



CHICAGO
BIOMEDICAL
CONSORTIUM

THE UNIVERSITY OF CHICAGO
UNIVERSITY OF ILLINOIS CHICAGO
NORTHWESTERN UNIVERSITY

2022 Perspectives



2022

CBC Mission

The mission of the Chicago Biomedical Consortium (CBC) is to stimulate collaboration among scientists at Northwestern University, The University of Chicago, the University of Illinois Chicago and others to accelerate discovery that will transform biomedical research and improve the health of humankind.

The CBC will:

- Stimulate research and education that bridge institutional boundaries,
- Enable collaborative and interdisciplinary research that is beyond the range of a single institution,
- Mentor and develop a strong cadre of biomedical leaders, researchers, and entrepreneurs in Chicago,
- Enhance and promote the development of the biomedical ecosystem in Chicago,
- Facilitate development of therapeutics that will, over the long term, improve the health of citizens of Chicago and beyond.

2022

The Searle Funds
at The Chicago Community Trust



The CBC TEAM

Executive Director and Staff



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Leadership



Luisa DiPietro, DDS, PhD

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Department of Periodontics
University of Illinois Chicago College of Dentistry



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Scientific Director
Hospira Foundation Professor of Oncology
Section of Hematology/Oncology
Departments of Medicine and Human Genetics
The University of Chicago



Richard Morimoto, PhD

Scientific Director
Bill and Gayle Cook Professor of Biology
Director, Rice Institute for Biomedical Research
Department of Molecular Biosciences
Northwestern University

2021 Perspectives

The CBC was inaugurated in 2006 with a generous grant of \$5 million per year from the Searle Funds at The Chicago Community Trust. Through the end of 2021, \$71 million has been invested in the CBC allowing for the continuation in efforts to leverage the strong foundation that has been established and to intensify the focus on translational research and entrepreneurship. Projects launched by the CBC have gone on to earn \$917.4 million in additional funding from external sources, primarily from the NIH.

As of the end of 2021, the CBC's most notable achievements since its inception include:



Awards

A total of 372 awards made to faculty members, postdoctoral fellows, and graduate students to support discovery and cutting-edge research in basic and translational science in all areas of biomedical research. In 2021 a total of 14 awards were made including 3 Catalyst Awards, 2 Year 1 Accelerator Awards, 2 Year 2 Accelerator Awards and 7 Director's Fund Awards.



Educational events

Organized over 75 educational events including 18 symposia showcasing research supported by the CBC and high-end technologies available at CBC universities. In 2021, the CBC hosted the 18th Annual CBC Symposium; 4 Accelerator Network (CBCAN) meetings; the CBC COVID-19 Seminar Series; and 8 citywide Info Sessions promoting 3 CBC award programs (Accelerator, Catalyst, and Entrepreneurial Fellows).



Research Centers

Establishment of 6 national research centers at the CBC universities; recruitment of 8 outstanding senior and junior faculty members who have gone on to receive numerous awards; and acquisition of state-of-the-art instruments to enable groundbreaking investigations of key biomedical questions.



Publications

Achieving a milestone of over 2,715 peer-reviewed scientific articles published based on CBC-funded research; in 2021, 65 new publications were reported as attributed to CBC-supported research, including in high-impact journals such as Nature, Nature Communications, Nature Immunology, Cell Reports, Scientific Reports, and Frontiers in Immunology.



Development Programs

Provided professional development programs and resources for graduate students and postdoctoral fellows; encouraged a broad array of inter-institutional collaborations, including the Open Access Initiative; offered mentoring assistance for researchers interested in commercializing discoveries, exemplified by a robust involvement of pharma, biotech and other members of the Chicago biosystem.



Community Interactions

A high level of engagement within the Chicago biomedical community is an important component of the CBC. In 2021, CBC participated in various community programs and collaborations with organizations such as P33, Portal Innovations, ThinkChicago, Alzheimer's Association, SACNAS, Women in Bio, and ABRCMS, just to name a few.

Director's Corner

Michelle Hoffmann, PhD, has been serving as Chicago Biomedical Consortium's Executive Director since August 2021. Prior to this role, from 2019-2021, Hoffmann was the senior vice president of Deep Tech at P33, a privately funded nonprofit charged with elevating Chicagoland's innovation economy and driving inclusive economic growth. Prior to that, Michelle was Senior Vice President at Back Bay Life Science Advisors, a life sciences strategic advisory firm.



