

**Khorana Bose Orientation 2018 Agenda
May 19th, 2018**

- 9:00am** **Depart Getaway Hostel, 616 W. Arlington Place**
Transportation provided by Chicago Detours Tour
- 9:45am** **Arrive UChicago campus:**
Knapp Center for Biomedical Discovery (Room 1103)
900 E 57th St, Chicago, IL 60637
- 10:00** **Orientation Begins**
- 10:00 - 10:05** **Welcoming remarks**
Bala Srinivasan, Vice President for Global Initiatives and Strategy, Senior Associate Provost at UChicago
- 10:05 - 10:10** **WINStep remarks**
Aseem Ansari, Founder and Director of the Khorana and S.N. Bose Programs and *Professor of Chemical Genomics and Synthetic Biology*, University of Wisconsin-Madison
- 10:10 – 10:15** **Remarks by Neeta Bhushan, Consul General of India in Chicago**
- 10:15 -10:30** **UChicago Faculty Presentation: Bobby Kasthuri**
Neuroscience Researcher and Assistant Professor, Department of Neurobiology at UChicago
- 10:30 -10:45** **UChicago Faculty Presentation: Ian Foster**
Arthur Holly Compton Distinguished Service Professor, Department of Computer Science at UChicago and Distinguished Fellow and Senior Scientist, MCS Division, Argonne National Laboratory
- 10:45 – 11:00* *Break (light snacks provided)*
- 11:00 -11:15** **UChicago Faculty Presentation: Supratik Guha**
Professor at the Institute for Molecular Engineering at UChicago and Nanoscience and Technology Division Director at Argonne National Laboratory
- 11:15 -11:30** **UChicago Faculty Presentation: Marsha Rosner**
Charles B. Huggins Professor, Ben May Department for Cancer Research, Department of Neurobiology - Pharmacology and Physiology, UCCCC, Committee on Cancer Biology, Committee on Developmental Biology at UChicago
- 11:30 – 12:00** **Group activity organized by WINStep Forward**

12:00-1:00	<i>Lunch (Boxed lunches provided)</i>
1:00-1:40	UChicago Student Panel
1:40 – 1:55	UChicago Faculty Presentation Peter Littlewood Professor of Physics, James Franck Institute at UChicago and Former Director of Argonne National Laboratory
1:55 – 2:05	Polsky Center Showcase
2:05 – 2:20	<i>Break</i>
	Presentations by Peer Institutions
2:20 – 2:35	Washington University Presentation: Himadri Pakrasi Myron and Sonya Glassberg/Albert and Blanche Greensfelder Distinguished University Professor; Director, International Center for Energy, Environment and Sustainability (InCEES)
2:35 – 2:50	Purdue University Presentation: Heidi Arola Managing Director for Global Partnerships and India Engagement Coordinator, Purdue University
2:50 – 3:05	UIUC Presentation: Shachi Mittal and Krishna D. B. Anapindi Graduate Students, University of Illinois at Urbana-Champaign
3:05 – 3:20	Northwestern Presentation: Hank Seifert John E. Porter Professor of Biomedical Science and Associate Dean for Student Affairs, Northwestern University
3:20pm	Closing Remarks (1 mins)
3:30pm	Depart UChicago on by Chicago Detours Tour
6:00pm	Arrive Getaway Hostel, 616 W. Arlington Place

Bala Srinivasan

Vice President for Global Initiatives and Strategy and Senior Associate Provost, UChicago



Bala Srinivasan joined the University of Chicago in September, 2016. As the Vice President for Global Initiatives and Strategy and Senior Associate Provost, Srinivasan oversees the central University's global engagement activities and management of the University Centers in Hong Kong, Delhi, and Beijing. He also works to build academic partnerships and research collaborations with international partners, create global education opportunities, and strengthen the University's connections to foreign institutional partners, policymakers, and civic leaders. He also works closely with deans and faculty on academic opportunities, as well as with administrative leadership regarding issues of compliance and risk.

Prior to joining the University, Srinivasan served as Managing Director of Och Ziff Capital Management, based in India and Hong Kong; Executive Director of Goldman Sachs Hong Kong; and Associate Director of Jardine Fleming in Singapore, Hong Kong, and Mumbai. He received a B.S. in mathematics from CalTech in 1989 and a Ph.D. in mathematics from the University of Chicago in 1995.

