19th Annual CBC Symposium
Stress and Human Health: Diabetes

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

Northwestern Medicine
Prentice Women’s Hospital
250 East Superior Street
Chicago, IL 60611

Credit: Kulkarni laboratory, Joslin Diabetes Center

www.chicagobiomedicalconsortium.org
Chicago Biomedical Consortium

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 (UIC) 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.

CBC History

The CBC was launched in 2006 with a generous grant of $5 million per year from the Searle Funds at The Chicago Community Trust (SFCCT). During the 16 years of operations, the CBC has strengthened the Chicago biomedical community through a series of innovative Catalyst, Accelerator and Entrepreneurial Fellows programs, leveraging the strong foundation that has been established with a focus on translational research and entrepreneurship. Funding provided by the CBC has resulted in more than 370 grant awards and $917 million in additional research funding and resulted in over 2,700 peer-reviewed scientific publications that has brought together faculty across the CBC institutions into new collaborations. The CBC has helped scholars transcend institutional boundaries by spearheading the Open Access Initiative, which allows CBC-affiliated researchers to utilize research cores at any CBC university at the same cost as the home institution. The CBC has organized more than 75 educational events, including 18 annual symposia, all showcasing research supported by the CBC.

CBC Leadership

Luisa DiPietro, DDS, PhD
Director, Center for Wound Healing and Tissue Regeneration
Professor of Periodontics
Department of Periodontics, College of Dentistry
CBC Scientific Director, University of Illinois at Chicago

Lucy Godley, MD, PhD
Hospira Foundation Professor
Departments of Medicine and Human Genetics
Professor, Department of Medicine, Section of Hematology/Oncology
CBC Scientific Director, The University of Chicago

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

Michelle Hoffmann, PhD
CBC Executive Director
Thank you for joining us today! This unique event aims to gather local scientists and key life science players to highlight research from the bench to the bedside to the community. We are excited to have two highly renowned scientists join us as keynote speakers: Dr. Rohit Kulkarni, Harvard Medical School/Joslin Diabetes Center, and Dr. Arleen Tuchman, Vanderbilt University, who is well known for authoring “Diabetes: A History of Race and Disease.” Our two keynotes, along with 12 outstanding featured researchers from Northwestern University, the University of Illinois Chicago, and the University of Chicago, will discuss stress in diabetes while encouraging a rich conversation among experts in the field.

Meet the Symposium Organizers

Lead Organizers:

Joseph T. Bass, MD, PhD
Northwestern University,
Feinberg School of Medicine

Brian Layden, MD, PhD
University of Illinois Chicago

Louis Philipson, MD, PhD
The University of Chicago

Julian Solway, MD
The University of Chicago

Supporting Organizers:

Grazia Aleppo-Kacmarek, MD, PhD
Northwestern University
Feinberg School of Medicine

Raghu Mirmira, MD, PhD
The University of Chicago

Monica Peek, MD
University of Illinois Chicago

Sirimon Reutrakal, MD
University of Illinois Chicago

Robert Sargis, MD, PhD
University of Illinois Chicago

Amisha Wallia, MD, MS
Northwestern University
Feinberg School of Medicine

The CBC Symposium is generously sponsored by:

The Searle Funds
at The Chicago Community Trust

GenScript

PROBIO
# Program of the Day

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:30 AM</td>
<td>Registration, Continental Breakfast <em>(Harris Atrium)</em></td>
</tr>
<tr>
<td>8:45 AM</td>
<td>Zoom waiting area open and Poster Session set-up <em>(Harris Atrium)</em></td>
</tr>
<tr>
<td>9:00 AM</td>
<td>Welcome and Opening Remarks by Michelle Hoffmann, PhD, CBC Executive Director and CBC Symposium Organizer(s) <em>(Room L)</em></td>
</tr>
</tbody>
</table>

