Tentative AGENDA (as of April 25, 2013)

GeneExpression Systems & Appasani Research Conferences of USA Presents:

Therapeutics Discovery Symposia - 2013

OPTOGENETICS - 2013 Meeting *on Neuronal Function to Mapping & Disease Therapeutics*

Venue: Hilton Garden Inn, 420 Totten Pond Road, Waltham, MA **USA** **Date:** May 1-2, 2013

Organizer: **Krishnarao Appasani, PhD.** GeneExpression Systems, Inc. of USA

	MAY 01, Wednesday		**MAY 02, Thursday**
8:00 AM	**REGISTRATION OPEN:** Coffee/Tea & Refreshments	**7:30 AM**	**REGISTRATION OPEN:** Coffee/Tea & Refreshments
8:45 – 10:45 AM	**Session I: JOINT INAUGURAL SESSION (on RNAi, Stem Cells & Optogenetics)**	**9:00 – 10:55 AM**	**Session V: JOINT INAUGURAL SESSION (on RNAi, Stem Cells & Optogenetics)**
8:45 – 9: 00 AM	**Welcome Note & Introduction of Keynote Speakers** **Krishnarao Appasani, PhD.** GeneExpression Systems, **USA**	9:00 – 9:10 AM	**Welcome Note & Introduction of Keynote Speakers** **Krishnarao Appasani, PhD.** GeneExpression Systems, **USA**
9:00 – 9:35 AM	**Keynote Lecture by: David T. Scadden, Jr., MD.** Harvard-Massachusetts General Hospital, **USA** **Title:** Stem cells and their niche: lessons from the blood	9:10 – 9:45 AM	**Keynote Lecture by: Alexander Schier, PhD.** Harvard University, **USA** **Title:** Non-coding RNAs as regulators of zebrafish embryogenesis
9:35 – 10: 10 AM	**Keynote Lecture by: Adam Cohen, PhD.** Harvard University, **USA** **Title:** All-optical electrophysiology with microbial rhodopsins	9:45 – 10:20 AM	**Keynote Lecture by: Rachel Meyers, PhD.** Alnylam Pharmaceuticals, Inc., **USA** **Title:** RNAi Therapeutics: From Discovery to Clinical Development
—	—	10:20 – 10:55 AM	**Keynote Lecture by: Antonello Bonci, MD.** National Institute on Drug Abuse-NIH, **USA** **Title:** Optogenetic approaches to synaptic plasticity and substance abuse
10:10 – 10:40 AM	**30 Minutes AM Break**	**10:55 – 11:15 AM**	**20 Minutes AM Break**
	Parallel Sessions on: RNAi, Stem Cells & Optogenetics Runs from Now onwards		**Parallel Sessions on: RNAi, Stem Cells & Optogenetics Runs from Now onwards**
	FOCUSSED OPTOGENETICS THEME TALKS		**FOCUSSED OPTOGENETICS THEME TALKS**
10:40 – 12:25 PM	**Session II: Optogenetics in Model Organisms** **Chair: Ethan Scott, PhD. Australia**	**11:15 – 12:35 PM**	**Session VI: Optogenetics in Neurology & Cardiology** **Chair: Antonello Bonci, MD. USA**
10:40 – 11:05 AM	**Arivinthan Samuel, PhD.** Harvard University, **USA** **Title:** Optogenetic dissection of a motor sequence	11:15 – 11:40 AM	**Emilia Entcheva, PhD.** Stony Brook University, **USA** **Title:** Optogenetic studies in cardiac muscle
11:05 – 11:30 AM	**Ethan Scott, PhD.** The University of Queensland, **Australia** **Title:** The zebrafish cerebellum: motor learning as studied with optogenetics	11:40 – 12:05 PM	**Oscar J. Abilez, MD, PhD.** Stanford University School of Medicine, **USA** **Title:** Multi-scale computational models for optogenetic control of cardiac function
11:30 – 11:45 AM	**Michael Sasner, PhD.** **SHORT Presentation** The Jackson Laboratory, **USA** **Title:** The JAX repository of mouse models for optogenetics research	12:05 – 12:20 PM	**Yonatan Katz, PhD.** **Short Presentation** Weizmann Institute of Science, **Israel** **Title:** Optopatcher – An electrode holder for simultaneous intracellular patch-clamp recording and optical manipulation
11:45 – 12:00 PM	**Adi Schejter** **SHORT Presentation** Technion-Israel Institute of Technology, **Israel** **Title:** Cellular-resolution optogenetics in the retina: Imaging and holographic patterned stimulation	12:20 – 12:35 PM	**Esther Krook-Magnuson, PhD.** **Short Presentation** University of California Irvine School of Medicine, **USA** **Title:** Closed-loop optogenetic control of epilepsy
12:00 – 12:25 PM	**Ute Hochgeschwender, MD.** Duke University Medical Center , **USA** **Title:** Combining optogenetics with bioluminescence	—	—
12:25 – 1:30 PM	**Lunch Break I hour 5min (Lunch Provided)**	**12:35 – 2.00 PM**	**Lunch Break 1 hour and 25 min (ON YOUR OWN)**