Aseem Ansari

Founder and Director of the Khorana and S.N. Bose Programs and Professor of Chemical Genomics and Synthetic Biology, University of Wisconsin-Madison



Aseem Ansari is a Professor of Chemical Genomics and Synthetic Biology at the University of Wisconsin-Madison. Dr. Ansari co-founded the prestigious Khorana Program in 2007, S. N. Bose Program and Winstep Forward (WSF) in 2013, and Sci-ROI young investigators group in 2015. Khorana and Bose programs are funded by the Government of India (DBT & SERB) and were developed in partnership with the bilateral Indo-US Science and Technology Forum (IUSSTF), U.S. National Science Foundation (NSF), and WSF. These highly successful programs are akin to the Fulbright fellowship but tailored to undergraduates in science, technology, engineering and medicine.

Aseem began his scientific career as a summer intern in the laboratory of Dr. Obaid Siddiqi's at Tata Institute of Fundamental Research (TIFR) in Bombay. That experience led him to pursue his PhD in Chemical Biology at Northwestern University with Dr. Thomas O'Halloran. Aseem completed his training as a Whitney scholar with Dr. Mark Ptashne at Harvard University and Dr. Rick Young at MIT. At Harvard, he was a resident tutor at the Winthrop House and member of the Board of Tutors in Biochemical Sciences. The Ansari Lab at UW-Madison works on devising synthetic gene switches that control the fate of human embryonic stem cells and correct gene regulatory networks in neurodegenerative diseases. For more details, see: <https://ansarilab.biochem.wisc.edu/research.html>.

Neeta Bhushan

Consul General of India – Chicago



Mrs. Neeta Bhushan joined the Indian Foreign Service in 1994. As a career diplomat, her overseas assignments have included political and information work in Tokyo (Japan), Head of the Press, Culture and Information Wing in Dhaka (Bangladesh), and Head of the Economic and Commercial Wing in the Indian Embassy in Berlin (Germany). She also worked as Director in the Department of Economic Affairs, Ministry of Finance and as Joint Secretary (Parliament & Coordination) in the Ministry of External Affairs.

Before joining as Consul General of India in Chicago, she was Deputy Chief of Mission in Embassy of India, Abu Dhabi.

She is married to Mr. Anurag Bhushan. He was Consul General of India in Dubai and presently he is Joint Secretary in the Ministry of External Affairs. She has a daughter and a son.

Narayanan (Bobby) Kasthuri

Neuroscience Researcher and Assistant Professor, Department of Neurobiology at UChicago



Dr. Kasthuri is a neuroscience researcher at Argonne and an assistant professor (adjunct) in the Department of Neurobiology at The University of Chicago. He has an M.D. from Washington University School of Medicine and a D.Phil. from Oxford University, where he studied as a Rhodes scholar. As a postdoctoral fellow, Dr. Kasthuri developed an automated approach to large-volume serial electron microscopy ("connectomics"). The Kasthuri lab continues to innovate new

approaches to electron microscopic based connectomics reconstructions including making samples more amenable to automatic segmentation and combining proteomic and genomic approaches with electron microscopy. We are also now exploring the use of high-energy X-rays from synchrotron sources for mapping brains in their entirety. The Kasthuri lab is applying these techniques to developing, adult, and aged brains in service of answering the question: How do brains grow up and age?

Ian Foster

**Arthur Holly Compton Distinguished Service Professor, Department of Computer Science at UChicago
Distinguished Fellow and Senior Scientist, MCS Division, Argonne National Laboratory**



Ian Foster is director of the Computation Institute, a joint institute of the University of Chicago and Argonne National Laboratory. He is also an Argonne Senior Scientist and Distinguished Fellow and the Arthur Holly Compton Distinguished Service Professor of Computer Science.

Ian received a BSc (Hons I) degree from the University of Canterbury, New Zealand, and a PhD from Imperial College, United Kingdom, both in computer science. His research deals with distributed, parallel, and data-intensive computing technologies, and innovative applications of those technologies to scientific problems in such domains as climate change and biomedicine. Methods

and software developed under his leadership underpin many large national and international cyberinfrastructures.

Foster is a fellow of the American Association for the Advancement of Science, the Association for Computing Machinery, and the British Computer Society. His awards include the Global Information Infrastructure (GII) Next Generation award, the British Computer Society's Lovelace Medal, R&D Magazine's Innovator of the Year, and honorary doctorates from the University of Canterbury, New Zealand, and the Mexican Center for Research and Advanced Studies of the National Polytechnic Institute (CINVESTAV). He was a co-founder of Univa UD, Inc., a company established to deliver grid and cloud computing solutions.