The View from Here

01 CBC and Ecosystem Workforce, Expertise, and Capital Attraction

We are strengthening Chicagoland and CBC commercialization programs, educating the biotech workforce, and linking to capital— via the Entrepreneurial Fellows, the Accelerator Awards, and the Accelerator Venture Board

02 The CBC's Visibility and Brand

We are building the CBC Brand – a tentpole for the early stage biotech ecosystem: Our goal is to integrate into the Chicagoland biotech ecosystem.

03 High Impact CBC Scientific Symposia

The CBC is bringing together our best scientists to address Chicagoland's biggest health problems.

04 Collaborations and Team Science

The CBC is nucleating collaborations with affinity groups of inter-institutional scientists to curate the most important scientific questions and collaboratively determine the teams to address these questions.

Accelerator Awards

The Accelerator Award program supports translational research at the initial, and therefore highest risk, stage of commercially directed research focused on the development of a therapeutic or an associated biomarker or diagnostic. Awardees receive \$100,000 of first year funding and, if the milestones are met, the projects become eligible for an additional \$150,000 to support a second year of funding. Applications are accepted on a rolling basis.

Year 1 Awardees

Funding of \$100,000 award for one year, eligible for \$150,000 for year two



PI: Richard Minshall (UIC) for the project:
"Development of Small Molecule Inhibitors of
Gα12/ Alpha-SNAP-dependent vWF Secretion"



PIs: Huiping Liu and Deyu Fang (NU)
for the project: "Exosomes as a Novel Biologic
Platform for Targeted Therapy"

Year 2 Awardees

Extension of \$150,000 for Year Two Funding



PIs: Steven Ackerman and Vadim Gapenenko (UIC)
for the project: "Pre-clinical Development of a Biased
Antagonist of CCR3 for Allergic Diseases"



PIs: Yun Fang and Matt Tirrell (UChicago)
for the project: "Targeted Nanomedicine for
Treating Arteriovenous Fistula Failure"



PI: Richard Silverman (NU) for the project:
"Novel Drug for Hepatocellular Carcinoma"



PI: Marcus Peter (NU) for the project:
"Development of a Novel Treatment for Ovarian
and Prostate Cancer Based on Toxic RNA"



PI: Karla Satchell (NU) for the project:
"RAS Processing as a Strategy to
Reduce RAS-Driven Tumors"



Chicago Biomedical Consortium Accelerator Network

The CBC Accelerator Network (CBCAN) program has created a community, bringing together industry experts, university tech transfer officers, researchers and others from the local and extended biomedical ecosystem with discoveries that may have commercial potential. The aim is to move promising discoveries into and forward in the pipeline towards commercialization, providing early commercial guidance that universities and university-based researchers need. Below lists past CBCAN events held in 2021 and the first half of 2022.



April 6, 2022

CBC Accelerator Awardees' Presentations: Progress to Date & Pitch for Year 2 Funding and CBC Fireside Chat with Chandler D. Robinson (Monopar Therapeutics).



December 9, 2021

CBC Accelerator Awardees' Presentation: Progress to Date & Pitch for Year 2 Funding AND CBC Fireside Chat with David Y. Brill, MD of Paragon Biosciences and Azurii Collier, PhD of AbbVie.



May 20, 2021

CBC Accelerator Award LOI Submitters Presentations, Round five, Part 2



May 6, 2021

CBC Accelerator Award LOI Submitters Presentations, Round five, Part 1



April 29, 2021

CBC Accelerator Awardee Presentations: Progress to Date & Pitch for Year 2 Funding

Catalyst Awards

The longest running CBC program provides funding of up to \$250,000 for one- or two-year new inter-institutional collaborative research projects that address fundamental biological and biomedical research questions that are high-risk/high-reward, innovative and transformative.

Spring 2021

Round 30



PIs: Brian Murphy (UIC) and Neil Kelleher (NU)
for the project: "Establishing two new bacterial phyla to produce the next generation of biomedical drug leads"



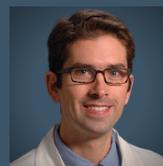
PIs: Carole Ober (UChicago) and Yu Gao (UIC)
for the project: "Elucidating the function of the non-classical HLA-DQα2/HLA-DQβ2 in asthma"



PIs: Kay Macleod (UChicago) and Alexis Demonbreun (NU)
for the project: "Use of PROTACs to inhibit BNIP3-dependent mitophagy in muscle atrophy and cancer cachexia"

Fall 2021

Round 31



PIs: Christopher Weber (UChicago) and Fatemah Khalili (UIC)
for the project: "Determination of tight junction structural organization by cryo-electron microscopy"



PIs: Stephanie Cologna (UIC) and Neha Kamat (NU)
for the project: "Membrane Dynamics in Lipid Storage Disorder"

CBC Entrepreneurial Fellows

The CBC Entrepreneurial Fellows (EF) Award program identifies and supports the professional development of junior life sciences researchers who are keen to develop the skills and experiences needed to move translational projects from a university lab toward commercialization and potentially into a Chicago-based biotech start-up. The program exposes Fellows to a breadth of real-world experiences across the CBC institutions and connects trainees to the Chicago biomedical community.