### OPENING - MORNING SESSION

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:10 AM</td>
<td>KEYNOTE SPEAKER: Arleen Tuchman, PhD <em>(Vanderbilt)</em></td>
</tr>
<tr>
<td></td>
<td><em>Historical Reflections on Stress, Race, and Diabetes</em></td>
</tr>
<tr>
<td>9:55 AM</td>
<td>Chairs I Session Introduction:</td>
</tr>
<tr>
<td></td>
<td>Lisa R. Beutler, MD, PhD <em>(NU)</em> &amp; Scott André Oakes, MD <em>(UChicago)</em></td>
</tr>
<tr>
<td>10:05 AM</td>
<td>Tina Drossos, PhD <em>(UChicago)</em></td>
</tr>
<tr>
<td></td>
<td><em>Nutrition and Obesity: Key Factors in Diabetes Management</em></td>
</tr>
<tr>
<td>10:25 AM</td>
<td>Krista Varady, PhD <em>(UIC)</em></td>
</tr>
<tr>
<td></td>
<td><em>Health benefits of intermittent fasting</em></td>
</tr>
<tr>
<td>10:45 AM</td>
<td>Pingwen Xu, PhD <em>(UIC)</em></td>
</tr>
<tr>
<td></td>
<td><em>Estrogens in the brain and metabolic adaptation to temperature and nutritional stresses</em></td>
</tr>
<tr>
<td>11:05 AM</td>
<td>Grant Barish, MD, PhD <em>(NU)</em></td>
</tr>
<tr>
<td></td>
<td><em>B cell lymphoma 6 regulates sexually dimorphic hepatic lipid metabolism and steatosis</em></td>
</tr>
<tr>
<td>11:25 AM</td>
<td>Q&amp;A panel discussion</td>
</tr>
<tr>
<td>11:45 AM</td>
<td>Lunch and Poster Session <em>(Harris Atrium)</em></td>
</tr>
</tbody>
</table>

### OPENING - AFTERNOON SESSION

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:05 PM</td>
<td>KEYNOTE SPEAKER: Rohit Kulkarni, MD, PhD <em>(Joslin/Harvard)</em></td>
</tr>
<tr>
<td></td>
<td><em>Diabetes - a consequence of miscommunication between exocrine and endocrine cells?</em></td>
</tr>
<tr>
<td>1:50 PM</td>
<td>Chairs II Session Introduction:</td>
</tr>
<tr>
<td></td>
<td>Talia N. Lerner, PhD <em>(NU)</em> &amp; Celeste Thomas, MD <em>(UChicago)</em></td>
</tr>
<tr>
<td>1:55 PM</td>
<td>Robert Sargs, MD, PhD <em>(UIC)</em></td>
</tr>
<tr>
<td></td>
<td><em>Swimming in a Pool of Stressors: Environmental Toxicants, Health Justice, and the Diabetes Pandemic</em></td>
</tr>
</tbody>
</table>
Program of the Day continued

2:15 PM  
**Raghu Mirmira, MD, PhD** (UChicago)  
*New Perspectives on Type 1 Diabetes: The Beta Cell under Stress*

2:35 PM  
**Amisha Wallia, MD, MS** (NU)  
*Stress, Cardiovascular Disease, and Diabetes in the COVID-19 Era*

2:55 PM  
**Jill Weissberg-Benchell, PhD, CDCES** (NU)  
*Adolescent Coping and Adapting to Life with T1D*

3:15 PM  
Q&A panel discussion

3:35 PM  
20 Minute Break

**SESSION III Stress in diabetes: reciprocal aspects of hypoxia, rhythms, sleep, and social determinants**

3:55 PM  
Chairs III Session Introduction:  
**Selwyn O. Rogers Jr., MD, MPH** (UChicago) & **Brian Layden, MD, PhD** (UIC)

4:00 PM  
**Kristen L. Knutson, PhD** (NU)  
*Sleep health and metabolic disorders: A review of the evidence*

4:20 PM  
**Sirimon Reutrakul, MD** (UIC)  
*Sleep interventions and glucose metabolism*

4:40 PM  
**Pamela Martyn-Nemeth, PhD, RN, FAHA, FAAN** (UIC)  
*Stress and Sleep in Type 1 Diabetes*

5:00 PM  
**Kirstie Danielson, PhD** (UIC)  
*A Novel Electronic Medical Record Diabetes Screening Program in an Urban Academic Hospital Emergency Department*

