Monday, August 29, 2005

American Academy for Arts & Sciences, 200 Beacon Street, Somerville, MA (617-576-5030)

9:50 Coffee

10:05 Welcome – Tomaso Poggio

10:15 – 12:45 Presentations [15 minutes each, strictly enforced]
- David Ferster: Introduction: Physiology in Area 17
- Ian Finn: The Relationship of Spatial Frequency Tuning to the Substructure of Receptive Fields in Complex Cells of Cat Primary Visual Cortex
- Jim DiCarlo: Introduction: Physiology in IT
- Davide Zoccolan: Multiple Object Response Normalization in Monkey Inferotemporal Cortex
- Tomaso Poggio: Introduction: Theory
- Minjoon Kouh: A Theory of the Feedforward Path of the Ventral Stream in Visual Cortex: IT
- Charles Cadieu: A Theory of the Feedforward Path of the Ventral Stream in Visual Cortex: V4
- Ulf Knoblich: A Theory of the Feedforward Path of the Ventral Stream in Visual Cortex: Biophysics

12:45 Lunch

2:00 – 3:25 Presentations [15 minutes each, strictly enforced]
- Earl Miller: Activity of Monkey Prefrontal Cortex Neurons during Shifts in Category Membership [work with M. Riesenhuber, T Poggio and E. Miller]
- Jefferson Roy: Introduction: Physiology in PFC
- Christof Koch: Introduction: Psychophysics
- Rufin Van Rullen: When do You Need to Pay Attention When Recognizing Objects?
- Dirk Walther: Modeling Feature-sharing between Object Detection and Top-down Attention

3:25 – 3:35 Tea

3:35 – 5:00 Presentations [15 minutes each, strictly enforced]
- M. Riesenhuber: Introduction: fMRI and Theory
- Xiong Jiang: Shape and Category Tuning in Human Cortex Induced by Categorization Training: A fMRI-RA Study
- Chou Hung: Causal Evidence Linking IT Neural Activity to Object Recognition
- Gabriel Kreiman: Fast Decoding of Object Identity
- Christof Koch: Watching for Faces, but Very Fast

5:00 – 6:00 Advisory Board meets separately

6:00 – 7:00 Advisory Board meets with PIs only

7:30 – 10:00 Dinner at Blue Room – All participants and Advisory Board invited
**Tuesday, August 30, 2005**  
Massachusetts Institute of Technology, Room E25-202

9:15  
**Breakfast** – Summary of previous day by Tomaso Poggio and PIs

10:00 – 10:30  
**Ilan Lampl**  
*Amplification Mechanism of Cortical inhibition and its Role in Spatial Integration*

10:30 – 11:00  
**Coffee**

11:00 – 11:30  
**David Freedman**  
*Categorical Representation of Visual Motion Direction in the Lateral Intraparietal Area*

11:30 – 12:30  
**Brainstorming** (brainstorming about research plans for next year)

12:30 – 2:00  
**Working Lunch**

2:00 – 3:00  
**Seminar Talk by Doris Tsao**  
(Room E25-401)  
*CBCL Brains & Machines Seminar: Single-cell Mechanisms for Representing Faces in an fMRI-identified Macaque Face Patch*

3:00 – 3:30  
**Winrich Freiwald**  
*Mechanisms of Shape Processing in Macaque Area V4*

3:30 – 7:30  
**Tea** (and long-term planning, e.g. planning of future proposal for a real adult center and discussion of scientific issues)