Meet the CBC's 2022 Entrepreneurial Fellows:

Elan Ness-Cohn
PhD from NU



Schnaude Dorizan
PhD from NU



Amanda Maldonado
PhD from UIC



Karol Sokolowski
PharmD, PhD from UIC



Immerse

Working with university faculty and experts in the greater Chicago bioentrepreneurship community.

Partner

Partnering with our member institution tech transfer and entrepreneurship offices.

Integrate

Integrating with members of the Entrepreneurial Fellows Advisory Board and industry mentors.

Education & Outreach

18th Annual CBC Symposium:
Immunology and Immunoengineering Response to COVID-19

FEATURED SPEAKERS:

Scott BUDINGER Northwestern University	Sally MCFALL Northwestern University
Michael CAFFREY University of Illinois at Chicago	Bellur S. PRABHAKAR University of Illinois at Chicago
Alexis DEMOMBREUN Northwestern University	Aaron RING Yale School of Medicine
George GEORGIU University of Texas Austin	Karla Fullner SATCHELL Northwestern University
Jennifer LAYDEN Center for Disease Control and Prevention	Melody SWARTZ The University of Chicago

To register and for program details go to:
www.chicagobiomedicalconsortium.org

Organized by: Scott Budinger, Northwestern University; Jeffrey Hubbell, The University of Chicago; Richard Nowak, University of Illinois at Chicago; Melody Swartz, The University of Chicago. This symposium is generously sponsored by: The Searle Funds at The Chicago Community Trust.

18th Annual Symposium

An outstanding program with three distinct sessions:

- 1) Understanding serological responses to infection,
- 2) Understanding immune consequences of infection
- 3) Discovery and diagnostics.

Ten featured speakers presented their scientific research to a world-wide audience numbering over 250 from 6 different countries, representing a vast array of universities, companies, and institutions. In addition, a virtual poster session was hosted on www.virtualpostersession.org which provided an organized platform for poster presenters to discuss their research and for participants to have an overall more engaging and interactive experience.

February 25, 2021
"Screening for Coronavirus Antibodies in Neighborhoods (SCAN)"
Speaker: Elizabeth M. McNally, NU

March 25, 2021
"Vaccine Distribution and COVID-19 Spread"
Speaker: Emily Landon, UChicago

April 22, 2021
"Drug repurposing for COVID-19 and future pandemics"
Speaker: Savas Tay, UChicago

May 27, 2021
"SARS-CoV-2 Viral Genomics and Variation in the Chicago Region"
Speaker: Egon Ozer, NU

July 22, 2021
"Vascular Dysregulation in COVID-19"
Speaker: Melody Swartz, UChicago

COVID-19
Seminar Series

A series of townhall meetings during which our invited speakers discuss ongoing SARS-CoV-2/COVID-19 biomedical research.

Building the Next Generation of Chicagoland's Bio-entrepreneurs P33

The Missing Piece

Integration with larger companies • Cutting-edge research

Series A-D capital and experienced management

• A 1-year paid fellowship working to develop science into applications
• Recruiting life sciences advanced doctoral (MS/MD/PhD) from anywhere in the world in Chicago

Information Sessions
CBC Entrepreneurial Fellows

Seeking Recent PhD /MD/MA/MSc & Postdocs from Across our Region Opportunity for Immersive, Full-time Bio-entrepreneurial Training

• Partner with Renowned Researchers
• Attractive Salary and Benefits

To learn more about the Chicago Biomedical Consortium (CBC) Entrepreneurial Fellows (EF) Award program and how you can apply, register to attend a CBC Information Session. Events will be held in-person and virtually via Zoom. You may choose one or more sessions to attend.

