Centre for Bioengineering & Biotechnology
Operational Steering Committee

MINUTES
Wednesday October 11, 2017
2:00 – 4:00 pm, East Campus 4, Room 2101 Boardroom (EC4-2101)

Attending: Catherine Burns, Elizabeth Meiering, Brendan McConkey, Melanie Campbell, Helen Chen, Brian Ingalls, Jennifer Boger, Chekema Prince, Krystina Bednarowski, Mei Lin Chen (student rep)
Regrets: Marc Aucoin (Sabbatical until Jan 2018), Elizabeth Meiering (Sabbatical until Apr 2018) Karim Karim, Safieddin Safavi-Naeini

<table>
<thead>
<tr>
<th>TIME</th>
<th>ITEM</th>
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</thead>
<tbody>
<tr>
<td>12:00</td>
<td>Welcome, Overview of Agenda &amp; Materials</td>
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| 12:10 | 1. Administrative  
- CBB Team changes (Associate Directors, Operations)  
- University Centre progress (Catherine)  
- Formation of a nomination and selection committee for AD “Engineering”  
2. Discussion: Marketing Materials (Krystina)  
3. Discussion: Local Hospital outreach (Cambridge, CAHO), Biotalent, Ethics (Keyma)  
4. Discussion: Student Networking events (Mei)  
5. Proposals progress (update only, not for discussion)  
- 2 NSERC CREATEs submitted  
- 2 Superclusters: Regenerative Medicine and one in Personalized Medicine.  
- CECR MEDTEQ  
- NCE Exploration  
6. Fall activities  
7. MEDEC visit  
8. AGM  
9. Hiring (once budget confirmed)  
10. Round table updates |

1:30 Adjourn
• Introduction of new Associate Director: Elizabeth Meiering, Chemistry to replace Trevor Charles, Biology.
• Call for nominations for additional Associate Director: Karim Karim’s term will be ending end of October
• New Operations Committee members:
  o Jen Boger, Systems Design Engineering
  o Helen Chen, School of Public Health and Health Systems
  o Brian Ingalls, Applied Mathematics
  o Shirley Tang, Chemistry
  o Alfred Yu, Electrical and Computer Engineering
• University Centre Promotion: (approved Summer 2017)
  o Administrative operation same as WIN, WISE, IQC, Games, Water.
  o Centre now reports to VP Research, and funded out of Provost office with an increase in operating budget.
  o Regular meetings to be scheduled with VP Research Charmaine Dean jointly with other centres. Regular meetings for Communications persons across the centres will also be scheduled.
  o Request from Office of Research for CBB to hold an annual Town Hall.
  o Office of Research suggested a yearly call for new members (new faculty to UW), along with encouragement from their home departments that all faculty members to belong to a centre (possibly tie it into merit).
• CBB Seed Research funding:
  o To encourage cross faculty collaboration
  o Committee to be formed for administration of funding announcement, application procedures and award criteria
• Marketing materials:
  o CBB is currently redefining research groups categories to better identify what our UW researchers do and improve outward communication of research focus areas.
• Healthcare Outreach (Summer 2017):
  o Cambridge Memorial – CBB met with health professional staff to discuss the avenues for potential research collaborations. They are currently looking for researcher engagement in the areas of patient experience and other quantifiable measures to report back to WWLHIN.
  o Grand River – facilitating projects through Sara Laferriere /Tina Mah, expansion of PwP to main campus (themes of Cancer and Stroke).
  o Ethics review panel – Development of a document to clarify the language used for the submission of ethics documentation to UW and the Tri-Hospitals.
  o Council for Academic Hospitals for Ontario (CAHO) in Toronto is an innovation broker that facilitates research/start-ups to test their technology in a clinical setting. They are accepting applications from individual researchers or companies. Applications are reviewed internally before being distributed to the 23 research hospitals. CAHO help the research hospitals review the applications and initiate the collaborations within the departments. Projects must be strictly research testing; not companies pitching to procurement.
Centre for Bioengineering & Biotechnology
Operational Steering Committee

- WWLHIN – established an innovation directive to drive the onboarding of health technology into the clinical setting. The process for engaging the WWLHIN to participate in this initiative is still unclear.
- BIOTALENT is an HR Industry partner. They received funding this year in order to connect co-op with companies in the biotech space. Currently working with the UW Co-op office. CBB is looking for ways to direct grad students to them. BIOTALENT is looking to help academic institutions craft/design their curriculum so students are learning skills applicable to bio jobs.

