40th Anniversary Program Winter Conference on Learning and Memory Thursday Jan 7 to Sunday January 10, 2016 Park City, Utah

THURSDAY JANURARY 7, 2016

Registration 3:00 -4:00 p.m. (Just outside Prospector 1-2)

Session 1: Dave Olton Data Blitz

Time: 4:00 to 6:00 p.m. Location: Prospector 1-2

Organizer: Wendy Suzuki (NYU)

Description: If you would like to present at this session, please e-mail Wendy Suzuki at <u>wendy@cns.nyu.edu</u> with the title of your presentation. Presentations are limited to 5 minutes, including discussion. Limit of 1 slide with a single panel will be strictly enforced.

PIZZA PARTY:

Time: 6:30 -8:00 p.m.

Location: Atrium

Session 2: Current Topics in the Neurobiology Exercise and the Brain

Time: 8:00-10:00 p.m. **Location:** Prospector 1-2

Organizer: Wendy Suzuki (NYU)

Speakers:

- Monika R. Fleshner (Colorado U) "Early life exercise and the gut microbiota: Long lasting impacts on brain, stress resistance, and metabolism"
- Henriette Van Praag (NIH) "Running modifies the circuitry and function of new neurons in the dentate gyrus"
- Michelle W. Voss (U of Iowa) "Investigating the relationships between physical activity and fitness with functional brain health in older adults"

FRIDAY JANUARY 8, 2015

Session 3: Altered Discrimination and Generalization in Mood and Anxiety Disorders

Time: 4:00-6:00 p.m. **Location:** Prospector 1-2

Organizers: Mark Gluck (Rutgers-Newark) and Michael Yassa (UCI)

Speakers:

- Rene Hen (Columbia), Harnessing hippocampal stem cells to improve pattern separation and decrease overgeneralization.
- Cheryl Conrad (Arizona State University), A two-hit animal model of PTSD, chronic stress and fear conditioning: Implications for extinction and fear generalization
- Mike Yassa & Stephanie Leal (UC, Irvine), Reducing emotional memory interference and implications for mood disorders
- Mark Gluck & Mohammad Herzallah (Rutgers University-Newark), SSRIs impairs generalization in Major Depressive Disorder, while PTSD results in overgeneralization.

Dinner: Check out the new eateries in town.

6:00-8:00 p.m.

Session 4: Functional Interactions between the Retrosplenial Cortex and the Hippocampal Memory System

Time: 8:00-10:00 p.m. **Location:** Prospector 1-2

Organizer: David Bucci (Dartmouth)

Speakers:

- David Bucci (Dartmouth): "Stimulus-stimulus associations in retrosplenial cortex"
- Kiriana Cowansage (Scripps Inst): "Genetic tracking and manipulation of plastic neocortical circuits"
- Fred Helmstetter (U of Wisconsin): "Cortical contributions to fear extinction and memory updating"
- David Smith (Cornell): "Retrosplenial Cortical Neurons Encode Important Navigational and Contextual Cues"

SATURDAY JANUARY 9, 2016

Session 5: Coordination of memory computations by brain oscillations

Time: 4:00-6:00 p.m. **Location:** Prospector 1-2

Organizer: Stephan Leutgeb (UCSD)

Speakers:

- Michael Hasselmo (Boston U): "Oscillations and the encoding of space and time"
- Shigeyoshi Fujisawa (Riken): "Representations of spatial information of self and other in the hippocampus"
- Stefan Leutgeb (UCSD): "Effects of the medial entorhinal cortex on spatial and temporal neuronal computations"

Dinner: Check out the new eateries in town.

6:00-8:00 p.m.

Session 6: Network interactions for cognition: bidirectional neuronal communication that guides memory retrieval.

Time: 8:00-10:00 p.m. **Location:** Prospector 1-2

Organizer: Matthew Shapiro (Mt. Sinai)

Speakers:

Speaker List Coming Soon

SUNDAY JANUARY 10, 2016

Session 7: Cutting edge molecular approaches to study neurobiological mechanisms of memory

Time: 4:00-6:00 p.m. **Location:** Prospector 1-2

Organizers: John Guzowski (UCI) and Mark Mayford (Scripps)

Speakers:

- Mark Mayford (Scripps): "Mapping and Manipulating Activity in the Mouse Brain"
- Takaki Komiyama (UCSD): "Imaging neural ensembles in mice during learning."

- Denise J. Cai (UCLA): "Linking memories across time."
- Tim Bredy (UC Irvine): "Novel Nucleobase Modifications Associated with Memory Formation"

Business Meeting:

Time: 6:00-6:30 pm **Location:** Prospector 1-2

Banquet

Time: 7:30-11:00 pm **Location:** Prospector 1-2

Special Event: Returning members of the original organizers of this meeting (Ray Kesner, James McGaugh, Larry Squire and Aryehy Routtenberg) will discuss what they see as the future of learning and memory research.

SOCIAL ACTIVITIES:

DINNER

January 3rd - Pizza Party - For registrants or guests, no extra cost.

January 4th - Dinner (on your own) January 5th - Dinner (on your own)

January 6th - Banquet – \$40 for registrants and guests

Cash Bar: Friday, Saturday, Sunday evenings

Time: 10:00 pm-12:00 am

Location: Timbers

For Families:

- Gorgoza Park (http://www.gorgoza.com): Tubing, mini-snowmobiles, learn to ski/ride, etc.
- Tanger Outlets (http://www.tangeroutlet.com/parkcity): Shopping
- Ice skating (http://www.resortcentericerink.com)
- Alpine Coaster @ Park City (http://www.parkcitymountain.com/summer/alpine-coaster.aspx)
- Utah Olympic Park (https://www.visitparkcity.com/visitors/resorts/utah-olympic-park/): ski jump, bobsled, ropes course