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SIGN UP FOR THE CBC NEWSLETTER

The CBC newsletter is distributed bi-annually (winter and summer editions) and informs the CBC community about relevant CBC news (new funding opportunities, educational events, annual symposia, workshops, forums, seminars) via the CBC news listserv. To sign up for CBC news [click here](#).

CBC is funded by the Searle Funds at The Chicago Community Trust

Happy New Year from the CBC!

2012 brings the launch of a new initiative, **Exploratory Workshops**. Check out the RFA and let the CBC help you assemble a multi-institutional group of colleagues to discuss how to push forward the edges of your field with the goal of obtaining either CBC or external funding.

Learn about a new CBC Lever Award-funded facility, the **Microenvironmental Control Foundry**, that is up and running on the UIC campus. **Spring 2012 Catalyst** round electronic application submission opens in late February (March 7 deadline) and we hope to receive many proposals for innovative collaborative research projects.

The **Lever Award** program has been one of the most successful initiatives of the CBC. Levers offer matching grants to successful Center grants. A Lever match can help a Center grant win NIH funding and the Lever also benefits the wider community by providing resources to researchers who are not part of the Center. Learn about the **two new Centers**, matched with Lever Awards that were established in fall 2011. Take a few minutes to re-familiarize yourself with this powerful program, as well as the new Lever resources that will soon be available to the CBC community.

We are pleased to report that in the second half of 2011, 4 new **Catalyst teams** received awards and 9 new **CBC Scholars** joined the CBC community. On the biotechnology front, the CBC awarded support to the **Chicago Innovation Mentors (CIM)** program, which works with faculty interested in forming start-up companies.

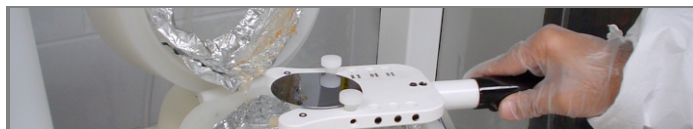
Finally, the CBC has a wonderful tradition of presenting yearly symposia on timely and high-impact research. See a recap of the 2011 symposium, and mark your calendar for the **10th Annual CBC Symposium** to be held on Friday, October 12, 2012.

Enjoy browsing through the newsletter and exploring the topics you find interesting - and visit our website often to read about our programs and other breaking news!

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Microenvironmental Control Foundry



The **Microenvironmental Control Foundry** was funded at UIC through the CBC Lever Award: *Nanomaterials for Cancer Diagnostics and Therapeutics*. The foundry will fabricate, at no charge, custom microfluidic devices, microfluidic oxygenation control devices, and molds for micropatterning substrates to researchers at the CBC universities. Devices will be provided at no cost and foundry staff will provide training to users of these new technologies. The goal of the foundry is to disseminate microfluidic tools to researchers by either reproducing devices reported in the literature or by working with foundry staff to develop new devices for specific applications.

David Eddington is the Director of the Foundry and is joined by two Application Engineers: Dr. Joe Lo and Dr. Shawn Oppeward. Researchers can contact Dave by email at dte@uic.edu or by phone at 312-355-3278.

[\(Microenvironmental Control Foundry website\)](#)

Catalyst Application Deadlines

The CBC invites faculty members at UChicago, UIC and Northwestern to submit Catalyst proposals for the spring 2012 round. The Catalyst program offers funding of up to \$200K for new inter-institutional and highly innovative research projects. Projects should address an important biological/biomedical question. Catalysts are not intended to support incremental progress – the proposed research should have high impact and be risky. Preliminary data is not required. Collaborations involving senior and junior faculty members are given special consideration. Research teams must be composed of Principal Investigators from at least two CBC institutions.

Catalyst Program Key Dates for 2012

Application Round	Spring 2012	Fall 2012
Online Submission Opens	February 27, 2012	August, 20, 2012
Submission Deadline	March 7, 2012	August 28, 2012
Expected Decision	May 16, 2012	November 14, 2012

For questions about the Catalyst Program or submitting an application, please contact CBC Associate Director [Karen Snapp](#).

[\(CBC Catalyst Award RFA\)](#)
[\(CBC-funded Catalyst Awards to-date\)](#)
[\(CBC Scientific Review Board\)](#)



10th Annual CBC Symposium

The 10th Annual CBC Symposium will be held at Northwestern University on **Friday, October 12, 2012**. The symposium will feature research developments in the area of epigenomics.

Jason Brickner (NU), **Alex Ruthenburg** (UChicago) and **Tom Diekwisch** (UIC) have joined forces with **Shohei Koide** (UChicago CBC Scientific Director) to organize this event. The organizational committee has recruited three outstanding external keynote speakers: **Steven Henikoff** (Fred Hutchinson Cancer Research Center), **Tom Misteli** (National Cancer Institute, NIH) and **Joanna Wysocka** (Stanford). As additional information becomes available, it will be posted on the CBC website.