Supratik Guha

Professor at the Institute for Molecular Engineering and Nanoscience at UChicago and Technology Division Director at Argonne National Laboratory



Supratik joined the University of Chicago in August 2015. Concurrently, he is also Director of the Nanoscience and Technology Division at Argonne National Laboratory. He has extensive industrial research and development experience, having spent twenty years at IBM Research where he was the Director of Physical Sciences since 2010.

Supratik received his Ph.D. in Materials Science from the University of Southern California in 1991. He was a post-doc in the Esaki-Chang group at IBM Research from 1991-92, following which he worked as a Senior Materials Scientist at the 3M Corporate Research Laboratory in St. Paul, MN between 1992-95. At 3M he was a member of the group that pioneered the first blue semiconductor injection laser using II-VI semiconductors. He returned to IBM Research in 1995 and, prior to beginning work in the area of oxide dielectrics, carried out research on the molecular beam epitaxial growth of GaN heterostructures on silicon substrates: in 1997 he was responsible for demonstrating the first working GaN/Si light emitting diodes. Supratik holds 85 US patents and has over 150 publications.

Supratik is a member of the National Academy of Engineering, and a Fellow of the Materials Research Society and the American Physical Society. He received the 2015 Industrial Applications of Physics award from the American Institute of Physics in 2015 and IBM Corporate Award in 2013.

Marsha R. Rosner

Charles B. Huggins Professor, Ben May Department for Cancer Research, Department of Neurobiology - Pharmacology and Physiology, UCCCC, Committee on Cancer Biology, Committee on Developmental Biology



Marsha R. Rosner earned a B.A. in biochemistry from Harvard University and her Ph.D. in biochemistry from MIT as a student of Professor Har-Gobind Khorana, a Nobel Prize Laureate. In 1982, she became an Assistant Professor in the Dept. of Applied Biological Sciences at MIT. In addition to the fellowship that she received from the American Cancer Society, Dr. Rosner received an MIT Endowed Fellowship, a Sloan Research Traineeship in Biophysics, an Institutional National Research Service Award, and a Research Award from the International Life Sciences Institute. Dr. Rosner joined the University of Chicago faculty as an Associate Professor in 1987 and was promoted to Full Professor in 1994. In 1994 she was named the first Chair of the Committee on Cancer Biology and built a

degree-granting graduate program leading to the Ph.D. in Cancer Biology. Under Dr. Rosner's leadership, the Committee on Cancer Biology became one of the most successful graduate programs within the Division of Biological Sciences at the University of Chicago. Dr. Rosner was appointed the Charles B. Huggins Professor and later became the Director of the Ben May Institute for Cancer Research and Chair of the newly formed Ben May Department for Cancer Research. She served as Departmental Chair for 13 years until 2013, and is currently a Fellow of the Institute for Molecular Engineering, the Institute for Genomics and Systems Biology, and the Committees on Cancer Biology, Developmental Biology, Systems Biology and Neurobiology at the University of Chicago. Dr. Rosner has received several honors including appointment as a Fellow of the American Association for the Advancement of Science (AAAS) in 2011.

The current focus of the Rosner laboratory is to understand fundamental signaling mechanisms leading to the generation of tumor cells and their progression to metastatic disease, particularly in triple-negative breast cancer that lacks targeted therapies. For more details, see: <https://benmay.uchicago.edu/faculty/rosner>.

UChicago Student Panel



Moderator: Emily Easton, Associate Dean of Students, Division of Physical Sciences

Emily W. Easton has served as the Associate Dean of Students in the Physical Sciences Division for the last five years, supporting graduate admissions for the Physical Sciences' Ph.D. and M.S. programs, as well as supervising divisional student programs such as the Eckhardt Research Scholars, the Women in Graduate Science, and the Graduate Research Fellowship workshop program. She holds a B.A. and M.A. from the University of Chicago and a Ph.D. from the University of Illinois at Chicago.



Pratiti Deb, UChicago graduate student, Institute for Molecular Engineering

Pratiti is originally from Kolkata, India, and before coming to The University of Chicago for graduate school, she got a BA in physics with a minor in mathematics from Cornell University, Ithaca, New York. She currently a graduate student in David Awschalom's lab at the Institute for Molecular Engineering studying defects in solid state systems for quantum applications

Her experience at UChicago: "I'm excited to be at The University of Chicago because it is recruiting talent and developing resources across physics, chemistry, materials science and biology to tackle problems in quantum science: as a graduate student, this gives me the freedom to work on interdisciplinary problem and have access to great facilities and tools as well as experts with diverse skill sets. Outside of science, I like exploring Chicago, learning about the city's rich cultural and political landscape, browsing, reading and buying books at the Seminary Co-op Bookstore and Powell's in Hyde Park and practicing the Indian classical dance form of Bharatanatyam."



