

Appendix C

Animal Behavior Interest Group (ABIG)



Figure C.1: Graphic from **ABIG** website

During the first year after joining my thesis laboratory, I decided that the folks interested in animal behavior were spread too thinly throughout the Caltech community. I decided to start the focus group, ABIG. I invited and hosted speakers from within and off campus for three years, until I began preparing for fatherhood. The laboratories involved and the speakers and the titles of their talks are documented below.

C.1 Laboratories affiliated with ABIG (behavior; animal; technique)

Adolphs (social cognition, emotion; human; neuropsychology, neuropsychiatry, and neuroimaging)

Andersen (sensory guided behavior, decision making; primates; multi unit recording, brain imaging, electrophysiology, neural prosthetics)

Anderson (fear, anxiety, emotion; fly, mouse; molecular genetics)

Allman (primate brain evolution, functional imaging, stereology)

Benzer (fly; molecular genetics)

Dickinson (flight; fly, bee, moth, humming bird; electrophysiology, robotics, behavioral analysis)

Koch (visual attention and awareness, associative conditioning; mouse, human)

Konishi (song bird, owl; electrophysiology)

Laurent (olfactory learning; fly, bee, locust; electrophysiology, two-photon imaging, modeling)

Lester (nicotine addiction, movement disorder, and epilepsy; mouse; electrophysiology, optical probes, reward)

O' Doherty (human fMRI, conditioning, reward, decision making)

Patterson (acoustic startle, social interaction, ultrasonic vocalization, learning & memory, anxiety, motor coordination; mouse; human disease model)

Schuman (learning & memory; rat; electrophysiology)

Siapas (learning & memory; rat; multi-electrode recordings)

Sternberg (mating behavior, locomotion, mechanosensation; nematode; genetics, evolution, machine vision analysis)

C.2 ABIG speaker schedule

C.2.1 Spring 2006

April 10th **Larry Swanson**, Biological Sciences, Psychology, Neurology, USC, “Structural organization of neural networks underlying mammalian eating and drinking behaviors.”

April 17th **David Lentink** [van Leeuwen Lab], Wageningen University, “How swifts control their glide performance with morphing wings.”

April 24th **Walter Lerchner** [Anderson Lab], “Neurons turning silent - Mice turning silently.”

May 1st **Yan Zhu** [Zipursky & Frye Labs], UCLA, “The Fly Stampede: dynamics of visually forced walking behavior in fruit flies.”

May 8th **Elissa Hallem** [Sternberg Lab], “The molecular and cellular basis of infectivity in the insect parasitic nematode *Heterorhabditis bacteriophora*.” (Noyes 153).

May 15th **Allyson Whittaker** [Sternberg Lab], “Turning inside out: Control of locomotory behavior during *C. elegans* male mating.”

May 22nd **Michelle Arbeitman**, Biological Sciences, USC, “Genomic and molecular analyses of *Drosophila* courtship behaviors.”

C.2.2 Winter 2006

Jan. 23rd **Gaby Maimon** [Dickinson Lab], “Monkey parietal cortex and the internal timing of action.”

Jan. 30th **Mike Reiser** [Dickinson Lab], “Visually-mediated control of translatory flight in *Drosophila*.”

Feb. 6th **Jagan Srinivasan** [Sternberg Lab], “Conservation of sensory neuron polymodality during evolution of free-living nematodes.”

Feb. 13th **Genes & Behavior Conference 2006.**

Feb. 27th **Joy Goto**, Division of Neurosciences, Beckman Research Institute, City of Hope, “From Fruit bats to Fruit flies: A *Drosophila* Model of ALS-PDC (amyotrophic lateral sclerosis-Parkinsonian dementia complex).”

March 6th **Dick Zimmer**, Department of Ecology and Evolutionary Biology, UCLA, “Chemical communication and the language of sperm and egg.”

March 13th **Amber Southwell** [Patterson Lab], “Anti-Huntingtin antibodies as a therapeutic for Huntington’s Disease.”

