2014

UMCCTS Newsletter, September 2014

UMass Center for Clinical and Translational Science

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UMMS Bioinformatics Core
Sequence Analysis Bootcamp

The UMMS Bioinformatics Core, under the guidance of Manuel Garber, PhD, Director, will be hosting a second installment of the Sequencing Bootcamp starting October 2, 2014.

This is a series of lectures on Unix, MGHPC cluster, R language and bioinformatics tools for molecular biologists. The main goal is to introduce the audience to the basics of the bioinformatics with a focus on deep sequencing data analysis using RNA-Seq as an example. No prior computer or programming skills are required to follow the lectures.

Things to Check Before the 1st Class: The audience will have a hands-on experience on Unix command line and Galaxy during the classes. Therefore, attendees must have a working UMass HPC account before the first lecture. If you don't have a UMass account, please fill in the form at https://ghpcc06.umassrc.org/hpc/index.php and have it approved by your PI. Then follow the directions in the confirmation email that you will receive upon approval. There will be a preliminary meeting (week 0, October 2nd) before the first lecture for those who have difficulty logging in to their accounts.

The attendees will need a laptop to follow the lectures. Windows does not include a suitable terminal program; attendees need to have a terminal software to access their HPC accounts. If you have a windows machine, please set-up PuTTY prior to the class. Mac and Linux users don’t need any additional software for terminal access.

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<th>Schedule</th>
<th>Week</th>
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<tbody>
<tr>
<td></td>
<td>Week 0</td>
<td>October 2</td>
<td>Preliminary Meeting</td>
<td>TBD</td>
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<tr>
<td></td>
<td>Week 1</td>
<td>October 9</td>
<td>Unix environment</td>
<td>All classes at UMMS, Hiatt Auditorium, S1-608</td>
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<tr>
<td></td>
<td>Week 2</td>
<td>October 16</td>
<td>Genomic files &amp; HPC</td>
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<td></td>
<td>Week 3</td>
<td>October 23</td>
<td>Sequence data analysis</td>
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<td>Week 4</td>
<td>October 30</td>
<td>RNA-Seq data processing</td>
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<td>Week 5</td>
<td>November 6</td>
<td>RNA-Seq data processing II</td>
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<td>Week 6</td>
<td>November 13</td>
<td>RNA-Seq analysis</td>
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Thanksgiving Holiday
Week 7: December 4, Student presentations, TBD

Contacts:

<table>
<thead>
<tr>
<th>Instructor</th>
<th>E-mail</th>
<th>Weeks</th>
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<tbody>
<tr>
<td>Manuel Garber</td>
<td><a href="mailto:manuel.garber@umassmed.edu">manuel.garber@umassmed.edu</a></td>
<td>5 &amp; 6</td>
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<tr>
<td>Alper Kucukural</td>
<td><a href="mailto:alper.kucukural@umassmed.edu">alper.kucukural@umassmed.edu</a></td>
<td>3 &amp; 4</td>
</tr>
<tr>
<td>Hakan Ozadam</td>
<td><a href="mailto:hakan.ozadam@umassmed.edu">hakan.ozadam@umassmed.edu</a></td>
<td>1 &amp; 2</td>
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</tbody>
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If interested, please sign-up, using Google Chrome as your internet browser, on the google sheet at: https://docs.google.com/spreadsheet/ccc?key=0Arit8IOXqjrYdEhkNkRZbTNJdXpmVWFndE5kaGp0UUE&usp=sharing#gid=0
On behalf of Drs. Rob Goldberg and Beth McCormick, we are pleased to announce the formation of a K to R Club at UMMS. This seminar/working group is available for all current and past K awardees and junior faculty at the institution who are contemplating the submission of an R type grant (e.g., R01, R03, R21) to the NIH during the coming academic year. This course will meet on a regular monthly basis on the 3rd Wednesday of each month, beginning on October 15, 2014, and will run through mid-July. We will discuss all the basic elements of a grant application and will conduct a series of mock grant reviews during the year so that applicants will obtain a better appreciation for the peer review process and what makes for a successful grant application. This working group is intended to enhance, and not replace, mentoring by peers and senior faculty. Each of the monthly sessions will be conducted in an interactive format so that attendees can ask questions of each other and the course leaders to facilitate their proposal development.

