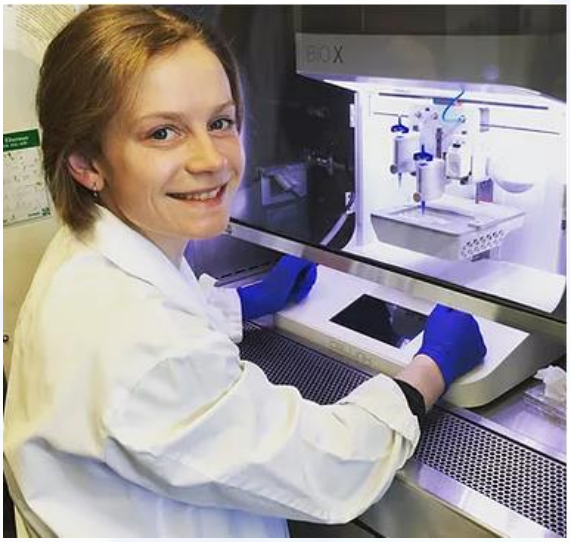
Canadian Biomaterials Society
Société Canadienne des Biomatériaux

QUEBEC CITY STUDENT CHAPTER
CHAPITRE ÉTUDIANT DE QUÉBEC

est heureux de vous inviter à l'événement suivant:

« Impression 3D et fabrication additive: Biofabrication pour des applications biomédicales »

Megan E. Cooke, PhD.



Stagiaire Postdoctoral - Boursière des Instituts de Recherche en Santé du Canada (IRSC)

Université McGill

Jeudi 18 novembre 2021
13h00 – 14h30 EDT
Amphithéâtre Fisher TR-54,
CHU de Québec – Université Laval[1]

Événement hybride

[1]**En présentiel:** Le passeport vaccinal est obligatoire et le port du masque est exigé en tout temps, ainsi que de laisser un siège libre entre deux places (premier arrivé, premier servi).
Via Zoom: https://zoom.us/j/95367082113?pwd=bE1teFpucUlRekdvOXEzNjNIRGhMUT09
ID de réunion : **953 6708 2113**; Code secret : **674700**

Les étudiants membres du CBS qui le désirent pourront visiter l'infrastructure d'imagerie IRM, TEP et CT du CR-CHU de Québec – Université Laval (Laboratoire MAFortin, CR-CHU de Québec- UL – CHUL). Les étudiants doivent s'inscrire avant le 11 nov.: https://forms.gle/MKZiHPEVyQFfA24y9

CSB
UNIVERSITÉ LAVAL
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FONDATION CHU de Québec

Canadian Biomaterials Society
Société Canadienne des Biomatériaux

QUEBEC CITY STUDENT CHAPTER
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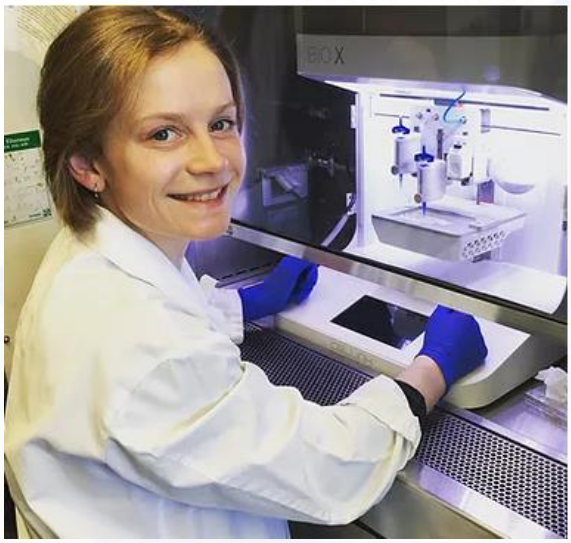
Is pleased to invite you to the following event:

« 3D Printing and Additive Manufacturing: Biofabrication for biomedical applications »

Megan E. Cooke, PhD.

Canadian Institutes of Health Research (CIHR) Postdoctoral fellow

McGill University



Thursday, November 18, 2021
1:00 – 2:30 pm EDT
Fisher auditorium TR-54,
Quebec CHU – Laval University[1]

Hybrid event

[1]**Presential:** Proof of vaccination required, wearing mask all time, seating policy: at least one seat of distance (first come, first served).