C.2.3 Fall 2005

Oct. 17th **Paul Patterson**, “Neuroimmune interactions in schizophrenia and autism: an animal model.”

Oct. 24th **Biology retreat weekend.**

Oct. 31st **Peter Narins**, Department of Physiological Science and Biology, UCLA, “Communication at extreme frequencies: pushing the vertebrate limits.”

Nov. 7th **David Chang** [Anderson Lab], “Rapid, systematic enhancer element screen using brain slice electroporation.”

Nov. 14th **SFN: Society of Neuroscience 2005.**

Nov. 21st **Glenn Turner** [Laurent Lab], “Olfactory representations in the *Drosophila* mushroom body.”

Nov. 28th **Marla Sokolowski**, Biology Department, U. of Toronto, Mississauga, Invited Graduate Student Chalk Talk: “The rover/sitter story: a personal account.”

[Tuesday Nov. 29th **Marla Sokolowski**, 4PM Department Talk: “Fine Dining: A role for cGMP protein kinase in behaviour.”]

Dec. 5th **David Chang** [Anderson Lab], “Strategies to improve the functional manipulation of brain region-specific expression.”

Allyson Whittaker [Sternberg Lab], “Turning inside out: Control of locomotory behavior during *C. elegans* male mating.” (**postponed**).

C.2.4 Spring 2005

April 4th **John O’Doherty**, “The neural correlates of behavioral preference.”

April 11th **Stephanie White**, Physiology Department, UCLA. “A fox in the finch coop, or, candidate molecules in birdsong.”

April 18th **Jagan Srinivasan** [Sternberg Lab], “Evolution of the polymodal neuron: Comparative analyses of behavior in nematodes.”

April 25th **Ben Rubin** [Laurent Lab], “The honey bee dance language.”

May 2nd **Curtis Loer**, Biology Department, UCSD, “Evolution of behavior and neuroanatomy in free-living nematode relatives of *C. elegans*.”

May 9th **David Glanzman**, Physiology, Neurobiology Department, UCLA, “The Role of Modulation of AMPA Receptor Function in Behavioral Sensitization in *Aplysia*.”

May 16th* **Marla Sokolowski**, Biology Department, University of Toronto, Mississauga, “Invited Graduate Student Chalk Talk.” [*note specific date not final.]

May 23rd **Jasper Simon** [Dickinson Lab], “FlyWorld: a high-throughput instrument kit to study the genetics, neural circuits that underlie complex behavioral traits of *Drosophila*.”

C.2.5 Winter 2005

January 31st **Bruno van Swinderen**, NSI, San Diego “Behavioral and electrophysiological measures of selective attention in *Drosophila*.”

February 7th **Joanna Jankowsky** [Lester Lab], “Tetracycline-controlled APP transgenics: new mouse models for Alzheimer’s disease.”

February 14th **Carlos Fonck** [Lester Lab], “Spatial-temporal separation of seizure circuits in knock-in mice with hypersensitive nicotinic receptors.”

February 28th* **Liz Phelps**, Department of Psychology, NYU, “Discussion Topic: Emotion, Cognition and the Human Amygdala.” [*note BBB24 from 1-2PM.]

March 7th **Titus Neuman** [Dickinson Lab], “Towards the virtual fly: A computational approach to insect behavior.”

March 14th **James Tong** [Wallace Lab], MAMMAG, UCI, “Dial ”M” for Mitochondria–Mitochondrial Dynamics in Longevity and Memory.”

C.2.6 Fall 2004

Oct. 4th **Henry Lester**, “A mouse genetic model for some aspects of nicotine dependence.”

Oct. 11th **Michael Fanselow**, Department of Psychology, UCLA, “The Hippocampus and Pavlovian Fear Conditioning: A Rodent Model of Episodic Memory.”

Oct. 18th **Biology Department retreat.**

Oct. 25th **Edward B. Lewis Memorial** (Beckman Auditorium, 2 to 4 PM; Reception in Dabney Gardens, 4 to 5 PM)

Nov. 1st **Joy Goto** Division of Neurosciences, Beckman Research Institute, City of Hope, “From Fruitbats to Fruitflies: A Model of ALS-PDC (amyotrophic lateral sclerosis-Parkinsonian dementia complex).”