The specific topics to be covered (syllabus) are available at:
http://www.umassmed.edu/Global/Quantitative%20Health%20Sciences/Files/K%20to%20R%20Club%20syllabus%20doc.pdf and lunch will be served at all sessions which will convene promptly at 12:30 pm. The location for all sessions is at the Albert Sherman Center, Conference Room, AS6-2072 (6th Floor), UMass Medical School, Worcester campus. Attendees will be strongly encouraged to develop proposals suitable for funding so there will be a considerable amount of writing, rewriting, and thoughtful discussion that will take place.

PDF printable announcement:
http://www.umassmed.edu/Global/Quantitative%20Health%20Sciences/Files/K%20to%20R%20Announcement.pdf

We look forward to seeing you at our initial meeting on October 15th, 2014.

Questions? Please contact either, Robert.Golberg@umassmed.edu or Beth.McCormick@umassmed.edu

NCATS Tox21 Data Challenge 2014

The Challenge:
The 2014 Tox21 (http://www.ncats.nih.gov/research/reengineering/tox21/tox21.html) data challenge is designed to help scientists understand the potential of the chemicals and compounds being tested through the Toxicology in the 21st Century initiative to disrupt biological pathways in ways that may result in toxic effects.

The goal of the challenge is to “crowdsource” data analysis by independent researchers to reveal how well they can predict compounds’ interference in biochemical pathways using only chemical structure data. The computational models produced from the Challenge could become decision-making tools for government agencies in determining which environmental chemicals and drugs are of the greatest potential concern to human health.

All Challenge winners will receive the opportunity to submit a paper for publication in a special thematic issue of Frontiers in Environmental Science and recognition on the NCATS website and via social media.

Key Dates:
- November 14, 2014 Registration and submission deadline
- January 12, 2015 Winners announced

Full details and to register: https://tripod.nih.gov/tox21/challenge/
DID YOU KNOW?

UMass Conquering Diseases Biorepository

The UMass Conquering Diseases Biorepository and Neurology Chair, Robert Brown, DPhil, MD, together with his research lab, are collaborating on an exciting effort to characterize a common genetic cause of Amyotrophic Lateral Sclerosis (ALS) for related changes in normal control individuals. Dr. Brown and his team, Peter Sapp, BS; Diane McKenna-Yasek, RN; Colin Quinn, MD; and Ziqiang (Selina) Lin, a medical school exchange student from Sichuan University, China, are studying the ALS associated mutation in gene C9ORF72. About 10 percent of ALS cases are inherited and a hexanucleotide repeat expansion within the C9ORF72 gene is the most common cause of this neurodegenerative disease in families with ALS and frontotemporal dementia. The UMass Conquering Diseases Biorepository has provided over 4,000 DNA samples for the collaboration. The samples are from a control population and will be used to compare to the Brown Lab’s ALS samples which contain different lengths of the expanded DNA segment in individuals with the C9ORF72 mutation. About the collaboration, Dr. Brown stated, “The Biorepository is a terrific resource for researchers! We’re impressed that we were able to get the specimens we needed for our study from the UMass Biorepository. Our collaboration perfectly illustrates Clinical and Translational Science in action.”

