## **Student Presenters**

#### Lara Gechijian

During her undergraduate years at Wellesley College, Lara Gechijian worked as a research assistant in the lab of Matthew Meyerson (Broad Institute of Harvard and MIT) where she conducted research on the characterization of the potency, activity, and functional effects of a novel cytotoxic agent. Currently, Lara is a PhD candidate in Biomedical and Biological Sciences and Therapeutics at Harvard Medical School. She is



conducting her graduate research in the labs of Dr. Jay Bradner and Dr. Nathanael Gray on the development and characterization of novel epigenetic cancer therapeutics.

#### **Caitlin Nichols**

Caitlin Nichols is a 5th-year PhD student in the lab of Rameen Beroukhim at Dana-Farber Cancer Institute. Caitlin received her BS in molecular biology with a minor in editing from Brigham Young University in 2012, where she studied mouse models of osteoarthritis and the peptidomics of placental disease. Caitlin's work in the Beroukhim lab focuses on identifying and characterizing copy number–associated gene dependencies in cancer.



LANDRY CANCER BIOLOGY CONSORTIUM



## Fall Symposium 2017

# Developing The Future Of Cancer Therapeutics

8 November 2017 1:30 – 7:00 PM NRB350

## About the Landry Cancer Biology Consortium

The Landry Cancer Biology Consortium provides a unique and essential service to the cancer biology community at Harvard: it brings this community together to realize its full potential.

Harvard University is home to 14 life sciences PhD programs—but no one gets a PhD in cancer. To drive new advances in multidisciplinary cancer research, and to introduce students at all levels to research and training opportunities across Harvard, the Landry Cancer Biology Consortium creates new courses, scientific events, and co-curricular activities, all designed to bring students and faculty together to share recent developments, address current challenges, and promote synergy in cancer research and treatment. In addition, through the Landry Cancer Biology Research Fellowship a premier fellowship awarded to five exceptional PhD students each year—this program supports emerging leaders within the growing network of cancer biology researchers across Harvard.

This program is made possible by the generous support of the late C. Kevin Landry '66 and his family, colleagues, and friends. This gift represents a transformative investment in some of the best and brightest young minds in cancer biology.

#### Martin A. Nowak, PhD

Dr. Martin A. Nowak is Professor of Biology and Mathematics at Harvard University and Director of the Program for Evolutionary Dynamics. He works on the mathematical description of evolutionary processes, including the evolution of cooperation and human language, as well as the dynamics of virus infections and human cancer.



Dr. Nowak studied biochemistry and mathematics at the University of Vienna with Peter Schuster and Karl Sigmund, receiving his Ph.D. sub auspiciis praesidentis in 1989. He went on to the University of Oxford as an Erwin Schrödinger Scholar and worked there with Robert May, the later Lord May of Oxford, with whom he coauthored numerous articles and his first book, Virus Dynamics (2000). Dr. Nowak was a Junior Research Fellow at Wolfson College and later at Keble College, and a Wellcome Trust Senior Research Fellow. He became head of the mathematical biology group at Oxford in 1995 and Professor of Mathematical Biology in 1997. A year later, he moved to Princeton to establish the first program in theoretical biology at the Institute for Advanced Study. He accepted his present position at Harvard University in 2003.

A corresponding member of the Austrian Academy of Sciences, Dr. Nowak is the author of over 400 papers and four books, and the recipient of numerous prizes, including the Weldon Memorial Prize of Oxford University, the David Starr Jordan Prize of Stanford University, and the Akira Okubo Prize.

#### Stephanie Dougan, PhD

Dr. Stephanie Dougan received her PhD in Immunology from Harvard University where she studied lipid antigen presentation by CD1d and NKT cell development with Richard Blumberg. She then performed a postdoctoral fellowship with Hidde Ploegh at Whitehead Institute, where she became adept in somatic cell nuclear transfer and embryo manipulations for



the purpose of generating transnuclear and CRISPR genomemodified mice. Dr. Dougan joined the faculty at Harvard Medical School and Dana-Farber Cancer Institute in 2014, where her lab uses unique mouse models to study the immune response to tumors. She is particularly interested in tumors that do not induce a CD8 T cell response at baseline, and has been using pancreatic cancer as a model to develop new immunotherapies for non-T cell infiltrated tumors.

Dr. Dougan is the course director for the Harvard Immunology Summer Undergraduate Program, the co-director for the graduate school class Immunology 201, and is the course director for an Advanced Integrated Science course in Immunology for third year HMS medical students.