Sugata Paul, UChicago graduate student, Division of Physical Sciences

Sugata Paul is originally from Kolkata, India. He attended Fergusson College, Pune, India for his undergrad in Physics. He is currently in the Masters Program at the Physical Sciences Division, at The University of Chicago and is working on Dark Matter detection collaboration in Paolo Privitera's lab.

His experience at UChicago: "What I love about being in UChicago is that every conversation is a learning experience. I have spent time debating, discussing, understanding and internalizing ideas with people from my program who are very enthusiastic and inquisitive about Physics, and Science in general. And meeting people from other programs and interacting with them continues to broaden my worldview and I am always fascinated to learn about all the wonderful work that is going on at the University. In my spare time, I like to whine about the weather, explore art, and find innovative ways to procrastinate."



Shabana M Shaik, UChicago graduate student, Division of Physical Sciences

Shabana is originally from Kurnool, Andhra Pradesh, India. She attended undergrad program at Sri Krishnadevaraya University, Anantapur, India with Biochemistry, Chemistry and Zoology as majors. She received her PhD in Chemistry from The University of Chicago and her doctoral work aimed at investigating the role of RNA structure on regulation of splicing. She is currently a post-doctoral fellow at the department of Neurobiology where she is investigating the impact of microbiome on microglial biology in murine models of Alzheimer's disease.

Her experience at UChicago: "I started my doctoral studies at National Centre for Biological Sciences (NCBS)-TIFR, Bangalore, India under the supervision of Prof. Yamuna Krishnan and relocated to UChicago along with the Krishnan group. Most of the studies that led to my graduate degree were accomplished here and the scientific environment around has primarily driven this. I remember my first day here, the Christmas Eve of 2014, I had lost my way and was approached by the University Police. I was very intimidated seeing them as I wasn't sure if I did something wrong, but I was relieved to know that the officer was just concerned about my safety given the bad weather and was offering his help. It was very scary moment, but now recalling it makes me feel funny about my reaction and thankful to the UChicago police for watching out. The dynamic and friendly cross-disciplinary scientific community and their willingness to collaborate, joined by the pleasant and helpful environment created by the support staff makes UChicago one of the best places to be."

Peter Littlewood

Professor of Physics, James Franck Institute at UChicago and Former Director of Argonne National Laboratory



Dr. Littlewood came to Chicago from Cambridge University, United Kingdom, where he was Head of the Cavendish Laboratory and the Department of Physics at the University of Cambridge. He previously headed the Theory of Condensed Matter group at the Cavendish Laboratory. During a 2003-2004 sabbatical leave, he was Matthias Scholar at Los Alamos National Laboratory.

Prior to joining Cambridge, he worked at Bell Laboratories from 1980 through 1997, finishing his time there as head of Theoretical Physics Research.

He holds a bachelor's degree in Natural Sciences (Physics) and a PhD in Physics, both from the University of Cambridge. He is a fellow of the Royal Society of London, the Institute of Physics, the American Physical Society, and an associate member The World Academy of Sciences (TWAS).

Polsky Center Showcase

Kiran Kumararaj, New Venture Challenge program, Polsky Center for Entrepreneurship and Innovation and University of Chicago Booth School



Kumararaj was born and raised in southern India until 9 years old, when his parents and he moved to the US. He now lives with his fiancée in Cincinnati, Ohio. He completed his B.S. in Accounting and Finance at Northern Illinois University. Currently, he works in Corporate Strategy at Procter & Gamble (multinational consumer goods company), while completing his weekend MBA program at University of Chicago Booth School of Business. He chose UChicago because of its stellar reputation for producing high quality leaders, many of whom he works with daily.

He is part of the New Venture Challenge program, which is a result of the close collaboration between the Polsky Center for Entrepreneurship and Innovation, the Social Enterprise Initiative at Chicago Booth, the University of Chicago Booth School of Business Executive MBA office, and the University of Chicago Undergraduate Careers in Entrepreneurship office. He sets the vision, goal and path for Commix, a B2B technology company, automating the Data Integration (DI) process for IT consulting firms.