1:30 – 3:35 PM	**Session III: Opsin Biology & Behavioral Networks** **Chair: Nir Grossman, PhD. USA**	**2:00 – 4:00 PM**	**Session VII: Optogenetics in Neurological Diseases & Behavior** **Chair: Kay Tye, PhD. USA**
1:30 – 1:55 PM	**Nir Grossman, PhD.** MIT Media Lab & Beth Israel Deaconess Medical Ctr. **USA** **Title:** Principles of spatiotemporal optogenetic control of neural activity	2:00 – 2:25 PM	**Kay M. Tye, PhD.** Picower Institute of Learning and Memory, MIT, **USA** **Title:** Optogenetic dissection of novel circuits that control anxiety-related behaviors
1:55 – 2:20 PM	**Osamu Nureki, PhD.** The University of Tokyo, **Japan** **Title:** Structural basis for light-gated cation conductance by channelrhodopsin	2:25 – 2:50 PM	**Ming-Hu Han, PhD.** Friedman Brain Institute, Mount Sinai School of Medicine, **USA** **Title:** Pathway-Specific dissection of neural circuits underlying depression-related behaviors
2:20 – 2:45 PM	**Dany Adams, PhD.** Tufts University, **USA** **Title:** Using Archaerhodopsin to induce regeneration: the potential in resting potential	2:50 – 3:15 PM	**Melissa R. Warden, PhD.** Stanford University & Cornell University, **USA** **Title:** Cortical control of brainstem neuromodulatory systems in motivated behavior
2:45 – 3:10 PM	**Wim J.M. Vanduffel, PhD.** Harvard's Massachusetts General Hospital, **USA** **Title:** Optogenetically induced behavioral and functional network changes in primates	3:15 – 3:40 PM	**Dennis R. Sparta, PhD.** University of North Carolina at Chapel Hill, **USA** **Title:** Distinct extended amygdala circuits for divergent motivational states
3:10 – 3:35 PM	**Don Cooper, PhD.** University of Colorado, **USA** **Title:** Plasticity of excitability in the prefrontal cortex and its role in behavioral resilience to stress addiction: New insights from molecular neurogenetics and optogenetics	3:40 – 3.55 PM	**Ramón Piñol, PhD** Student **Short Presentation** George Washington University , **USA** **Title:** Oxytocin release facilitates paraventricular hypothalamic neurotransmission to brain stem cardiac vagal neurons
3:35 – 4:15 PM	**PM Break 40 min - Visit of Posters & Exhibits**	**3:55 – 4:20 PM**	**PM Break 25 min - Visit of Posters & Exhibits**
4:15 – 6:30 PM	**Session IV: Optogenetic Tools & Technology Platform** **Chair: Akihiro Yamanaka, PhD. Japan**	**4:20 – 6:00 PM**	**Session VIII: Optogenetics in Memory, GPCR Signaling & Enhanced gene expression systems** **Chair: Michael Bruchas, Ph.D. USA**
4:15 – 4:40 PM	**Akihiro Yamanaka, Ph.D.** Nagoya University, **Japan** **Title:** Optogenetical approach to reveal the regulatory mechanism of instinctive behaviors by the hypothalamic neurons	4:20 – 4:45 PM	**Ryan T. LaLumiere, PhD.** University of Iowa, **USA** **Title:** Optogenetics with cocaine-seeking and with memory consolidation
4:40 – 5:05 PM	**Jessica A. Cardin, Ph.D.** Yale University School of Medicine, **USA** **Title:** Cell type-specific optogenetic dissection of cortical networks *in vivo*	4:45 – 5:10 PM	**Xu Liu, PhD.** The Picower Institute for Learning and Memory, MIT, **USA** **Title:** Optogenetic activation of a memory engram
5: 05 – 5:30 PM	**Il-Joo Cho, PhD.** Korea Institute of Science and Technology, **Korea** **Title:** Neuronal probing with optogenetic tools	5:10 – 5:35 PM	**Kenji Tanaka, MD, PhD.** Keio University School of Medicine, **Japan** **Title**: Expanding the repertoire of optogenetically targeted cells with an enhanced gene expression system
5:30 – 5:55 PM	**Jin Hyung Lee, PhD.** Stanford University, **USA** **Title:** Cell type-specific optogenetic dissection of cortical networks *in vivo*	5:35 – 6:00 PM	**Michael R. Bruchas, Ph.D.** Washington University, **USA** **Title**: Optical control of GPCR signaling in the BLA
5:55 – 6:20 PM	**Sheila Nirenberg, PhD.** Weill Medical College of Cornell University, **USA** **Title:** A retinal prosthetic strategy with the capacity to restore normal or near-normal vision		
6:30 PM End of 1st day session		**6:00 PM End of Conference CLOSING REMARKS**	