2nd Suna Kıraç Workshop
on Neurodegenerative Disease
Istanbul

From Genetic Models of Neurodegenerative Disease to Therapies

January 15– 18, 2013

A cutting-edge update on recent advances in neurodegenerative disease research and therapy

- ***DESIGN, CREATION AND UTILIZATION OF STATE-OF-THE-ART GENETIC MODELS***
  - ***C. elegans***
  - ***D. melanogaster***
  - ***M. musculus***
  - ***iPS cells***
- ***TRANSLATION TO THERAPY DEVELOPMENT***
- ***PUBLICATION SKILLS WORKSHOP***
  - ***Publishing in Top Tier Scientific Journals – Insider's View***
- ***BIOINFORMATICS MINI-WORKSHOP***
  - ***Hands-on Exposure to Database Mining***

A total of 100 participants will be accepted to the workshop.
Registration is free and on a first-come, first-served basis.
Venue: Boğaziçi University, Rectorate Building, Lecture Hall

Registration deadline is Monday, January 7, 2013.

FOR REGISTRATION, PLEASE FILL IN THE FORM ATTACHED AND SUBMIT TO
kiracwsjan2013@gmail.com

www.alsturkiye.org

Program

Tuesday, January 15, 2013

Welcome to Brown faculty in the evening at Sumahan Hotel (A.N. Başak)

Wednesday, January 16, 2013

09.00am - 09.30am	Introduction and Welcome to Students (Başak, Fallon)
09.30am - 10.30am	Overview of Basic Genetic Concepts and Model Organisms (Reenan)
10.30am - 11.00am	Coffee Break
11.00am - 12.00pm	Anne Hart: ***C. elegans***; 1st Didactic Lecture Part I
12.00pm - 01.15pm	Lunch Break
12.15pm - 01.00pm	**Workshop on Publication Skills I** – for students (D. Lipscombe & J. Davenport) - with Lunch boxes
01.15pm - 02.00pm	Anne Hart: ***C. elegans***; 1st Didactic Lecture Part II + Discussion
02.00pm - 02.45pm	Rob Reenan: ***Drosophila***; 2nd Didactic Lecture Part I
02.45pm - 03.15pm	Coffee break
03.15pm - 04.00pm	Rob Reenan: ***Drosophila***; 2nd Didactic Lecture Part II + Discussion
04.00pm - 05.30pm	Gilad Barnea: ***Mouse***; 3rd Didactic Lecture Part I & II + Discussion
07.00pm - 10.00pm	Dinner with all attendants – Kennedy Lodge

Thursday, January 17, 2013

09.00am - 10.00am	Eric Morrow: Human Genetics and **iPS Cells**; 4th Didactic Lecture Part I
10.00am - 10.30am	Coffee break
10.30am - 11.15am	Eric Morrow: Human Genetics and **iPS Cells**; 4th Didactic Lecture Part II + Discussion
11.15am - 12.15pm	Diane Lipscombe: **Ion Channels**; 5th Didactic Lecture Part I
12.15pm - 02.15pm	**Working lunch: Bioinformatics Mini-Workshop** for a maximum of 60 graduate and senior students (2 successive sessions - 1 hour each) (Barnea, Fallon, Hart, Lipscombe, Morrow, Reenan and assistants)
01:15pm - 02.15pm	**Workshop on Publication skills II** – for faculty (D. Lipscombe & J. Davenport)
02.15pm - 03.15pm	Diane Lipscombe: **Ion Channels**; 5th Didactic Lecture Part II + Discussion
03.15pm - 03.45pm	Coffee Break
03.45pm - 05.15pm	Justin Fallon: **From Model Organism to Therapy**; 6th Didactic Lecture Part I & II + Discussion
07.00pm - 10.00pm	Dinner for Brown faculty – Traditional Turkish restaurant