October 20, 2021 12:00 PM | October 26, 2021 1:00 PM
October 22, 2021 12:45 PM | October 28, 2021 1:00 PM

REGISTER TODAY: www.chicagobiomedicalconsortium.org

CBC Information Sessions: Accelerator Award & Catalyst Award

Join us at one of three upcoming Information Sessions as we Accelerator Award, a \$250K/two year grant, is changing and it are rolling out to fund new translational opportunities. We will your ideas and feedback on the Catalyst Award which provides collaborative project. Attend In-Person or Virtually. Registration

1 UNIVERSITY OF ILLINOIS AT CHICAGO Herman Auditorium 900 S. Auburn, MEBB Chicago, IL March 29 11:00 AM	2 NORTHWESTERN UNIVERSITY Searle Seminar Room 1-143 E33 E Superior Chicago, IL March 30 11:00 AM	3 THE UNIVERSITY OF CHICAGO 880 9241 Chicago, IL March 30 11:00 AM
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Questions?
Nancy Tyrrell at nancy.tyrrell@northwestern.edu
www.ChicagoBiomedicalConsortium.org

The Searle Funds

Information Sessions

Multiple CBC Catalyst & Accelerator Awards Info Sessions:

- February 3, 2021 via Zoom
- March 29, March 30 and April 1, 2022 (In-person at the three CBC Campuses)

CBC Entrepreneurial Fellows Info Session
October 8th (UChicago), October 12th (UIC), October 14th (NU),
October 20, 2021 (Rush Univ) October 22, 2021 (IIT), October 26,
2021 (Loyola) October 28, 2021 (Rosalind Franklin Univ)

Meeting Platform: In-person and via Zoom





Virtual Booths

The CBC participated in two virtual booths this year as we worked to promote CBC award programs and inclusively build the next generation of Chicagoland's bio-entrepreneurs by casting a wide net to find the best potential biotech talent for the CBC Entrepreneurial Fellows program and retain them here in Chicagoland.

- The 2021 SACNAS National Diversity in STEM Conference
- The 2021 Annual Biomedical Research Conference for Minority Students (ABRCMS)



Podcasts

March 2, 2022

Reset with Sasha-Ann Simons at WBEZ Chicago
 "Chicago Innovators: A four-person cohort may seed the biotech industry in Chicago"
 Reset checks in with CBC Executive Director, Michelle Hoffmann for the latest on CBC's pilot Entrepreneurial Fellows program to train the city's next generation of bio-entrepreneurs.

July 6, 2022

Lab Rats to Unicorns hosted by John Flavin of Portal Innovations
 "Ecosystem_e.017"
 CBC Executive Director, Michelle Hoffmann, John Conrad of iBio, and Azurii Collier of AbbVie provides insight on what it means to be involved in Chicago's emerging life science ecosystem.



Community Engagement

The CBC actively participates in the Chicago biomedical community through speaking engagements, collaborative outreach opportunities and supportive partnerships with like-minded organizations.

In conjunction with the City of Chicago's economic development arm, World Business Chicago (WBC), the CBC is also working with accelerators Portal Innovations, MATTER, and with organizations such as iBio, the Illinois Science and Technology Council (ISTC) to ensure our R1 universities are recognized and in the center of our burgeoning biotech ecosystem.



CBC Donors, Program

The Searle Funds

at The Chicago Community Trust



Portal
Innovations



Partners & Ecosystem

- mHub
- Cures Within Reach
- Horizon Therapeutics 3.8 Initiative
- Rosalind Franklin University
- Smart Health Activator's BioPathways
- Society of Physician Entrepreneurs
- Illinois Women Conquer Alzheimer's (Alzheimer's Association)
- iBIO
- Discovery Partners Institute (DPI)
- Shirley Ryan AbilityLab
- CHlentist
- IllinoisVentures
- P33
- ThinkChicago
- Illinois Science & Technology Coalition (ISTC)
- UICentre
- Polsky Center for Entrepreneurship & Innovation
- SACNAS (Society for the Advancement of Chicanos/Hispanics and Native Americans in Science)
- ABRCMS (Annual Biomedical Research Conference for Minoritized Students)
- World Business Chicago
- Women-in-Bio (WIB)
- Roivant Social
- MATTER
- The Garage at Northwestern
- NU's INVO
- UIC's Office of Technology Management (OTM)
- Rush University Research & Innovation
- Chicago Council on Science and Technology (C2ST)
- STEM Circuits
- NU's Chemistry of Life Process Institute



CALL FOR APPLICATIONS

CBC CATALYST AWARD

Round 32

APPLICATION SUBMISSION DEADLINE:
NOVEMBER 18, 2022

TO APPLY:



SCAN ME

Visit our website for more details:
<https://bit.ly/CBC-CatalystAward2022>



Questions?

