

# AIC 2023 Program Jackson, WY

**Thursday Feb 2, 2023**

**David Melcher**, *NYU*. The role of prediction in naturalistic visual perception.

**Mike Landy**, *NYU*. Sensory-motor confidence.

**Michael Frank**, *Brown*. Beyond drift diffusion: fitting a broad class of neurally informed decision making models with likelihood approximation networks.

**Thomas Serre**, *Brown*. Recurrent neural circuits for perceptual grouping.

**Frederike Petzchner**, *Brown*. Computational models of compulsive behavior.

**Josh Brown**, *IU*. fMRI studies of non-invasive deep brain temporal-interference neurostimulation in humans.

**Jeff Mulligan**, *Freelance (NASA, retired)*. Internet-based methods for assessing data literacy.

## **Friday Feb 3, 2023 - Organizer: Fulvio Domini** **“3D Vision: modeling and psychophysics”**

**Fulvio Domini**, *Brown*. A “novel” non-probabilistic model of 3D cue integration explains both perception and action.

**James Elder**, *York U*. Single-view 3D perception in humans and machines.

**Johannes Burge**, *U Penn*. Temporal processing and 3D vision.

**Roland Fleming**, *U of Giessen*. Learning to See Stuff.

**Jovan Kemp**, *Brown*. Evidence that Just-Noticeable Differences do not reflect perceptual uncertainty in depth discrimination.

**Michele Rucci**, *Univ of Rochester*. Influences of eye movements on stereopsis.

**Zyg Pizlo**, *UC Irvine*. Recovering shapes of 3D real objects from a single image.

## **Saturday Feb 4, 2023 - Organizer: Anne Churchland** **“Seeing neural activity through the lens of decision, movements and moral behavior”**

**Anne Churchland**, *UCLA*. What determines decision accuracy in rats, mice and humans?

**Mark Churchland**, *Columbia U*. From spikes to factors: understanding large-scale neural computations.

**Patricia Churchland**, *UCSD*. The neurobiological platform for moral behavior.

**Adina Roskies**, *Dartmouth*. Agency as a framework for thinking about neuropsychiatric disorders.

**Colin Allen**, *U Pitt*. Reconciling Dynamical and Computational Models.

**Tim McNamara**, *Vanderbilt*. Bayesian priors in spatial memory and spatial causal inference.

**George Sperling**, *UC Irvine*. Discovering how many salience maps we have.

**Sunday Feb 5, 2023 - Organizers: Bruno Averbeck & Veronica Alvarez  
“Synaptic Pathophysiology Underlying Psychiatric Disorders”**

**Bruno Averbeck**, *NIMH*. Synaptic pruning and developmental neurodynamics.

**Veronica A. Alvarez**, *NIMH/NIAAA*. A circuit mechanism for cortical control over striatal dopamine that is targeted by drugs of abuse.

**Katherine M. Nautiyal**, *Dartmouth College*. It's not just dopamine - Serotonin also modulates brain reward systems.

**Daniel Wonjae Chung**, *U Pitt*. Combining postmortem studies and computational modeling to decipher cortical circuit abnormalities in schizophrenia.

**Yevgenia Kozorovitskiy**, *Northwestern*. Dopamine dynamics and neuroplasticity across behavioral states.

**Matthew Chafee**, *U of Minn*. Spike timing and prefrontal circuit disconnection in schizophrenia models.

**Alberto Cruz-Martin**, *Boston U*. Cell Type Specific Contributions to Anxiety Deficits in a Mouse Model of Complement 4 Overexpression.

**8:00 Pizza Banquet – Conference Room**

**Monday Feb 6, 2023**

**Jessica K. Witt**, *Colorado State U*. Ensemble perception: perception of mean and variability.

**Brian Garibaldi**, *Johns Hopkins U*. Applying Precision Medicine to COVID-19.

**Cris Niell**, *U of Oregon*. Neural circuits for natural behavior and active vision in the mouse.

**Sharad Shanbhag**, *NE Ohio Med U*. Representations of Social Vocalizations in the Basolateral Amygdala of Big Brown Bats (*Eptesicus fuscus*).

**Merri Rosen**, *NE Ohio Med U*. Prolonged Development of Duration Discrimination: Human Perception and Mongolian Gerbil Neural Correlates.

**Cory Miller**, *UCSD*. Cross-Modal Representation of Identity in Primate Hippocampus.

**Shihab Shamma**, *U of MD*, Predictive Decoding of the Auditory Mind.

Attending the meeting:

**Kerry Jordan**, *Utah State U*

**Jude Mitchel**, *U of Rochester*