5:20 PM  
Q&A panel discussion

5:40 PM  
Closing remarks by **CBC Symposium Organizers Julian Solway, MD** (UChicago) and **Louis Philipson, MD, PhD** (UChicago)

5:55 PM  
Reception (*Harris Atrium*)

6:30 PM  
Adjourn Symposium

Acknowledgments

This Symposium is generously supported by the Searle Funds at The Chicago Community Trust and GenTech PROBIO
Keynote Speakers’ Biographies

**Rohit Kulkarni, MD, PhD**
Professor of Medicine
Harvard Medical School
Margaret A. Congleton Chair and Co-Head
Section on Islet & Regenerative Biology
Joslin Diabetes Center
Cambridge, MA

Dr. Kulkarni, MD PhD holds the Margaret A. Congleton Chair and is Professor of Medicine, at Harvard Medical School. He is Co-Section Head of Islet Cell and Regenerative Biology Section and Associate Director of the DRC at Joslin Diabetes Center. He is recognized for research in diabetes by the Ernst Oppenheimer Award by the Endocrine Society, the Albert Renold Prize by the European Association for the Study of Diabetes (EASD), and the Julio V. Santiago MD Memorial Lecture, among others. He is an elected member of the American Association of Clinical Investigation and the Association of American Physicians. His laboratory is focused on studying pancreatic islet biology and organ cross-talk with the long-term goal of preventing progression and/or curing human diabetes.

**Arleen Tuchman, PhD**
Nelson O. Tyrone, Jr. Chair in History
Professor of History
History Department
Vanderbilt University
Nashville, TN

Dr. Tuchman is a specialist in the history of medicine in the United States and Europe, with research interests in the cultural history of health, disease, and addiction. She is the author of three books, the most recent being Diabetes: A History of Race and Disease (Yale University Press, 2020), which won the 2021 PROSE Book Award in History of Science, Medicine, and Technology from the Association of American Publishers, and the 2022 George Rosen Prize in the history of public health from the American Association for the History of Medicine. She is currently working on a history of addiction and the family in the United States. Tuchman is a past director of Vanderbilt University’s Center for Medicine, Health, and Society (2006-2009) and is the co-creator of a historic medicinal garden on Vanderbilt University’s campus.
Dr. Barish is the Martha Leland Sherwin Professor of Medicine at Feinberg. Dr. Barish received his A.B. in Molecular and Cell Biology from the University of California, Berkeley, and his M.D. from the University of Michigan. Following his clinical training in internal medicine and endocrinology at the University of California, San Francisco, he pursued postdoctoral studies in molecular biology and nuclear hormone receptor signaling at the Salk Institute with Dr. Ronald Evans. He joined Northwestern University in 2012 and is currently a tenured Associate Professor in the Division of Endocrinology, Metabolism, and Molecular Medicine.

Dr. Barish’s research is focused on transcriptional mechanisms controlling type 2 diabetes mellitus and related comorbidities, skeletal muscle remodeling, and inter-organ communication. To these ends, his laboratory uses a variety of genetic, molecular, and biochemical methods as well as physiological models. His group has identified powerful roles for the transcriptional repressor B cell lymphoma 6 (BCL6) in control of body fat distribution, glucose metabolism, and non-alcoholic fatty liver disease, as well as the impact of exercise on epigenetic regulation. His work has been supported by R01grants from the NIH, a Veterans Administration Merit Award, and funding from Pfizer, Boehringer Ingelheim, and the American Diabetes Association.

In addition to his research, Dr. Barish is the site director for Northwestern’s endocrinology clinic at the Jesse Brown VA Medical Center, where he attends to veterans with a broad range of endocrine disorders and trains clinical fellows. He has served on study sections for the NIH and international grant review groups as well as the editorial board for the Journal of Clinical Investigation. Dr. Barish’s past honors include election to Alpha Omega Alpha Honor Medical Society and the American Society for Clinical Investigation.