Via Zoom: https://zoom.us/j/95367082113?pwd=bE1teFpucUlRekdvOXEzNjNIRGhMUT09

ID de réunion : **953 6708 2113**; Code secret : **674700**

Those CBS student members who may be interested can visit the MRI, PET and CT imaging infrastructure of the CR-CHU de Québec – Laval University (MAFortin Laboratory, CR-CHU de Québec-UL - CHUL). Students must register by Nov 11th : https://forms.gle/MKZiHPEVyQFfA24y9

CSB · Université Laval · CHU de Québec · Fondation CHU de Québec

Megan E. Cooke, PhD.

McGill University, Canadian Institutes of Health Postdoctoral Fellow

Summary:

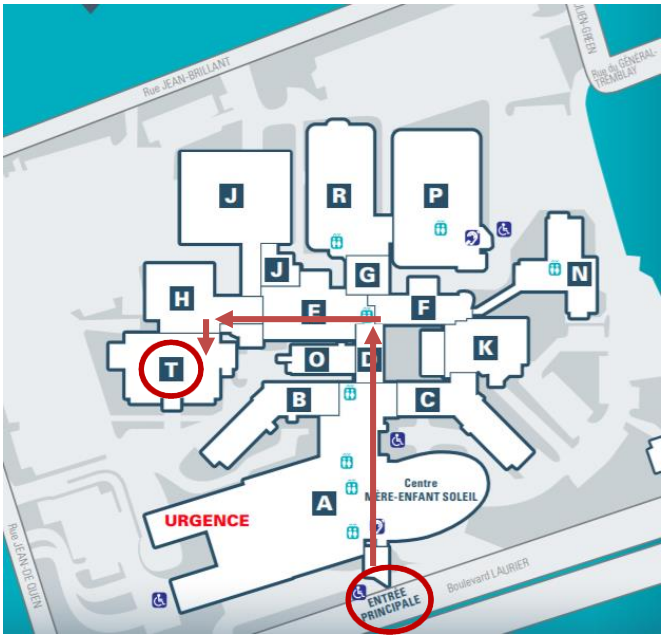
Biofabrication is the controlled spatial deposition of materials and biological material (termed a *bioink* when printed simultaneously) and subsequent maturation of the printed tissue structure. It is a rapidly developing technique with commercially available printing hardware now making the field very accessible. Dr. Cooke has worked on the development of embedded printing using fluid gels, which have been sheared during gelation to produce a suspension media. This helps to overcome the limitations of viscosity in bioprinting tissue constructs with good shape fidelity. The development of a biofabrication tool in the field of tissue engineering. Bioprinting enables precise control over the deposition of materials and cells so is a great tool to produce models of tissue microenvironments. Novel methods to structure biopolymer hydrogels to extract new mechanical properties from already approved materials, an area of great potential. Studies investigating physicochemical and mechanical changes that occur in musculoskeletal diseases. Using techniques more common in chemical engineering and applying them to biological systems, new information can be extracted from well-known systems.

Biography:

Dr. Cooke is a CIHR Postdoctoral Fellow at McGill University. She received her PhD in Chemical Engineering in 2018 from the University of Birmingham under the supervision of Prof Liam Grover and is now working with Dr Derek Rosenzweig. Dr. Cooke's research involves the development of 3D hydrogel culture systems through bioprinting and microgel fabrication for *in vitro* disease models. Her findings have been published in Advanced Materials, Advanced Functional Materials among other journals. Megan has been awarded fellowships from CIHR, FRQNT, FRQS and RSBO as well as independent research funding from the Osteology Foundation.

Comment s'y rendre?
How to arrive?

CHUL 2705, boulevard Laurier, Québec (Québec) G1V 4G2



Version en français:

Se rendre à l'entrée principale (Hospital Centre Mère-Enfant Soleil, Bloc A), aller à la cafétéria (Bloc E) et tournez à gauche et suivez les panneaux pour l'institut de recherche au bloc T. Des étudiants seront à l'entrée principale avant l'heure du séminaire pour vous aider.

English Version:

From the main entrance of Hospital CHUL et Mère-Enfant Soleil, then go to the cafeteria (Block E) and turn left and follow the signs for the research institute in block T. Students will be available at the main entrance before the time of the seminar to help you.