Nov. 8th **Jan Karbowski** [Sternberg Lab], “Robust sinusoidal locomotion of *Caenorhabditis* worms: Integrating theory with genetics.”

Nov. 15th **Seth Budick** [Dickinson Lab], “Free flight responses of *Drosophila melanogaster* to attractive odorants.”

Nov. 22nd **Karli Watson** [Allman Lab], “Neuroanatomy, functional imaging of Von-Economo’s spindle cell regions: evidence of a recent event in primate brain evolution.”

Nov. 29th **Break for Thanksgiving**

Dec. 6th **Gary Schindelman** [Sternberg Lab], “Characterization of the sperm transfer step of male mating behavior of *C. elegans*.”

C.2.7 Spring 2004

April 5th **David Krantz**, Department of Psychiatry and Behavioral Science, UCLA, “The Making of a Well-Groomed Fly.”

April 12th **Ralph Adolphs**, “How can we measure human social behavior? Studies in lesion patients, autism, and Williams syndrome.”

April 19th **Bader Al-Anzi** [Benzer Lab], “The isolation and characterization of X chromosome mutations that cause obesity in the fruit fly *Drosophila melanogaster*.”

April 26th **Allyson Whittaker** [Sternberg Lab], “Genes and circuits controlling *C. elegans* male mating behavior.”

May 3rd **Doug Altshuler** [Dickinson Lab], “Of hummingbirds and helicopters: foraging, competition, and flight behavior.”

May 10th **Chris Cronin** [Sternberg Lab], “Quantifying worm behavior using the Tracker.”

May 17th **Mckell Carter** [Koch Lab], “Explicit and Implicit Learning in Humans and Rodents.”

May 24th **Greg Suh** [Anderson Lab], “Feeding and defending fruit flies, genetic and circuit analyses of these innate behaviors.”

C.2.8 Winter 2004

Jan. 12th **Paul Sternberg**, “Genetic control of *C. elegans* mating behavior.”

Jan. 18th **Institute holiday**

Jan. 26th Organizational meeting/coffee

- Feb. 2nd **Erin Schuman**, “Plasticity and memory consolidation in hippocampal circuits.”
- Feb. 9th **David Anderson**, “Genetic analysis of circuits for innate defensive behaviors in flies.”
- Feb. 16th **Institute holiday**
- Feb. 23rd **Dai Watanabe** [Konishi Lab], “Transgenic approach to interneurons in cerebellar and retinal circuits.”
- March 1st **Jose Pena** [Konishi Lab], “Neural computation for sound localization in the owl.”
- March 8th **Tim Lebestky** [Anderson Lab], “Panicking Flies: modeling emotional responses in *Drosophila*.”
- March 15th **Rachel Wilson** [Laurent Lab], “Olfactory Representations in the *Drosophila* Brain: Electrophysiology, Anatomy, Genetics, and Behavior.”

C.2.9 Fall 2003

- Oct. 20th **Michael Dickinson**, “Flight behavior in *Drosophila*.”
- Oct. 27th **Mark Konishi**, “Current issues in birdsong research.”
- Nov. 3rd **David Anderson**, “Neural correlates of fear and anxiety in mice.”
- Nov. 10th none (**Neuroscience Meeting**)
- Nov. 17th **Malcom Gordon** Department of Biology, UCLA, “Fish out of water: behavioral adaptations of amphibious fishes.”
- Nov. 24th **Teresa Nick** [Konishi Lab], “Neural correlates of the template: Song memory and learning in the zebra finch.”
- Dec. 1st **Mark Frye** [Dickinson Lab], “Edge orientation for visual course control in *Drosophila*.”
- Dec. 8th **Mark Zylka** [Anderson Lab], “Molecular and genetic analysis of mammalian pain circuitry and behavior.”