[\(10th Annual CBC Symposium webpage\)](#)

RFA Exploratory Workshops

In November 2011, CBC launched a new program to host small workshops for CBC faculty members which will encourage and support collaborative interactions across new boundaries. Upcoming application deadlines are: **February 17, April 20 and June 8**. The CBC Staff and Scientific Directors will review applications, with funding decisions expected approximately four weeks after submission.

Applications are now being accepted for CBC Exploratory Workshops. CBC-affiliated researchers who would be interested in serving as scientific organizers of a workshop are encouraged to apply. For further information on the workshop program and instructions for applying see the CBC Exploratory Workshops RFA. Feel free to contact CBC Associate Director [Karen Snapp](#) with questions regarding this program.

[\(CBC Exploratory Workshop RFA\)](#)

The Power of Lever Awards

The Lever Award program is a centerpiece of the CBC's efforts to foster collaboration and bring national recognition to Chicago-area biomedical research. Levers have been a resounding success to date, and we want to remind the CBC community about this powerful program. Please consider the Lever program as you think about applying for large federal grants.

Levers provide matching funds of up to \$2.5M, for discrete activities associated with large-scale (greater than \$10M direct costs) grants from federal or other sources, including Center-type grants such as NIH P-50 or U54 awards. **Lever funds must be used to establish transformative infrastructure that can be made broadly available to the Chicago scientific community.** Levers are not intended to simply provide general supplemental research support or substitute for required institutional commitment(s). To be eligible for matching funds, the Center project must have participants from at least two CBC universities. Lever proposals must have at least one Principal Investigator from each of the three CBC universities. Investigators contemplating a Lever application must initiate interaction with the CBC at the outset of planning the Center application.

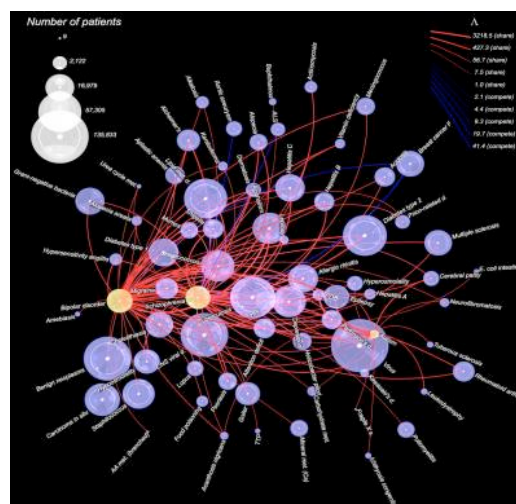
Since January 2007, 13 teams of CBC scientists have received commitments of CBC Lever matches. Five of these teams have received their NIH awards and have gone on to establish Centers and collect Lever matching funds. This is a success rate of almost 40%, and it appears that the promise of Lever funding substantially contributed to the success of these Center proposals. Importantly, thanks to the Lever Awards, CBC-affiliated scientists have access to cutting-edge, often unique research resources.

[\(CBC Lever Award RFA\)](#)
[\(CBC-funded Lever Awards to-date\)](#)

Lever Awards funded in 2011:

The Conte Center on the Computational Systems Genomics of Psychiatric Disorders

A CBC Lever Award of \$2.0M has been received by the team of **Andrey Rzhetsky** (UChicago), **Edwin Cook** (UIC) and **Rick Morimoto** (NU) in conjunction with a recent NIH P50 Award entitled, *Silvio O. Conte Centers for Basic and Translational Mental Health Research*. The Lever funds will be used to enhance current genomic facilities with an emphasis on proteomics and deep sequencing and use the tri-institutional cloud-computing infrastructure to link CBC project institutions. The ultimate goal is to enhance the investigation of complex molecular interactions by generating a "virtual factory" that will allow complex methods and computational facilities to be available to all CBC institutions.



Credit: Image courtesy of Andrey Rzhetsky / University of Chicago.

Synthetic Antibody Consortium

Tony Kossiakoff (UChicago), **Brian Kay** (UIC), **Geoffrey Greene** (UChicago) and **Jason Brickner** (NU) have received a \$2.3M CBC Lever Award for a proposal, *Synthetic Antibody Consortium*, which was awarded in conjunction with an NIH U54 grant, *Recombinant Antibody Network (RAN)*. The goal of the NIH grant is to generate renewable, high quality affinity reagents against all human transcription factors. The Lever Award will use the NIH RAN infrastructure to generate affinity reagents for the CBC community against a variety of targets including membrane and soluble proteins, protein complexes and functional RNA. Synthetic antibodies will be generated by phage display and will be stored as plasmids, allowing for low cost regeneration. The consortium is in its early stages so please check the CBC webpage for updates.

[\(CBC Lever Award RFA\)](#)

[\(CBC-funded Lever Awards to-date\)](#)

New Catalyst Awards

Sixteen Catalyst Teams submitted proposals in the fall 2011 Catalyst Award round. Four of these proposals were approved for funding by the Scientific Review Board, a 25% success rate. We offer congratulations to the Principal Investigators and welcome them to the CBC.

