



**Canadian Biomaterials Society**  
**Soci t  Canadienne des Biomat riaux**

**Quarterly Newsletter**

**Spring 2015**



### **Letter from the President**

Dear Colleagues,

Summer is around the corner and so is our Annual Meeting in Toronto, May 27-30! We would like to congratulate our student travel award winners, and we look forward to hearing more about their projects! Please note that our Annual General Meeting will take place at the conference site on Thursday, May 28<sup>th</sup>. We hope to see you there to discuss the future of our Society. In this regard, you will soon receive an e-mail from the Society regarding the upcoming elections of Board members. So, please keep an eye on your messages! More information about the Annual Meeting can be found below and on the CBS website.

Students have been traditionally the focus of our Society, and this past year marked the creation of two additional Student Chapters (Ottawa and Quebec City). The annual activities of the Chapters are summarized in this newsletter. In addition, we would like to remind Ph.D. students about the CBS Visiting Scholar Award, giving the most promising young scientists the opportunity to visit another university / lab during their studies. Please check below and on the CBS website for more information.

Finally, please note that the abstract submission for the World Biomaterials Congress 2016 (WBC2016) is now open, and the New Frontier Symposia have been announced. Please check the WBC2016 website for more information.

All the best,

Isabelle Catelas

**We hope to see you at the Annual Meeting of the Canadian Biomaterials Society held on the University of Toronto campus, May 27-30, 2015!**

Join us in Toronto for the 2015 Canadian Biomaterials Society Annual Meeting, May 27-30, 2015 on the campus of the University of Toronto! This year's theme is "*Next Generation Biomaterials*".



Follow this link to register:

<http://biomaterials.ca/#!/conference/register>

Information about accommodations can be found at:

<http://biomaterials.ca/#!/conference/2015/accommodations>

The program at glance is now available online:

<http://biomaterials.ca/attachments/CBS2015ProgramataGlance.pdf>

The technical program can be found at:

<http://biomaterials.ca/attachments/CBS2015Program.pdf>

### **Travel Award Winners for 32<sup>nd</sup> Annual Meeting of the Canadian Biomaterials Society**

Congratulations to the student Travel Award winners for CBS 2015 in Toronto! Join us in Toronto to hear more about these award-winning projects.

**Kyle Battiston** (University of Toronto)

*Macrophage effects on in vitro tissue regeneration when in co-culture with vascular smooth muscle cells on a degradable polyurethane under biomechanical strain*

**Yasaman Delaviz** (University of Toronto)

*Synthesis of Ciprofloxacin Releasing Di-Vinyl Monomer for Dental Adhesive Systems*

**Ludivine Hugoni** (University of Toronto)  
*Fibronectin adsorption on surface modified polyetherurethanes for blood-contacting applications*

**Ghulam Jalani** (McGill University)  
*Lanthanide-doped upconversion nanoparticles: non-invasive trackers for real-time hydrogel degradation monitoring in-vivo*

**Mathieu Maisani** (Laval University)  
*Hybrid hydrogel as a microenvironment for tissue engineering: A new matrix for bone regeneration*

**Arash Momeni** (Dalhousie University)  
*Polyphosphate Coacervates as Hemostatic Agents*

**Vanessa Montano-Machado** (Laval University)  
*Comparative Study on Adsorbed and Grafted Fibronectin Coatings on Fluorocarbon Surfaces for Cardiovascular Applications*

**Zeina Salloum** (University of Ottawa)  
*HIF-1 $\alpha$  Expression and Oxidative Damage in RAW264.7 Murine Macrophages Exposed to Cobalt and Chromium Ions*

**Qiong Wang** (University of British Columbia)  
*New insights into the corrosion products from modular total hip implants*

**Fei Xu** (McMaster University)  
*Direct Electrospinning of Degradable Hydrogel Nanofibres*

**Stuart Young** (Queen's University)  
*Design and evaluation of a polymer hydrogel scaffold for the delivery of adipose-derived stem cells for the treatment of peripheral arterial disease*

**Claire Yu** (Queen's University)  
*Tissue-specific Microcarriers for Adipose-derived Stem Cell Expansion and Delivery*

## Student Wanted!

The Canadian Biomaterials Society is looking for a motivated student to interview senior members of the society to put together a history page for our society in time for the World Biomaterials Congress in 2016. If interested, please contact Isabelle Catelas ([icatelas@uottawa.ca](mailto:icatelas@uottawa.ca)).

## Update from the Student Chapters

### Alberta Student Chapter (from Juliana Valencia Serna)

The CBS-Alberta Student Chapter has continued to be present at the University of Alberta by organizing different events throughout the 2014-2015 year. This year, we had the great opportunity of having two renowned professors at the University of Alberta as speakers for our academic talks. In November 2014, our resident biomaterial expert, Dr. Ravin Narain, shared with us the role and particular interest of glycol-polymers and glycol-structures in biomedical applications. In January of 2015, a world-renowned expert in nanotechnology, Dr. Carlo Montemagno, shared the latest breakthroughs from Ingenuity Lab that include the creation of nanomaterials inspired in nature that can influence human health. To fulfill our goal to raise enough funds to make our events possible, we did our first samosa and spring roll sale at two concurrent places on campus in October 2014. Besides our monthly executive meetings, we held a CBS-ASC general meeting in February 2015, to which all CBS-ASC members were invited to get to know the current executive members and also to awaken interest in getting more involved with the Society. We are excited to continue growing biomaterials awareness in our area next year!