#### Pasi A. Jänne, MD, PhD

Dr. Pasi A. Jänne is the Director of the Lower Center for Thoracic Oncology at Dana Farber Cancer Institute and a Professor of Medicine at Harvard Medical School. He is also the Director of the Belfer Center for Applied Cancer Science at the Dana Farber Cancer Institute. After earning his MD and PhD from the School of Medicine at the University of Pennsylvania, Dr. Jänne completed his internship and residency in Medicine at Brigham and Women's Hospital, Boston. He



subsequently completed fellowship training at Dana Farber Cancer Institute/Massachusetts General Hospital combined program in medical oncology in 2001. In 2002, he earned a Masters Degree in clinical investigation from Harvard University.

Dr. Jänne's research combines laboratory based studies, with translational research and clinical trials of novel therapeutic agents in patients with lung cancer. His main research interests center around understanding and translating the therapeutic importance of oncogenic alterations in lung cancer. He has made seminal therapeutic discoveries, including being on one of the co-discoverers of EGFR mutations, and findings from his work has led to the development of several clinical trials. In addition, he led the first-in man clinical trial of the mutant selective EGFR inhibitor osimertinib which was approved by the Food and Drug Administration in 2015. Dr. Jänne has received several awards for his research, including from Uniting Against Lung Cancer, American Lung Association, and the Bonnie J. Addario Lung Cancer Foundation. He is an elected member to the American Society of Clinical Investigation (2008), American Association of Physicians (2016) and the Finnish Academy of Science and Letters (2016). Dr. Jänne is also the recipient of 2010 American Association of Cancer Research Richard and Hinda Rosenthal Memorial Award and a member of the 2010 AACR Team Science Award. In 2017, he was awarded an American Cancer Society Clinical Research Professorship.

#### Jeffrey Karp, PhD

Dr. Jeff Karp is a leading researcher in the fields of drug delivery, medical devices, stem cell therapeutics, and tissue adhesives. He is an Associate Professor at Brigham and Women's Hospital, Harvard Medical School, Principal Faculty at the Harvard Stem Cell Institute, and an affiliate faculty at the Broad Institute and at the Harvard-MIT Division of Health Sciences and Technology (where



he teaches to MIT-Sloan business school students). He has published >100 peer-reviewed papers (with >13,000 citations) and has given 250 national and international invited lectures and has >100 issued or pending national/international patents. Several technologies developed in his lab have formed the foundation for multiple products on the market and currently under development and for the launch of five companies including Skintifique, Gecko Biomedical, Alivio Therapeutics, Frequency Therapeutics, and Landsdowne Laboratories. In 2014, Skintifique brought 4 consumer healthcare products to market that are now globally available, and in 2017, Gecko Biomedical received European regulatory approval for its first tissue sealant product.

The Boston Business Journal recognized him as a Champion in Healthcare Innovation and MIT's Technology Review Magazine (TR35) also recognized Dr. Karp as being one of the top innovators in the world (3 members from his laboratory have subsequently received this award).

Dr. Karp was selected as the Outstanding Faculty Undergraduate Mentor among all Faculty at MIT and he received the HST McMahon Mentoring award for being the top mentor of Harvard-MIT students. To date, 18 trainees from his laboratory have secured faculty positions and several have transitioned into impactful careers in pharma, biotech, medtech, and venture capital.

## Schedule

1:30 — 1:55pm	Registration
1:55 — 2:00pm	Introduction
2:00 — 2:30pm	<b>Pasi Jänne, MD, PhD</b> EGFR Mutant Lung Cancer: From Clinic to Bench and Back to Clinic
2:30 — 2:45pm	<b>Caitlin Nichols</b> Loss of Heterozygosity of Essential Genes A Novel Class of Cancer Vulnerabilities
2:45 — 3:15pm	Martin Nowak, PhD The Evolutionary Dynamics of Cancer
3:15 — 3:30pm	Coffee Break
3:30 — 4:00pm	<b>Stephanie Dougan, PhD</b> Combination Immunotherapies: Clues From the Microenvironment
4:00 — 4:15pm	<b>Lara Gechijian</b> Targeting TRIM24 for Degradation With a Bromodomain-VHL Ligand Conjugate
4:15 — 4:45pm	Jeffrey Karp, PhD Towards Accelerated Medical Innovation
5:00 — 7:00pm	<b>Reception</b> NRB 8th Floor Sky lounge