Dr. Danielson is an Associate Professor of Endocrinology, Diabetes & Metabolism and Epidemiology & Biostatistics at the University of Illinois Chicago (UIC). She received her PhD in Epidemiology from the University of Wisconsin-Madison; and completed postdoctoral training in Endocrinology at the University of Chicago, and Epidemiology at UIC. Dr. Danielson’s expertise as an epidemiologist is in the area of type 1 diabetes (T1D), specifically complications of the disease and therapies for T1D, along with biostatistical approaches for large cohort and clinical trial studies. Her previous research has investigated the epidemiology of osteoporosis, cardiovascular disease, and altered reproductive function in patients both living with T1D and after being functionally cured of T1D by islet cell transplantation. And conversely, the impact of bone hormones, vascular function, and estrogen/sex differences on the ability of islet cell transplant to functionally cure T1D. Dr Danielson is internationally recognized for her work in the area of islet cell transplant as a functional cellular cure for T1D, and leads the UIC clinical research team that submitted the first Biologics License Application to the FDA to make islet cell transplant part of standard of care in the U.S. More recently, Dr. Danielson has expanded her research to screening underserved patients for type 2 diabetes in the emergency department at UIC. She has been funded by NIH, the CDC, the American Diabetes Association, UIC, foundations, and industry. Dr Danielson has received several research awards and high praise for her teaching and mentoring, directly supervising dozens of students to date in diabetes research at UIC, and is frequently selected for presentations of her work. She developed and teaches one of the most popular Honors College seminars at UIC on Current Perspectives in Diabetes and Treatments.
Dr. Drossos is an Associate Professor in the Department of Psychiatry and Behavioral Neuroscience at The University of Chicago Medicine. Dr. Drossos is a practicing health psychologist with expertise in cognitive behavioral therapy (CBT) and working with patients/families who are suffering from chronic illness. Dr. Drossos is well trained in all aspects of CBT and it is the modality she uses. Dr. Drossos has established multiple collaborative care programs to help support and treat children/adolescents and families with chronic illnesses. Since 2011, Dr. Drossos has directed The Family Health and Wellness Program at the Kovler Diabetes Center. In this program, she directs psychology trainees to conduct psychological evaluations and short-term interventions for patients referred by endocrinologists. Additionally, she has studied whether emotional intelligence and regulation impacts glycemic control among patients with Type 2 Diabetes. She has also conducted a small, clinical trial looking at the effectiveness of a CBT intervention vs. a treatment as usual, control group aimed at improving emotional intelligence and consequently glycemic control in patients with Type 2 diabetes. Given Dr. Drossos’s expertise in managing psychiatric/psychological illness in patients with chronic medical conditions, she supervises and directs multiple specialty-based, co-located mental health programs. She supervises psychology graduate students who are co-located in the hematology-oncology clinics and is studying the impact of post-traumatic stress symptoms on pediatric oncology patients and their families. Additionally, Dr. Drossos currently directs and supervises the comprehensive pre-surgical, psychological evaluations of all patients with Median Arcuate Ligament Syndrome (MALS) and has been involved in all aspects of the current research protocol with this population. Dr. Drossos remains very invested in working with this patient’s suffering from chronic illness, specifically diabetes, and in conducting cognitive behavior based interventions in this population.

Dr. Knutson has a PhD in biomedical anthropology from the University at Albany, SUNY and was a postdoctoral scholar in the Section of Endocrinology at the University of Chicago. She is currently an Associate Professor in the Departments of Neurology and Preventive Medicine at Northwestern University Feinberg School of Medicine. Her research focuses on the association between sleep, circadian rhythms, and cardiovascular and metabolic diseases, including diabetes and obesity. She primarily focuses on these associations out in the “real world” (outside the laboratory) by examining habitual sleep patterns and biomarkers of cardiometabolic health. In addition, her research examines whether sleep health partially mediates socioeconomic or racial and ethnic disparities in cardiometabolic diseases. She has examined sleep and health in a variety of populations, including large observational studies in the U.S. as well as in international locations such as Haiti and Brazil. She is or has been PI/MPI of several US NIH awards to fund this research.
Dr. Martyn-Nemeth PhD, RN, FAHA, FAAN, is an Associate Professor in the Department of Biobehavioral Nursing Science at the University of Illinois Chicago. Dr. Martyn-Nemeth’s program of research centers on improving self-management behavior and reducing cardiovascular disease risk in persons with diabetes. She has approached this problem by examining psychological stressors and behaviors that influence self-management behavior and how they affect the outcomes glycemic control, glycemic variability. She has recently completed one NIH-NIDDK-funded study (R21DK116146) testing a novel cognitive behavioral therapy intervention to reduce fear of hypoglycemia in young adults with type 1 diabetes. A second study, a randomized controlled trial (R01DK121726), is underway, testing a novel remotely-delivered technology-assisted behavioral intervention to improve sleep and reduce distress among adults with type 1 diabetes.