- Mei Lin Chen – student engagement and networking – looking to host a research and commercialization lunch and learn this fall; helping students get off the ground. VC asks to speak: Melanie Campbell, WatCo, Golden Triangle Angel Network, iGEM, Velocity Science. Possibility to tie in the Centre for Family Medicine (CFFM) students (a volunteer group) to give feedback to students who are working in the biomed space to consult on technology.


- Helen Chen- suggestion to establish mechanisms for 4th year project collaboration between faculties. E.g. Match SPPHS with Engineering projects.

- CBB holding off on the NCE call this fall until the next year or two. Some exploratory and positive outreach has been initiated to biomed related universities to build something in this space.

- CECR MEDTEQ (Quebec) – looking to work with Waterloo. Appears to be filling the shoes of expired MDCC group. Looking to invest in research. Approximately $50k funding packets to leverage into further funding channels.

- Fall Activities:
  - MEDEC Oct 31 – meet/greet
  - AGM/Town Hall to be planned this fall.
  - IP Series re-run, hosting with Games and/or ICR over lunch, with a focus on software.
  - MITACS seminar with WCMR – Ashley Hannon is the new rep.

- Sorbonne Student Exchange – 130 Euro for a 1 year commitment (ends June 30) in biomed area. Looking to match them with research projects in this area for a 4 month period. Exchange students receive travel money on both ends, but UW students to France may need additional GRS support. Areas of interest: biomechanics & health, sports engineering, neuromuscular, microfluidics platform for platelet formation, e-biomedical objects for health monitoring, Microwave bio-sensors, Nanoparticle use with Lab-on-a-chip, Measuring Radio Frequency Electromagnetic Field, low magnetic field imaging systems, cardiovascular disease and fluid mechanics.

- Hiring: CBB has made a budget request, but have not received any budget transfers. Hiring program director and communications. Process may take up to 1 year.

- Supercluster applications (regenerative medicine; personalized medicine) not invited to next step but the UW group in regenerative medicine (and Apobiologix) wants to build the UW relationship within continuous manufacturing and drug products, and machine learning approaches in drug manufacturing. They are also interested in the prospects of AI to do quality assurance tasks.

- CBB looking for seminar series speakers:
  - Biomedical discussion group; can cover for 1 night hotel stay or equivalent for guest researchers.
Centre for Bioengineering & Biotechnology
Operational Steering Committee

- Bioinnovations series – sponsored by GE and needs to be approved by them
- Visionary speaker series should have interest across UW.

Action items:

- (MEI) Provide budget breakdown for upcoming events. Prepare agenda for event for approval.
- (MELANIE, BRIAN) Associate Director Nominating Committee – replacing Karim Karim
- (ALL) Sorbonne student exchange as noted in the areas of interest.
- (ALL) Nominations for speakers for CBB Biomedical Discussion Group, Bioinnovations, Visionary series.
- (CBB) help facilitate meeting with Helen to Combine 4th year projects with another faculty to encourage cross collaboration. Match SPPHS with Engineering projects.
- (CBB) Guelph Hospital outreach, Ontario Public Health agency – identify potential collaborations
- (CBB) Marketing Materials: Revision of research groups, marketing materials, powerpoint presentations
- (CBB) Centre necessities planning over next 5 years – Space, IT, Staff – Report to John Thompson

Status Report

Centre Updates:

- CBB Team changes: Shirley retired April 2017, Trevor and Karim term ending, welcome Elizabeth Meiering. Nominating committee for Karim’s replacement to take place asap. BOD replacement for Elizabeth Meiering to be determined.
- Board of Directors Meeting – June 14
- Operations Committee Changes: Introduction of 5 new members; RETIRED: Trevor Charles, Karim Karim, John Yeow
- University Centre progress - Directors Meeting with Charmaine Dean – Sept 20, Operations meeting with John Thompson, Dianne Johnston – Aug 21
- Marketing materials – CBB research group names – more relatable to industry terminology. Refresh and update to our one-pagers. Will be presented to OPS for comment.
- Helen Chen – Clinical Analytics for Real-World Evidence – Looking for PostDocs, PhD and Masters students in CS, software engineering and analytics.
- Jen Boger – SYDE looking for students with Human Interactive systems, interface design, UI/UX machine learning and social computing.
- CREATE - Global Biomedical Technology Research and Innovation, submitted Sept 20

Company visits and events:

- Apr 12 – Pizza with the Prof (GRH): Jennifer Boger, Assistant Professor, Systems Design Engineering "Zero-effort Ambient Vitals Monitoring"
- May 10 – Pizza with the Prof (GRH): Paul Stolee, Heather McNeil ""Geriatric Health Systems: Challenges and Opportunities"
- May 31 - Waterloo-Wellington Clinical Research and Quality Improvement Symposium (WWCRQIS) – McMaster/CFFM campus - Research and quality improvement in the Waterloo-Wellington region. It brings together local students, clinicians, professionals, and researchers who are working to improve the clinical care in our region.
Centre for Bioengineering & Biotechnology
Operational Steering Committee

- Jun - Council of Academic Hospitals of Ontario (CAHO), Biotalent
- Jul 15 – MEDTEQ/CECR application and LOS
- Aug 9 – Biomedical Discussion Group: Dr. Patricia Trbovich, Academic Research Lead, UHN and Assistant Professor, U of T at University Health Network and University of Toronto – Host: Catherine Burns, SYDE
- Sep 25 – CBB Seminar: Dr. Ying Chau, Associate Professor, Division of Biomedical Engineering and Department of Chemical and Biomolecular Engineering, Hong Kong University of Science and Technology (HKUST); Associate Director, Bioengineering Graduate Program, HKUST; Vice Chairman, Hong Kong Biotechnology Organization (HK BIO) “Physical and Chemical Approaches for Ocular Drug Delivery”
- Sep 29 - Biomedical Discussion Group: Dr. Mohammed S. Razzaque, MBBS, PhD, Department of Oral Health Policy & Epidemiology, Harvard School of Dental Medicine, Boston, Massachusetts, USA; Department of Pathology, Lake Erie College of Osteopathic Medicine, Erie, PA, USA – Host: John Mielke SPPHS

Upcoming Calendar:
- Oct 20 – Roche company visit (Evelyn Allen)
- Oct 31 – Visit by MEDEC and Government of Canada Trade Commissioner
- Nov 22-25 – Sorbonne visit
- Advisory Board Meeting
- AGM / Town Hall
- Uwaterloo IP Series – co-host with Games and ICR
- MITACS Seminar – co-host with WCMR
- WCMR/CBB collaboration opportunities

CBB Speaker Series:
1. Pizza with the Profs: 1x month, 2nd Wednesday of every month at GRH, researcher presenters
2. Biomedical Discussion Group: 1x month, 3rd Thursday of every month, faculty or PhD student presenters
3. Bioinnovations Seminar: 1x term, sponsored by GE and needs to be approved by them.
   i. Dr. Cui, Institute of Biomedical Engineering, Oxford University – April 12, 2017
4. Visionary Speaker: 1x a year, speaker should have interest across UW.
   i. Dr. Ed Brown (MD, UW Math grad), CEO of OTN, founder of the world’s largest telemedicine network
   ii. Dr. Alex Jadad, former head of the Centre for Global eHealth Innovation
   iii. Dr. Calestous Juma, Professor, Practice of International Development, Faculty Chair, Edward S. Mason Fellows Program, Faculty Chair, Innovation for Economic Development Executive Program, Director of the Science, Technology, and Globalization Project Harvard Kennedy School (HKS).