### BC Student Chapter (from Felipe Eltit Guersetti)

The BC Student Chapter recently elected their new Executive Committee and is in the planning stages for a series of upcoming events including a Biomaterials Seminar to be held on UBC campus in October 2015.

### Montreal Student Chapter (from Antony Bertrand-Grenier)

The student chapter of Montréal organized small conferences with invited professors from different universities every two months and promoted CBS and WBC2016. Also, we would like to organize a bigger event involving the GRSTB group of researchers. Finally, the student chapter of Montréal will take part of the organization of the WBC 2016 (scientific forum, universities visits, rally, airport guiding, volunteers, and etc.).

### Ottawa Student Chapter (from Ava Parsian)

Established in September 2014, the Ottawa Student Chapter of the CBS has been successfully fulfilling its mandate by connecting the biomaterials laboratories within the University of Ottawa, Carleton University, and the University of Ottawa Heart Institute. The fall semester of 2014 marked the launch of two inaugural events, which took place at the University of Ottawa and the Carleton University campuses. The goal was to introduce the chapter to students at both campuses and also to provide an informative overview of the biomaterials research by Dr. Fabio Variola (University of Ottawa) and Dr. Maria DeRosa (Carleton University) to undergraduate and graduate students interested in the field. On April 29<sup>th</sup>, 2015 a luncheon was held at the University of Ottawa during which Ottawa experts in the field of biomaterials presented their research as part of the event under the theme "Application of Biomaterials in Medicine". This event assembled undergraduate and graduate students as well as faculty members, fostered the dissemination of knowledge, and created a meet-and-greet atmosphere for networking. The Board of Executives of the Ottawa Student Chapter will continue to promote the CBS and biomaterials research within Ottawa, leading up to the World Biomaterials Congress in 2016 and beyond.



### Quebec City Student Chapter (from Vanessa Montano Machado)

The creation of the Canadian Biomaterials Society, Quebec City Student Chapter (CBS-QCSC) was officially approved on September 2014 and a launch event was organized at CHU de Quebec Research Center in November. Nevertheless, since May 2014 the committee was already formed and started to organize events as a non-official student association. During the last year we organized around 12 conferences and workshops, featuring professors and physicians of different Universities from different countries, starting with invited professors from Canada, mainly from Laval and McGill Universities. From France, we received professors from the Universities of Bordeaux, Cergy-Pontoise, Paris 13 and Strasbourg; from Italy, Politecnico di Milano and Piemonte Orientale University. We also had the opportunity to welcome professors from Namur University in Belgium and São Paulo State University in Brazil. Besides the conferences given by professors that focused on research, we also organized a workshop about the process of scientific publishing given by expert librarians. Moreover, we also had an invitee from Cytograft, Tissue Engineering from the United States, who spoke about the current applications in industry of biomaterials research as well as the job opportunities for young researchers. Finally, on May 21<sup>st</sup>, we will close the year with our annual meeting with an invited professor from Italy to start the event with a conference, followed by presentations of students and post-docs. At the end of the day, it will be the moment to vote for the new committee and present the activities of next year.



### CBS Visiting Scholar Award

The Canadian Biomaterials Society is providing a Visiting Scholar Award to give to the most promising young scientists the opportunity to visit another university / lab with common research interests and stimulate their interest to pursuit their career in the

field of biomaterials. The award also intends to foster collaborations as well as exchange of technologies and ideas between Canadian universities in the field of Biomaterials.

### Who is Eligible for the Award?

The award is opened to Ph.D. students in their 2<sup>nd</sup> year and above, working in the field of Biomaterials. The student must fulfill the two conditions given below to be considered for an award:

- Have been a member of the Canadian Biomaterials Society for at least 2 years at the time of application for the award. The supervising professors in the student home and hosting institutions should also be members of the Canadian Biomaterials Society.
- Have attended at least one annual meeting of the Canadian Biomaterials Society prior to the application for the award.

### Value of the Award

This award has a value of a maximum of \$3,000, to cover travel and housing expenses for a visit of up to 2 weeks.

### Application Procedure

- The student should submit:
  - a current CV including the list of publications;
  - a short summary describing the proposed research activities during his/her visit in the hosting institution (maximum 2 pages);
  - a one page budget summarizing the expected expenses.
- The supervising professors (both in the student home and hosting institutions) should submit a support letter.
- Applications are now due annually on *July 1* (one award to be given per year). Send applications electronically to the CBS Secretary, Kathryn Grandfield (kgrandfield@mcmaster.ca). Results will be announced via the CBS website (together with a visiting scholar profile).

Information can be found on our website at:  
<http://www.biomaterials.ca/#!/awards/cbs-visiting-scholar>

**Abstract submission for the 10<sup>th</sup> World Biomaterials Congress in Montreal is now open!**



The organizers of the 10th World Biomaterials Congress welcome the submission of abstracts for original contribution to the field. The abstract website can be found here:

<http://wbc2016.org/index.php/program/abstract-submission>

Also the New Frontier Symposia have been announced and they can be found on the WBC2016 website. We encourage CBS members to submit to these sessions as well.

#### ***CBS Newsletter editorial board***

Stephanie Willerth

Isabelle Catelas

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Please contact [willerth@uvic.ca](mailto:willerth@uvic.ca) if you want to contribute to our next CBS Newsletter.



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