Friday, January 18, 2013 **Formal Seminars on Research Topics**

09.00am - 09.30am	Anne Hart: Spinal Muscular Atrophy, Conserved Pathways, and Invertebrate Models
09.30am - 10.00am	Gilad Barnea: A Critical Period in the Formation of the Glomerular Map in the Olfactory Bulb
10.00am - 10.30am	Eric Morrow: Novel Genomic Methods to Investigate Genetic Architecture and Loci in Autism and Intellectual Disability
10.30am - 11.00am	Coffee break
11.00am - 11.30am	Diane Lipscombe: Neuronal Calcium Ion Channels: Function, Drug Targets, and Disease
11.30am - 12.00pm	A. Nazlı Başak: ALS in Turkey: Insights from Genetics
12.00pm - 12.30pm	Rob Reenan: Validity & Studies of Human Neurological Disease in Drosophila
12.30pm - 01.00pm	Justin Fallon: Developing a Therapeutic for Duchenne Muscular Dystrophy and ALS: From Electric Fish to Human Disease

End of Meeting – Evening free

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Application Form for Participants **DEADLINE: JANUARY 7, 2013** **Please submit to: kiracwsjan2013@gmail.com**	
Name - Surname:	Neslihan Zohrap İmre
Title:	PhD Student
Affiliation:	Bogazici University
Research/Thesis Topic:	The possible involvement of SIK2 and SIK3 genes in tumorigenesis
Bioinformatics workshop	*YES*
Dinner on 16.01.2013	*YES*
e-mail:	nzohrap@yahoo.com

Publication skills workshop: All can attend

Wednesday – Students

Thursday – Faculty

Bioinformatics workshop: Sixty students

Thursday – 2 sessions

THE FIRST SIXTY APPLICANTS WILL BE ACCEPTED TO THE BIOINFO WORKSHOP

APPLICATION IS ON A FIRST-COME, FIRST-SERVED BASIS

ATTENDING BROWN FACULTY

Anne Hart, Ph.D., Professor of Neuroscience

Dr. Anne Hart obtained her Ph.D. in Neuroscience at UCLA with Dr. S.L. Zipursky working on cell fate specification in the Drosophila eye. She undertook her post-doctoral training in C. elegans genetics with Dr. J. Kaplan at Massachusetts General Hospital and Harvard Medical School. Dr. Hart established her own laboratory at MGH and was a professor in the Department of Pathology for 13 years before moving to the Department of Neuroscience at Brown University in 2009. Her laboratory uses *C. elegans* to delineate 1) conserved molecular and cellular sensory mechanisms and 2) pathological mechanisms underlying neurodegenerative diseases, including Huntington's disease and Spinal Muscular Atrophy.

Robert Reenan, Ph.D., Professor of Biology

Robert Reenan trained as a graduate student in the laboratory of Dr. Richard Kolodner at Harvard Medical School where he studied the process of DNA repair in yeast, discovering genes that would become important in human cancer. He then pursued post-doctoral work in the Laboratory of Genetics at University of Wisconsin-Madison under Dr. Barry Ganetzky. There, he started a lifelong love affair with behavioral neurogenetics studying, in particular, ion channel genes in the fruit fly. He began his independent career at the University of Connecticut Medical School in the Department of Genetics where he discovered the process of RNA editing in the nervous system of the fly. Reenan joined the faculty at Brown University in the summer of 2006.

Gilad Barnea, Ph.D., Assistant Professor of Neuroscience

Dr. Gilad Barnea obtained his Ph.D. in Pharmacology from New York University, where he worked with Dr. Joseph Schelessinger on cloning and characterization of a new family of receptor tyrosine phosphatases. He then switched fields to Neuroscience and moved to Columbia University, where he studied the molecular organization of the mammalian olfactory system with Dr. Richard Axel. In 2007, Dr. Barnea established his own laboratory at Brown University. The main focus of his research is on understanding how the olfactory system detects and identifies odor stimuli and how this information is translated into behavioral outputs. The Barnea lab is developing molecular strategies for trans-synaptic labeling of neural circuits and for selectively recording the activation of specific dopamine receptor subtypes *in vivo* both in mice and in flies.