The Conquering Diseases Biorepository is led by Lab Director, Thomas Mayer, PhD. In addition to Dr. Mayer, the team consists of Craig Lilly, MD, PI; Michelle Maynard, Clinical Coordinator; and Sarah Rulnick, Program Manager. The Biorepository arm of the Conquering Diseases Program collects blood samples from consented patients. Ongoing projects are also assisting researchers in cardiology, rheumatology, the Emergency Department and the RNA Therapeutics Institute in collecting samples from patients. In addition, the Biorepository also has de-identified plasma, DNA, RNA, and micro-RNA samples for use. Biorepository samples are used by many UMass researchers, and are a valuable resource for our research community. For more information, please contact, Sarah.Rulnick@umassmed.edu

Would you like help promoting your study? We can post your study description to the website!
https://www.umassmedresearchvolunteer.org/find-studies.html

Click on the link below to submit your study to our website:
https://www.umassmedresearchvolunteer.org/clinical_study_request_form.aspx

Do you need help recruiting study participants?
We invite you to take advantage of our clinical volunteer database filled with people who are eager to participate in UMass clinical trials.
https://www.umassmedresearchvolunteer.org/for-researchers.html

Do you need human samples (plasma, RNA or DNA) for your research?
We can provide you with blood specimens from our de-identified collection of samples from subjects with exact diagnosis and medical history.
http://www.umassmed.edu/conqueringdiseases/researchers/samples/index.aspx

What will these websites do for you?
- Promote your studies
- Recruit participants for your studies
- Educate potential study volunteers about types of clinical trials
Let us know how we can help!

The Conquering Diseases Team
Craig Lilly, MD – Director and PI
Michelle Maynard – Clinical Coordinator
Thomas Mayer, PhD – Biorepository Director
Sarah Rulnick, MPH – Project Manager

Conquering Diseases Program
University of Massachusetts Medical School
55 Lake Avenue North
Ambulatory Care Center, Room AC1-036B
Worcester, MA 01655
508-856-2557 (office)

UMCCTS Benefits of Membership

If you are not already signed-up as a member for the UMass Center for Clinical and Translational Science, please do so at: http://www.umassmed.edu/CCTS/CCTS-Sign-up-for-Membership/. The membership link is also located in the footer section of our website, http://www.umassmed.edu/CCTS

Membership is free and has many benefits, such as:

- UMass faculty can access UMMS Worcester research cores at the on-campus academic rate. Off-campus academic members can access UMMS Worcester research cores at the off-campus academic rate. Industry partners pay industry rates.
- UMass faculty are eligible to access electronic resources at the UMass Worcester and Amherst Libraries.
- UMass members are eligible to apply for pilot award funding.
- Members receive notification via email of all UMCCTS funding opportunities, events, seminars, and monthly newsletters.

If you have any questions about membership and its benefits, please email UMCCTS at: ccts@umassmed.edu

EVENTS:

UMass Lowell
Department of Clinical Laboratory and Nutritional Sciences
Fall 2014 CLNS Colloquium Weekly Schedule

Next Seminar - Thursday, September 25, 2014
12:30 – 1:30 pm
Room # 222 O'Leary Library
UMass Lowell


Questions? Contact Mahdi Garelnabi, PhD, MSc, FAHA, Mahdi_Garelnabi@uml.edu

UMCCTS “So you think you have a drug” Clinical Research Seminar Series Inaugural Event

“So You Think You Have a Drug You Want to Develop”

Thursday, September 25, 2014
3:00 – 4:00 pm
Albert Sherman Center
Conference Room AS5.2072 (5th floor)
Western Massachusetts Health Equity Summit

Registration is now open for the first-ever Western Massachusetts Health Equity Summit on Thursday, October 2, 2014. The Summit will bring together practitioners and community leaders from across our four counties. We’ll work, learn, and take important steps toward greater health equity in Western MA.

- Engage your community with new tools and insight.
- Join a network of people working toward health equity across the region.
- Create positive and lasting change where you live and work.
- Hear keynote Amanda Navarro, Deputy Director, PolicyLink!

More information and Registration is available on the Summit website: http://wmhes.umass.edu/

Thursday, October 2, 2014
8:30 am – 4:00 pm
UMass Amherst Campus Center
Auditorium

Questions? Please contact the UMass Amherst Office for Public Health Practice and Outreach at the School of Public Health and Health Sciences: at (413)-545-2529, email: risa@schoolph.umass.edu.