Dr. Mirmira attended The University of Chicago and graduated in 1986 with a Bachelor’s degree with Honors in Chemistry. He then entered the MD-PhD program (known as the Medical Scientist Training Program), also at The University of Chicago. During his PhD training, he worked under the mentorship of Dr. Howard Tager studying insulin-receptor interactions. His work during this time set the foundation for the development of ultra-rapid- and ultra-long-acting insulins that are widely in use today to treat all forms of diabetes. He received his PhD degree in 1991, followed by his MD degree in 1993. Raghu subsequently completed his residency in Internal Medicine and subspecialty training in Diabetes and Endocrinology at the University of California at San Francisco. During his subspecialty training, Raghu did his research in the laboratory of Dr. Michael German, where he studied the regulation of genes in the insulin-producing β cell. During this time, he held the prestigious Physician Postdoctoral Fellowship Award from the Howard Hughes Medical Institute. Raghu moved to Indiana University in 2008 to assume directorship of the burgeoning Diabetes Center, where he subsequently built a nationally recognized program that earned NIH Center Funding in 2015. He was recruited to the University of Chicago in November of 2019, where he now serves as Professor in the Biological Sciences Division and Director of the Translational Research Center in the Pritzker School of Medicine.
Dr. Sirimon Reutrakul, MD
Professor of Medicine
Division of Endocrinology, Diabetes & Metabolism
University of Illinois Chicago
Chicago, IL

Dr. Reutrakul practices in the Division of Endocrinology, Diabetes, and Metabolism at UI Health. Dr. Reutrakul specializes in treating type 1 and type 2 diabetes, and has a clinical interest in glucose metabolism.

Dr. Robert Sargis, MD, PhD
Associate Professor of Medicine
Division of Endocrinology, Diabetes & Metabolism
Feinberg School of Medicine
University of Illinois Chicago
Chicago, IL

Dr. Sargis is a native Chicagoan who received his B.A. in chemistry from Carleton College in Northfield, Minnesota, prior to completing an MD/PhD at Rush University where he studied lipid and lipoprotein biochemistry under the mentorship of P.V. Subbaiah. Rob completed his internship and residency in Internal Medicine as well as a fellowship in Endocrinology, Diabetes, and Metabolism at the University of Chicago where he studied adipose physiology under Matthew Brady. Rob was on the faculty at the University of Chicago before being recruited to the University of Illinois at Chicago where he is now a tenured Associate Professor in the Division of Endocrinology, Diabetes, and Metabolism as well as Section Chief of Endocrinology at the Jesse Brown Veterans Affairs Medical Center. In addition to his research examining the impact of endocrine-disrupting chemicals (EDCs) on metabolic physiology, Rob has an active clinical practice focused upon caring for patients with diabetes, lipid disorders, and other metabolic diseases. As part of his commitment to education and mentorship, he serves as Director of the Physician-Scientist Development Program in the Department of Medicine. Rob’s goal is to advance understanding of environmental pollutants as drivers of the current metabolic disease epidemic and health disparities. Rob’s work spans the spectrum from cell-based and animal studies to clinical and population-based work. It is his hope that rigorous scientific inquiry examining the metabolic consequences of environmental contamination will serve as the foundation for public policy to mitigate the impact of pollution on human health as well as its disproportionate effects on vulnerable populations.