Justin Fallon, Ph.D., Professor of Neuroscience

Justin Fallon, professor of medical science, has a longstanding interest in developmental neurobiology and the mechanisms underlying neurological disease. More recently, he has been directly involved in developing therapeutics for muscular dystrophy. After his Ph.D. work in cell motility at the University of Pennsylvania, he spent three year as an NIH Postdoctoral Fellow at University College London, where he worked on axonal guidance and regeneration with Martin C. Raff. Fallon gained further training with U.J. McMahan at Stanford University, where he began his interest in synapse formation and plasticity. He had own laboratory at the Worcester Foundation for Experimental Biology for 10 years before moving to Brown in 1996.

Diane Lipscombe, Ph.D., Professor of Neuroscience

Diane Lipscombe studied with Humphrey P. Rang as a graduate student at University College London, UK, working on synaptic neuronal nicotinic receptors. In 1987, she moved to Yale University and subsequently Stanford University, where she studied with Richard W. Tsien as a postdoctoral fellow working on neuronal voltage-gated calcium ion channels and neuronal calcium signaling. Dr. Lipscombe established her own laboratory at Brown University in 1990. She is interested in the molecular mechanisms that underlie functional diversity in voltage-gated ion channels, including alternative pre-mRNA splicing. Dr. Lipscombe also investigates the role of voltage-gated channels in chronic pain and in psychiatric disorders, including bipolar disorder.

Eric Morrow, M.D., Ph.D., Assistant Professor of Biology, Psychiatry & Human Behavior

The Morrow lab investigates the genetic and molecular mechanisms underlying disorders of cognitive development, such as intellectual disability and autism. He received his MD and Ph.D degrees at Harvard and MIT. The long-term aim of this research is to establish a basic foundation for improved genetic diagnosis and treatment interventions designed to enhance cognitive and functional gains for patients. Because these disorders are highly genetic and in order to identify core molecular mechanisms, genome-wide "forward genetic" strategies to identify genetic mutations have been a principal focus. In complement to this, molecular and neurodevelopmental studies of identified pathways are underway in experimental systems in human and mouse tissues.

John Davenport, Ph.D., Associate Director of Brown Institute for Brain Sciences

R. John Davenport, PhD, is an Associate Director of the Brown Institute for Brain Science at Brown University. A graduate of Williams College, Dr. Davenport received his Ph.D. in chemistry from the University of Oregon, where he developed and applied innovative biophysical techniques to study the movement of enzymes and the interaction between proteins and nucleic acids. As a science writer, his journalistic work has appeared in Science, Cell, Newsweek, Wired, HHMI Bulletin, and other publications. Prior to coming to Brown, he was the associate editor of Science Magazine's Web site on the biology of aging. At Brown, he oversees the operations of the interdisciplinary Institute for Brain Science and stimulates collaborative research among the more than 100 Brown faculty members who study the brain and nervous system. He works with faculty members to secure funding to support interdisciplinary research, student training, and facilities.

ATTENDING BROWN TEACHING ASSISTANTS

Aslı Şahin
PhD Student
Reenan Lab

Altar Sorkaç
PhD Student
Hart Lab

Mustafa Talay
PhD Student
Barnea Lab

Workshop Details

Bioinformatics

Gilad Barnea, Justin Fallon, Anne Hart, Diane Lipscombe, Eric Morrow, Robert Reenan & assistants Aslı Şahin, Altar Sorkaç and Mustafa Talay

- Hands-on exposure to database mining
- Online tools used in exome/genome analyses

Publication Skills: Publishing in Top Tier Scientific Journals - Insider's View

Diane Lipscombe & John Davenport

Diane Lipscombe is currently the Chair of the Scientific Publications Committee for the Society for Neuroscience. In this position she oversees Journal activities as well as Scientific Misconduct. Diane is also Senior Editor for *Brain Research* and former Reviewing Editor for the *Journal of Neuroscience*.

John Davenport is a former associate editor in the News Department at *Science* and is currently the Associate Director of the Brown Institute for Brain Science where he coordinates numerous major scientific writing projects.

Aim: At the end of this workshop you will know:

- how to select the appropriate journal for your submission
- the logistics of manuscript submission, editorial review, peer-review, and editorial decisions
- how most reviewers approach reviewing
- the common mistakes authors make in manuscript preparation, submission, and rebuttal, revision, and resubmission
- the major reasons why manuscripts are rejected
- more about effective communication in science writing and data presentation
- examples of misconduct in science publishing