VA New England HealthCare System presents...

“Creating a VA Learning Healthcare System: Opportunities for Research”

Friday, October 3, 2014
1:00 pm – 2:00 pm
Albert Sherman Center
Conference Room AS9.2072 (9th floor)
University of MA Medical School

Mary T. Brophy, MD, MPH
Staff Physician, VA Boston Hospital
Assistant Professor of Medicine, Boston University School of Medicine

Come find out how the Boston VA is developing a program to bring together researchers and create unique research opportunities within VISN1!
M2D2 “SHARK TANK” Pitch Event

Wednesday, October 15, 2014
UMass Lowell M2D2
600 Suffolk Street, 2nd Floor
Wannalancit Mills Office & Technology Center
Lowell, MA 01854

5:00-6:00 pm: Registration
6:00-7:00 pm: Company Pitches
7:00-9:00 pm: Networking

A panel-style venture pitch event resembling ABC TV Network’s “Shark Tank” show will be held at M2D2 followed by networking. Several entrepreneurs representing the start-up companies listed below affiliated with M2D2 will have to face tough questions from a panel of investors regarding their technologies, current stage of development and financial projections in a pitch of their ventures.

Register at:
https://events.r20.constantcontact.com/register/eventReg?oeidk=a07e9s1sjhwb0491f82&oeseq=&c=&ch

Registration Fee until October 1, 2014: $20.00
Registration Fee after October 1, 2014: $30.00
Walk-in/On-Site Registration Fee: $40.00
Registration Fee includes Hor d’Oeuvres, Beer and Wine

FDA Drug and Device Application Workshop - 2014

“Best Practices for Preparation and Maintenance of Sponsor-Investigator INDs and IDEs”

Wednesday, October 15, 2014
Boston University Trustee Ballroom
One Siber Way, 9th Floor
Boston, MA 02215

8:30 am: Check in and breakfast
9:00 am – 12:00 pm: IND Application Process
12:45 pm – 4:00 pm: IDE Application Process

This workshop is open to clinical researchers at Boston University/Boston Medical Center, and the New England Clinical and Translational Science Institutes (CTSIs). The target audience encompasses clinical investigators and others on the study team responsible for submitting and maintaining FDA IND and/or IDE applications.

Register at (free event) and complete information: http://www.bumc.bu.edu/crro/clinical-research-education-programs/best-practices-for-preparation-and-maintenance-of-sponsor-investigator-inds-and-ides-2014/
Goal of the Symposium: To build our shared capacity to address health issues in communities throughout Massachusetts by creating opportunities for people to:
- Meet each other
- Learn more about each other’s work and interests
- Make connections and plan for future collaborative work

Audience: Community leaders, faculty and staff from all 5 UMass campuses and other organizations and institutions interested in partnered research.

To Register (free) for the Community Engagement and Research Symposium:
https://docs.google.com/forms/d/1Wsn4LAefK7-dpAzKkP4l2fkkdYGJL0_-O0vq2-Syuwo/viewform?c=0&w=1
Deadline to register is October 24, 2014.

Questions? Please contact Amy Borg by email at communityengagement@umassmed.edu or phone at 508-856-4685.

~Mark your Calendars~

UMass Center for Clinical and Translational Science Seminar Series 2014-2015 Schedule
12:00-1:00 pm (lunch served)
Faculty Conference Room, S1-342
University of Massachusetts Medical School

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<thead>
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<th>Year</th>
<th>Date</th>
<th>Speaker</th>
<th>Title</th>
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<tbody>
<tr>
<td>2014</td>
<td>Thursday, October 30</td>
<td>Hong Yu, PhD</td>
<td>“TBA”</td>
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<td>Professor, Quantitative Health Sciences, UMMS</td>
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<td>Wednesday, November 19</td>
<td>Julia Hua Fang, PhD</td>
<td>“TBA”</td>
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<td>Professor, Quantitative Health Sciences</td>
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<td>2015</td>
<td>Tuesday, January 27</td>
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<td>Wednesday, February 25</td>
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<td>Tuesday, March 24</td>
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<td>Thursday, April 23</td>
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<td></td>
<td>Wednesday, May 27</td>
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If you are interested in presenting at one of our upcoming UMCCTS Seminars, please contact, Dr. Nate Hafer, Director of Operations, UMCCTS, at nathaniel.hafer@umassmed.edu

