascal Morissette Martin (Laval)

Tissue-engineered biological dressings for skin wound healing in a murine model of splinted full-thickness defects

12:30-2:00 pm

Lunch and poster session #1

Canadian Connective Tissue Society meeting

Session 2: The extracellular matrix in connective tissue pathology (2:00-3:30 pm)

Session Chairs: Bruce Riser and Justin Crawford

2:00-2:30 pm

*Invited Speaker: **Bruce Riser** (Chicago, USA)*

2:30-3:00 pm

*Invited Speaker: **Deiter Reinhardt** (Montreal, Canada)*

3:00-3:30 pm

Dirk Hubmacher (Cleveland Clinic)

*Limb-specific deletion of *Adamtsl2* in mice leads to brachydactyly and joint malformations: A model system for human acromelic dysplasias*

Matthew Riopel (Western)

Conditional $\beta 1$ integrin-deficient mice display impaired pancreatic function and architecture

3:30-4:00 pm

'Energy' Coffee Break

Session 3: Biomechanics, Mechanobiology and Biomaterials (4:00-6:00 pm)

Session Chairs: Boris Hinz and Shauna Kim

4:00-4:30 pm

*Invited Speaker: **Jim Johnson** (London, Canada)*

4:30-6:00 pm

A.L. Ménard (Montreal)

Bone growth is still active following removal of static compression on the growth plates

Kevin Middleton (Toronto)

Development of a Microfluidic System to Investigate Bone Cell Signaling

Rosa Kaviani (Montreal)

Effects of Type, Magnitude and Frequency of in vitro Compression on the Viability of Growth Plate Chondrocytes

Benjamin Wheal (Western)

Subcellular calcium signalling encodes directional preference during osteoclast migration

Yohannes Soenjaya (Western)

*Characterization of the Bone Sialoprotein Null (*Bsp*^{-/-}) Mice Mandibular Phenotype: The Influence of Mechanical Force in Inducing Mandibular Defects*

Chao Liu (Toronto)

Mechanical Regulation of Osteocyte Responses to Microdamage in vitro

7:30 PM Gala Dinner Delta Armouries
(Invited speaker Robin Poole)
Sponsored by IDI In Bone and Joint Health
at the University of Western Ontario

Tuesday, June 10

Session 4: Bone, cartilage and tooth development (8:30 am-12:00 pm)

Session Chairs Marc Grynepas and Kelly Gutpell

8:00-8:30 Coffee available

8:30-9:00 am *Invited Speaker: **Michael Kelley** (Durham, USA)*

9:00-10:30 am Daniel Lorusso (Western)
A microfluidic chamber for live cell imaging during fluid shear

Emerson Krock (McGill)
Painful degenerating intervertebral discs induce neuroplasticity by actively releasing nociceptive factors

Jake Bedore (Western)
Assessing the effect of notochord-specific CCN2 deletion on intervertebral disc degeneration and behaviour associated with back pain

Bashar Alkhatib (McGill)
Acute mechanical injury to the human intervertebral disc initiates events implicated in disc degeneration

Chan Gao (McGill)
Parathyroid hormone-related peptide (PTHrP) pellet as a preventative treatment for scoliosis

Karina Zeyer (McGill)
The RGD cell binding site in fibrillin-1 regulates miRNA expression

10:30-11:00 am 'Fruit-tastic' Coffee Break and poster viewing

11:00-12:30 pm Jelena Djokic (McGill)
Heparin/heparan sulfate controls fibrillin-1, -2 and -3 self-interactions in microfibril assembly

Amani Hassan (Montreal)
Estrogen receptor status and transcriptome profiling of genes regulated by 17-beta estradiol in human osteoblasts derived from idiopathic scoliosis patients

Sally Hu (Toronto)
Investigating effects of novel conjugate drugs for the treatment of osteoporosis

Iris Boraschi (McGill)
Interactions of osteoclasts with collagen type I

Heena Kumra (McGill)
The role of fibronectin as a master organizer of tissue in vivo

Nguyen Hong Phuc Pham (McGill)
Mouse fibrillins are differently organized in microfibrils compared to human fibrillins

12:30-2:00 pm Lunch and Poster session #2

Session 5: Connective tissue remodelling #2 (2:00pm-4:30 pm)

Session Chairs Sunil Parapuram and Gurpreet Baht

2:00- 2:30 pm *Invited Speaker: Lina Dagnino* (London, Canada)

2:30-3:15 pm N. Talele (Toronto)
Expression of α -SMA governs the stemness and fibrotic fate of mesenchymal stromal cells.

Haoran Li (Toronto)
Nanoparticle conjugated anti-microRNA-378a enhances angiogenesis and wound healing in a murine model

Matthew McCann (Western)
Whole body vibration results in degeneration of the intervertebral disc and knee joint in a mouse model: is fibrocartilage the culprit?

3:15-4:00 pm **Closing remarks**
Oral presentation and poster awards
Sponsored by Springer and Biomed Central