Himadri Pakrasi

Myron and Sonya Glassberg/Albert and Blanche Greensfelder Distinguished University Professor; Director, International Center for Energy, Environment and Sustainability (InCEES), Washington University



Professor Pakrasi is interested in studying photosynthetic organisms that are the primary producers in our biosphere. During recent years, his research group has focused on cyanobacteria, prokaryotic organisms that perform oxygenic photosynthesis and are the progenitors of chloroplasts in plants and algae. Their investigations span multiple disciplines. They study energy transducing molecular machines such as Photosystem II, the unique membrane protein complex that catalyzes splitting of water to molecular oxygen. They also deploy cutting edge tools of synthetic and systems biology to understand the inner workings of cyanobacterial cells that are emerging as attractive biocatalysts for sustainable, carbon neutral production of food, feed and fuels.

Professor Pakrasi also serves as the founding director of the International Center for Energy, Environment, and Sustainability (InCEES) at Washington University. In this role, he helps catalyze formation of teams of researchers and teachers to address the great energy, environmental and sustainability challenges facing our planet. See <https://inceed.wustl.edu> for more information on InCEES.

Heidi Arola

Managing Director for Global Partnerships and India Engagement Coordinator, Purdue University



Heidi Arola joined Purdue's Office of Corporate and Global Partnerships in August 2015 after a 13-year career as a U.S. Foreign Service Officer. In her last position, she served as Chief of the Department of State's Education USA network, overseeing 400 educational advising centers that promote U.S. higher education in 170 countries to millions of international students. Heidi has a B.A. in English with a French minor from Tulane University, and an M.Sc. in Foreign Service, International Relations, from Georgetown University where she was Editor-in-Chief of the *Georgetown Journal of International Affairs*. Following service in the Peace Corps in Cape Verde, West Africa, and work with the Hmong refugee community in St. Paul, MN, Heidi joined the State Department as a U.S. Foreign Service Officer. She spent 11 years overseas, nearly six of which were in Brazil where she was last Public Affairs Officer and Deputy Consul General at the U.S. Consulate General in Recife, Brazil. Heidi was also posted in Rio de Janeiro, Amsterdam and Montreal. In her current position, Heidi's main role is to help Purdue increase the impact, scale, and sustainability of its global partnerships. She is specifically charged with overseeing Purdue's comprehensive engagement with India, a country of strategic importance for the university.

Shachi Mittal

Graduate Student, Department of Bioengineering, University of Illinois at Urbana-Champaign



Shachi earned her Bachelors and Master's degrees in Biochemical Engineering and Biotechnology from the Indian Institute of Technology, Delhi in 2014. Shachi was selected as a Khorana Scholar in 2013. Currently, she is a fourth-year graduate student in the department of Bioengineering in University of Illinois at Urbana-Champaign. She has been awarded the Illinois Distinguished Fellowship and the Beckman Graduate Fellowship for her work as a graduate student. Currently, her research interests include developing efficient and robust computational tools for early cancer detection, particularly breast cancer. Some of her other interests are building a non-profit organization for better healthcare facilities and research in developing countries, poetry and singing.

Krishna D. B. Anapindi

Graduate Student, Department of Chemistry, University of Illinois at Urbana-Champaign



Krishna was the inaugural S.N. Bose scholar with Prof. Aseem Ansari at UW-Madison in summer of 2013. After completing his integrated BS and MS in Chemistry from the Indian Institute of Technology Kharagpur in 2014, he joined the PhD program at the University of Illinois at Urbana-Champaign. His current research at UIUC focuses on understanding the varying roles of chemical neurotransmitter molecules in different physiological and disease states of the brain. He tries to solve this interdisciplinary problem using a wide range of tools from Chemistry, Neuroscience and Bioinformatics. After graduation, he plans to start a company that can address some of the important but underrated problems in the healthcare industry.

Hank Seifert

John E. Porter Professor of Biomedical Science and Associate Dean for Student Affairs, Northwestern University



Hank is the John E. Porter Professor of Biomedical Sciences in the Microbiology-Immunology Department of the Feinberg School of Medicine, and has been at Northwestern since 1988 after earning his PhD in Molecular Biology from The Pennsylvania State University in 1984. He joined The Graduate School as Associate Dean for Student Affairs in August 2015.

From 1999-2004 he served as Director of the Driskill Graduate Program in Life Sciences (formerly the Integrated Graduate Program), one of the largest PhD programs at Northwestern. Additionally, from 1998-2015 he was Associate Chair of the Department of Microbiology-Immunology and served as Acting Chair of

that department in 2001.

As Associate Dean for Student Affairs, Hank oversees TGS's Student Services office, the Student Life office, and the Training Grant Support and Postdoctoral Affairs office.