The funded PIs and the titles of their proposals are:

- **Alan Leff** (UChicago) and **Terry Vanden Hoek** (UIC)
Design and Delivery of TAT Fusion Proteins for CPR
- **Chuan He** (UChicago) and **Jung-Hyun Min** (UIC)
Capturing Kinetically Labile Protein Assemblies on DNA
- **David Eddington** (UIC), **Navdeep Chandel** (NU) & **Jalees Rehman** (UIC)
Oxygen Sensing in Endothelial Progenitor Cells
- **Lucia Rothman-Denes** (UChicago), **Douglas Bishop** (UChicago), **Konrad Kording** (NU) and **Keith Tyo** (NU)
A Molecular Chart Recorder

[\(CBC Catalyst Award RFA\)](#)

[\(CBC-funded Catalyst Awards to-date\)](#)

CBC Scholars Class of 2012

The CBC Scholars Program was established in 2010 with the intent of developing a leadership forum for students at the CBC universities that would advance the CBC mission of fostering collaboration and excellence. Each CBC university nominates up to three outstanding advanced graduate students to participate in the CBC Scholars Program. Each CBC Scholar receives a grant of \$5,000 per year for up to two years, to be used for academically-related purposes such as travel to conferences.

The CBC is delighted to introduce the Class of 2012. The first gathering of the 2012 Class took place on January 16, 2012 during a welcoming lunch in downtown Chicago. The new Scholars met the Scholars from the 2011 and 2010 Classes, the CBC Scientific Directors, CBC staff members, and discussed scholarly and community projects to undertake in 2012.

Class of 2012:

NORTHWESTERN:

- **Andrew Scarpelli**, Department of Chemical and Biological Engineering, PI Joshua Leonard
- **Jonathan Woon Teck Yap**, Department of Chemical and Biological Engineering, PI Lonnie Shea
- **Elizabeth Tarasewicz**, Department of Surgery, PI Jacqueline Jeruss

UNIVERSITY OF ILLINOIS AT CHICAGO:

- **Chaitanya Aggarwal**, Department of Medicinal Chemistry/ Pharmacognosy, PI Michael Federle
- **Jackson Cone**, Department of Psychology, PI Mitchell Roitman
- **Susan Klosterman**, Department of Biological Sciences, PI Janet Richmond

UNIVERSITY OF CHICAGO:

- **Gregory Tietjen**, Department of Biophysical Sciences & Institute for Biophysical Dynamics, PIs Erin Adams and Ka Yee Lee
- **Joanna Rowell**, Committee on Neurobiology, PI Clifton Ragsdale
- **Timothy Best**, Committee on Cancer Biology, PI Kenan Onel

[\(CBC Scholars webpage\)](#)

Chicago Innovation Mentors

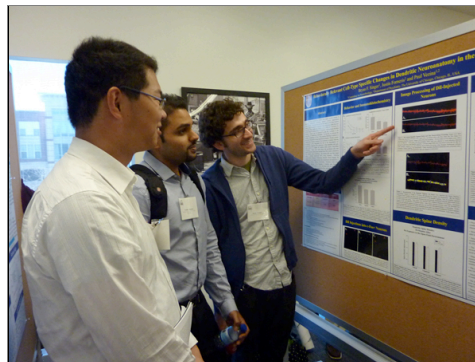
The Chicago Innovation Mentors (CIM) program is a multi-institution initiative that encourages university technology commercialization by matching experienced entrepreneurs, executives, and domain experts with innovative faculty and students. CIM is supported by the technology transfer offices of UChicago, NU and UIC, in collaboration with the iBIO[®] Institute. Currently, CIM has matched 72 mentors with 29 active ventures. CIM supports opportunities at a wide range of stages, from earliest idea to company formation, with an initial focus on biomedical and healthcare opportunities and welcomes inquiries from potential mentees and mentors interested in joining this exciting program to foster new company formation and development.

In July 2011, CBC made a \$60,000 grant to the Chicago Innovation Mentors program. These funds were used to hire Martha Wade, an experienced Operations Manager who will be working closely with John Flavin, the CIM Executive Director. "The CBC anticipates that CIM will continue to match entrepreneurial faculty at each campus with experienced mentors," said Katie Stallcup, CBC Executive Director. "The ideal outcome will be the launch of several companies that will translate research discoveries into new biotech companies; companies that, we hope, will be established here in the Chicago area."

[\(Chicago Innovation Mentors website\)](#)

9th Annual CBC Symposium

The 9th Annual CBC Symposium, *Engineering Biology: From tools to insights*, took place on Friday, October 21, 2011, at the UIC Forum. David Eddington (UIC), Lonnie Shea (NU), and Joel Collier (UChicago) collaborated to organize this scientific event. The organizational committee recruited three outstanding external keynote speakers: **Christopher Chen** (University of Pennsylvania), **Douglas Lauffenburger** (Massachusetts Institute of Technology) and **Melody Swartz** (Ecole Polytechnique Federale de Lausanne (EPFL), Switzerland). The symposium also featured talks by exceptional Chicago-area scientists: **David Eddington** (UIC), **Joshua Leonard** (NU) and **Dorothy Sipkins** (UChicago).



(Read more: [World experts in bioengineering lead the 9th Annual CBC Symposium](#))