Dr. Krista Varady, PhD
Professor
Department of Kinesiology and Nutrition
University of Illinois Chicago
Chicago, IL

Dr. Varady is a Professor of Nutrition at the University of Illinois, Chicago. Her research focuses on the efficacy of intermittent fasting for weight loss and metabolic disease reduction in people with obesity. Her work is funded by the NIH, American Heart Association, International Life Sciences Institute, and the University of Illinois. She has published over 100 publications on this topic and is also the author of a book for the general public, entitled the “Every Other Day Diet”.
Amisha Wallia, MD
Associate Professor
Division of Endocrinology, Metabolism and Molecular and
Center for Health Services and Outcomes Research
Feinberg School of Medicine
Northwestern University
Chicago, IL

Dr. Wallia is a clinical trials expert and health services researcher, specializing in creating chronic care solutions for those with diabetes mellitus and on high-risk medications. She has collaborated across disciplines (engineering, product design), and utilized novel methods (user-center design, pragmatic trial methodologies) to help front line clinicians innovate new care solutions to improve diabetes care. She has recently been involved in several initiatives examining technology use for diabetes in the COVID-19 era. In addition, she currently serves an Associate Director for the Chicago Center for Diabetes Translation Research. Dr. Wallia completed her medical degree at the Georgetown University School of Medicine in Washington DC in 2005 and her Internal Medicine residency and subsequent fellowship and T32 training in Endocrinology at Northwestern University. She is an Associate Director for the Chicago Center for Diabetes Translation Research. She hopes to continue to utilize feedback directly from the community and from providers to help improve the quality and safety of diabetes care.

Jill Weissberg-Benchell, PhD, CDCES
Pediatric Psychologist
The Pritzker Department of Psychiatry and Behavioral Health
Professor of Psychiatry and Behavioral Sciences
Feinberg School of Medicine
Northwestern University
Chicago, IL

Dr. Weissberg-Benchell is a pediatric psychologist and a certified diabetes care and education specialist with over 30 years of research experience and clinical work with children, adolescents and families with diabetes and their families. Her academic appointment is as a Professor of Psychiatry at Northwestern University’s Feinberg School of Medicine. She has published research articles and offered workshops and lectures addressing issues such as improving self-management behaviors, family adaptation and coping, building adolescent resilience, the use of technology (CGM, Pumps and the Artificial Pancreas), and transitioning from pediatric to adult care. She is a co-author of two books, one that focuses on transitioning from pediatric to adult care, and another that focuses on working with adolescents with type 1 diabetes.

Chicago, IL
Dr. Xu earned a BA in Animal Science from South China Agricultural University and a Ph.D. in Neurophysiology from Virginia Tech. His dissertation investigated body weight regulation by hypothalamic neurotransmitters and energy-sensing molecules in chickens. His postdoctoral research with Yong Xu at Baylor College of Medicine identified essential neural populations mediating estrogenic regulation of physical activity and energy expenditure. In 2018, he joined The University of Illinois at Chicago as an assistant professor in the Department of Medicine, Division of Endocrinology, Diabetes, and Metabolism. Research in his lab aims to investigate the metabolic effects of estrogens in the brain.
Session Chairs’ Biographies

Dr. Beutler, MD PhD is an Assistant Professor of Medicine at Northwestern University Feinberg School of Medicine. She is a physician scientist who received her MD and PhD from the University of Washington and specializes in endocrinology and metabolism. Dr. Beutler’s lab’s goal is to understand how the gut and the brain communicate with each other to maintain body weight, and how this goes awry in diseases such as obesity.

Dr. Layden is an Associate Professor, tenured, in the Department of Medicine at the University of Illinois at Chicago and Jesse Brown Veterans Affairs Medical Center and the Division Chief for Endocrinology, Diabetes, and Metabolism at the University of Illinois at Chicago, and the director of the newly formed UIC Diabetes Center. The overall theme of my research is understanding metabolic diseases, with a particular focus on type 2 diabetes and gestational diabetes. I am currently funded by the NIH, VA, and DOD. My group has two major focus areas; first project is on how novel GPCRs contribute to physiological and pathological states. This project, in particular, focuses on GPCRs that are regulated by nutrients derived from the gut microbiome. The other project is focused on HKDC1, a gene that has been discovered through our work and shown to play a role in the development of hyperglycemia in pregnancy and gestational diabetes.