FUNDING OPPORTUNITIES:

UMass Center for Clinical and Translational Science and Cubist Pharmaceuticals, Inc.
Developmental Therapeutics Awards 2014

To: All UMass Worcester Faculty and Cubist Employees
From: Katherine Luzuriaga, MD  
Director and PI, UMCCTS  

Ronnie Farquhar, PhD  
Senior Vice President, Discovery and Pharmaceutical Research, Cubist Pharmaceuticals, Inc.

The UMCCTS, in collaboration with Cubist Pharmaceuticals, Inc., is announcing a special round of the Pilot Project Program focused on understanding aspects of host-pathogen relationships that may lead to the development of novel measures to prevent or manage infectious diseases.

In this inaugural pilot program between UMCCTS and Cubist, a total of $350,000 is available to fund pilot projects ($2-4). Individual project awards of up to $120,000 over two years are allowable. Awards are expected to be made on a competitive basis by a scientific review committee to enable teams of joint investigators to accelerate the translation of innovative, cutting-edge research on host-pathogen interactions related to infectious diseases.

Application deadline: October 24, 2014 to: Nathaniel.Hafer@umassmed.edu

Full instructions are available (UMCCTS website, under the top tab, Funding), at: http://www.umassmed.edu/CCTS/Funding/

UMCCTS Small Conference Grants  
Funding Opportunity

Introduction
The University of Massachusetts Center for Clinical & Translational Science (UMCCTS) is pleased to announce a funding call for Small Conference Grants. This funding opportunity is designed to leverage the convening capacity of the UMCCTS to create new, multidisciplinary teams to address a pressing health need. For the purpose of this award, a conference is defined as a symposium, educational program, seminar, workshop, or any other organized and formal meeting.

Purpose
The UMCCTS supports projects that are inter-campus in orientation and directed toward life sciences projects related to clinical and translational research. This fund serves to spur inter-disciplinary collaboration and strengthen the University’s research portfolio in clinical and translational research. By providing seed funding to outstanding faculty members, this fund facilitates the development of faculty-to-faculty networks within the University system, thereby leveraging the considerable expertise and resources that exist on the individual campuses. It is assumed that successful conferences will serve as a springboard to attract additional funding from extramural sources.

All UMass faculty (Amherst, Boston, Dartmouth, Lowell, Worcester) with an interest in clinical and translational science may apply. Project awards of up to $1,000 can be requested.

Proposals will be accepted on a “rolling basis” (no due date). Investigators will be notified of award approximately 2-3 weeks post submission.

Complete details, criteria to apply, and the application process are available at the UMCCTS website: http://www.umassmed.edu/ccts/funding/

NIH K08 on Aging  
Funding Opportunity

The NIH, Department of Health and Human Services announces a funding opportunity, Paul B. Beeson Clinical Scientist Development Award in Aging (K08)

Letter of Intent Due: October 7, 2014
Application Due: November 7, 2014

This funding opportunity encourages and assists the development of future leaders in the field of aging by supporting clinically trained (primarily physicians) faculty members early in their careers to gain additional research training and to establish independent programs in aging research.

The John A. Hartford Foundation (http://www.jhartfound.org/) and the American Federation for Aging Research (http://www.afar.org/) are interested in independently funding applications submitted under this initiative.


Please remember to cite the CTSA Grant # UL1TR000161 in all supported journal publications.

Visit our website for all the latest news, funding announcements, seminars, educational training, sign-up for membership, etc., http://www.umassmed.edu/CCTS/NIH-Citation-Requirements/