✉ Eleonora Gatta at
eleonora.gatta@northwestern.edu
www.ChicagoBiomedicalConsortium.org



Catalysts are **one-time incentive awards (up to \$250,000)**, focused on basic biological/ biomedical research with transformative potential, made to **collaborative teams** with principals and other strong representation from **at least two of the CBC institutions** (Northwestern University, The University of Chicago and University of Illinois Chicago).

The CBC gratefully acknowledges support from: **The Searle Funds** at The Chicago Community Trust

CALL FOR APPLICATIONS CBC ACCELERATOR AWARD

APPLICATION SUBMISSION ACCEPTED:
ON A ROLLING BASIS

Visit our website for more details:
<https://chicagobiomedicalconsortium.org/awards/accelerator-award/>

TO APPLY:



SCAN ME



Questions?

✉ Nancy Tyrrell at
Nancy.Tyrrell@northwestern.edu
www.ChicagoBiomedicalConsortium.org



The CBC Accelerator Award is a **milestone-driven award program (up to \$250,000)** focused on **translational research** toward therapeutics or associated biomarkers and diagnostics. **Award recipients will be mentored** by faculty, industry experts, potential investors, technology transfer officers and CBC personnel.

The CBC gratefully acknowledges support from: **The Searle Funds** at The Chicago Community Trust

Full-Time Immersive Bio-Entrepreneurial Training

Seeking Recent PhDs and Postdocs for a One-Year Paid Fellowship Opportunity

- *Partner with renowned Chicago researchers
- *Experientially learn the path to commercialization
- *Networking to the Chicago biotech ecosystem
- *Attractive salary and benefits



The CBC actively welcomes women, minorities, veterans, and persons with disabilities to apply.

ABOUT US

The Chicago Biomedical Consortium is working to recruit and retain talent in Chicago. The CBC Entrepreneurial Fellows Award program exposes Fellows to a breadth of real-world experiences across the CBC institutions and connects trainees to the Chicago biomedical community.

Scan below to learn more!



https://bit.ly/CBC_EF

Questions?

✉ Elizabeth McMath
elizabeth.mcmath@northwestern.edu

The CBC gratefully acknowledges support from the Searle Funds at The Chicago Community Trust and program partner: P33

The Searle Funds
at The Chicago Community Trust





Register Today!

CBC 19TH ANNUAL SYMPOSIUM

Stress and Human Health: Diabetes

November 17, 2022
8:30 AM - 6:30 PM

Location:

Northwestern Medicine Prentice Women's Hospital
250 E. Superior St., Chicago IL 60611
and virtually via ZOOM

Session Topics:

- Stress in diabetes: integrated nutrition, obesity, and diabetes
- Stress from the micro and macro environment in complications and progression of diabetes
- Stress in diabetes: reciprocal aspects of hypoxia, rhythms, sleep and social determinants

Poster Submissions welcome: https://bit.ly/CBCSymp22_Postor

KEYNOTE SPEAKERS



DR. ARLEEN TUCHMAN, PHD
Professor of History, Vanderbilt University
and renowned author of "Diabetes: A History of Race and Disease"



DR. ROHIT KULKARNI, MD, PHD
Senior Investigator, Joslin Diabetes Center;
Principle Faculty at Harvard Stem Cell Institute.

<https://bit.ly/CBCsymp2022>



Scan to register

www.ChicagoBiomedicalConsortium.org

Organizers:

Louis Philipson, The University of Chicago
Julian Solway, The University of Chicago

Brian Layden, University of Illinois Chicago
Joseph Bass, Northwestern University

This symposium is
generously sponsored by:

The Searle Funds
at The Chicago Community Trust



2022 Chicago Biomedical Consortium 19th Annual Symposium

"Stress and Human Health: Diabetes"

CALL FOR POSTER PRESENTATIONS

November 17, 2022

Symposium: 8:30 - 6:30 PM
Poster Session: 11:45 - 1:00 PM

Northwestern Medicine
Prentice Women's Hospital
Room L & Harris Atrium
250 E. Superior Street
Chicago, IL 60611

DEADLINE:
November 1, 2022



Scan QR code or go to:
https://bit.ly/CBCSymp22_Postor

www.ChicagoBiomedicalConsortium.org

Organizers: Louis Philipson, The University of Chicago
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