Dr. Lerner is an Assistant Professor of Neuroscience at Northwestern’s Feinberg School of Medicine. Her lab studies the neural circuit basis of motivation, reward learning, and habit formation. She is particularly interested in how individual variations in dopamine circuit function relate to differences in behavior and neuropsychiatric disease risk. Dr. Lerner earned her BS in Molecular Biophysics & Biochemistry from Yale University and her PhD in Neuroscience from UCSF and completed postdoctoral training at Stanford University.
Scott André Oakes, MD
Professor and Vice Chair of Research
Department of Pathology
The University of Chicago
Chicago, IL

Dr. Oakes attended medical school at the University of Connecticut during which he spent an additional year doing research at the NIH. After medical school, he completed residency in anatomic pathology at the Brigham and Women’s Hospital, and postdoctoral training at the Dana-Farber Cancer Institute. His research laboratory at the University of Chicago focuses on mechanistically understanding and drugging key cell stress pathways in cancer, inflammatory diseases, and metabolic disorders of the pancreas. His discoveries have been published in Science, Cell, Nature Cell Biology, Cell Metabolism, and other high impact journals. He is an inventor on five patents and cofounded a biotech startup called OptiKira that is developing drugs for cancer and other diseases. Dr. Oakes has won numerous awards for his research, including an HHMI Early Career Physician Scientist Award, American Cancer Society Research Scholar Award, Harrington Discovery Institute Scholar-Innovator Award, American Association for Cancer Research Award, Induction into the American Society for Clinical Investigation (ASCI), UCSF Outstanding Mentor Award, and Outstanding Investigator Award from the American Society for Investigative Pathology (ASIP).

Selwyn O. Rogers Jr., MD, MPh
Professor of Surgery
Executive VP, Community Health Engagement
Founding Director, Trauma Center
Chief, Section of Trauma and Acute Care Surgery
The University of Chicago
Chicago, IL

Dr. Rogers Jr., MD, MPH, FACS, is a widely respected surgeon and public health expert. As founding director of the University of Chicago Medicine Trauma Center, Dr. Rogers is building an interdisciplinary team of specialists to treat patients who suffer injury from life-threatening events, such as car crashes, serious falls, and gun violence. His team works with leaders in the city’s trauma network to expand trauma care on the South Side.

Dr. Rogers has served in leadership capacities at health centers across the country, including most recently as vice president and chief medical officer for the University of Texas Medical Branch at Galveston. Dr. Rogers has also served as the chair of surgery at Temple University School of Medicine and as the division chief of trauma, burns and surgical critical care at Harvard Medical School. While at Brigham and Women’s Hospital (BWH), he helped launch the Center for Surgery and Public Health to understand the nature, quality, and utilization of surgical care nationally and internationally.

Additionally, as executive vice president for community health engagement, Dr. Rogers works with faculty across the University of Chicago as well as members of the community to develop a multidisciplinary approach to trauma care and health disparities. His work will help enhance the understanding of social factors that affect victims of violence and underserved populations, in addition to identifying approaches necessary to achieving better outcomes for trauma victims.

Dr. Rogers’ clinical and research interests focus on understanding the healthcare needs of underserved populations. He has published numerous articles relating to health disparities and the impact of race and ethnicity on surgical outcomes.
Dr. Thomas’s academic interests are focused on understanding ways to efficiently improve the quality of care of diabetes management in the inpatient and outpatient settings. Specifically, she is working with multidisciplinary teams to decrease iatrogenic hypoglycemia and improve blood glucose control. She is also interested in the relationship between environmental chemical exposures and metabolic diseases.

Thank you for attending the 19th Annual CBC Symposium!

See you next year!
CBC Programs and Funding Opportunities

CBC Catalyst Award Program
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. https://bit.ly/CBC-CatalystAward2022

Next application deadline: November 18, 2022

CBC Accelerator Award Program
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. https://bit.ly/CBC_Accelerator

Applications are accepted on a Rolling Basis

CBC Entrepreneurial Fellows Program
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. https://bit.ly/CBC_EFprogram

Applications deadline for spring will be announced soon!

For more information about the CBC, visit us at:
www.chicagobiomedicalconsortium.org