

2011-2012 PROJECT NUMBERS/TITLES/LEADERS

Project Leader	Project Nbr	Project Title
Poo	1.1.1 R	Neuronal correlates of cross-modal learning generalization
Cottrell	1.1.2 RI	Explaining cortical receptive fields with temporal and hierarchical sparse coding
Bartlett	1.1.3 RT	Exploration of expression and language deficits in autism as a general temporal processing deficit
Tallal	1.1.4 RT	Spatiotemporal patterns of neural activity generated by attention, sequencing and memory tasks: A MEG study
Chiba	1.1.5 RT	The Gamelan Project
Mercado	1.2.1. R	Effects of training sequences on cortical coherence and generalization
Gauthier	1.2.2 R	Effects of training sequences on the acquisition of expertise and competition across domains
Curran	1.2.3 R	Spacing and staging effects on perceptual expertise training
Pashler	1.2.4 RT	Practical issues in the design of 5tutoring systems for fact learning, spacing, feedback and practice manipulations
De Sa	1.3.1 R	Real-time EEG analysis for improving memory
Benasich	1.3.2 R	Infant maturation and deviation in EEG trajectories: ERPs and power analyses
Sheinberg	2.1.1 R	The time course of perceptual expertise training across species
Poizner	2.1.2 R	Sequence learning brain dynamics and dopaminergic modulation
Buzsaki	2.1.3 R	Keeping time with evolving cell assemblies
Feldman	2.1.4 R	Modulation of gamma rhythm by early experience in rodent sensory cortex and its effect on learning
Chiba	2.1.5 R	Beta-frequency oscillation and its relation to individual neurons during learning
Deak	2.2.1 R	Brain dynamics of rapid phoneme processing and word processing speed in pre-school-aged children
Wiles	2.2.2 RT	iRat: a rat-sized robot for bridging from neural systems to behavioral neuroscience

Clark	2.2.3 R	A new method to study the temporal dynamics of long-term memory
Squire	2.2.4 R	Brain activity in humans as a function of study-test interval using fMRI
Tarr	2.2.5 R	Top-down knowledge and contextual effects in dynamic social processing across modalities
Bell	2.2.6 RI	Theory of learning and energy across time and levels
Gauthier	2.3.1 R	Does holistic processing require temporal contiguity of features during learning?
Palmeri	2.3.2 RI	Measuring and modeling individual differences in perceptual expertise
Cottrell	2.3.3 RI	Modeling UP/DOWN category acquisition
Palmeri	2.3.4 RI	The time-course of perceptual expertise: Perceptual decisions by experts and novices
Tanaka	2.3.5 R	The human electrophysiology of individual differences in the broader autism phenotype and perceptual expertise
Herrington	2.3.6 R	Neural mechanisms of facial expression training in autism spectrum disorders
Sejnowski	2.3.7 RI	Cortico-basal ganglia networks in perceptual learning and decision-making
Cottrell	3.1.1 RI	Optimal scan paths
Todorov	3.1.2 R	Robotic models of sensorimotor control and learning
Movellan	3.1.3 RT	Optimal learning machines
Chukoskie	3.14 R	Nurturing information-seeking: Variability and learning in rats and humans
Mozer	3.1.5 R	Optimizing training in complex visual search tasks via attentional cueing
Gauthier	3.2.1	Studying the learning, development and engagement of functional and volumetric motor representations
Deak	3.2.2 RI	Reciprocal action in didactic learning: modeling longitudinal changes in infants
Serpell	3.2.3 R	Affect in socially-mediated iPad-based cognitive training
Littlewort	3.2.4 R	Automatic measurement of non-verbal behavior in children
Jernigan	3.2.5 RT	Development of assessment methods for emotional sensitivity in children and adolescents

Reilly	3.3.1 R	Individual differences in problem solving strategies in children
Movellan	3.4.1 IT	The RUBI Project
Bartlett	3.4.2 T	Perceptual and motor learning of dynamic facial expressions: An intervention for children with autism
Marciano	5	Data Grid Project
Tallal/Sejnowski/Bingham	6	All approved Outreach Projects
Cottrell/Alvarez	7	All approved Education and Diversity Projects