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Durham NC, 27710

EDUCATION AND TRAINING

Post-doctoral fellow (laboratory of Michael Platt) Duke University	Nov 2005 – Present Durham, NC
Post-doctoral fellow (laboratory of Jack Gallant) University of California, Berkeley	June 2005 – Oct 2005 Berkeley, CA
Ph.D. (Molecular and Cell Biology, advisor: Jack Gallant) Thesis title: <i>Mechanisms of working memory, attention, and decision in visual area V4</i> University of California, Berkeley	August 2000 – May 2005 Berkeley, CA
B.A. (Chemistry) Rice University	August 1996 – May 2000 Houston, TX

PEER-REVIEWED PUBLICATIONS

(for reprints, please visit <http://www.benhayden.com/pub.html>)

David V. Smith, **Benjamin Y. Hayden**, Trong-Kha Truong, Allen Song, Michael Platt and Scott A. Huettel
Distinct value signals in anterior and posterior ventromedial prefrontal cortex
Journal of Neuroscience (2010) *in press*.

Benjamin Y. Hayden and Michael L. Platt
Neurons in anterior cingulate cortex multiplex information about reward and action
Journal of Neuroscience (2010) *in press*.

John M. Pearson, **Benjamin Y. Hayden**, Sridhar Raghavachari, and Michael L. Platt
Neurons in posterior cingulate cortex signal exploratory decisions in a dynamic multi-option choice task
Current Biology (2009) vol. 19 (18), p 1-6

Benjamin Y. Hayden and Michael L. Platt
The mean, the median, and the St. Petersburg Paradox
Judgment and Decision Making (2009) vol. 4 (4), p. 256-273.

Benjamin Y. Hayden, John M. Pearson, and Michael L. Platt
Fictive learning signals in anterior cingulate cortex
Science (2009) vol. 324 (5929) p. 948-950. PMID 19443783.
New York Times: "In that tucked tail, real pangs of regret?" <http://www.benhayden.com/pub/nytimes.pdf>

Benjamin Y. Hayden, David V. Smith, and Michael L. Platt
Electrophysiological correlates of default-mode processing in macaque posterior cingulate cortex
Proceedings of the National Academy of Sciences (2009) vol. 106 (14) p. 5948-5953. PMID 19293382.
Faculty of 1000 Biology evaluation: <http://www.f1000biology.com/article/id/1161820/evaluation>

Benjamin Y. Hayden and Michael L. Platt
Gambling for Gatorade: risk-sensitive decision making for fluid rewards in humans
Animal Cognition (2009) vol. 12(1) p. 201-207. PMID 18719953.

Benjamin Y. Hayden and Jack L. Gallant

Combined effects of spatial and feature-based attention on responses of V4 neurons
Vision Research (2009) vol. 49(10) p. 1182-1187 PMID 18619996.

Benjamin Y. Hayden, Amrita C. Nair, Allison N. McCoy, and Michael L. Platt

Posterior cingulate cortex mediates outcome-contingent allocation of behavior
Neuron (2008) vol 60(1) p. 19-25. PMID 18940585.

Stephen V. David, **Benjamin Y. Hayden**, James A. Mazer, and Jack L. Gallant

Attention to stimulus features shifts spectral tuning of V4 neurons during natural vision
Neuron (2008) vol 59(3) p. 509-521. PMID 18701075.

Benjamin Y. Hayden, Sarah R. Heilbronner, Amrita C. Nair, and Michael L. Platt

Cognitive influences on risk-seeking by rhesus macaques
Judgment and Decision Making (2008) vol. 3(5) p. 389-395. NIHMSID 71864.

Benjamin Y. Hayden, Purak C. Parikh, Robert O. Deaner, and Michael L. Platt

Economic principles motivating social attention in humans
Proceedings of the Royal Society B (2007) vol. 274(1619) p. 1751-1756. PMID 17490943.

Benjamin Y. Hayden and Michael L. Platt

Temporal discounting predicts risk sensitivity in rhesus macaques
Current Biology (2007) vol. 17(1) p. 49-53. PMID 17208186.

Stephen V. David, **Benjamin Y. Hayden**, and Jack L. Gallant

Spectral receptive field properties explain shape selectivity in area V4
Journal of Neurophysiology (2006) vol. 96(6) p. 3492-3505. PMID 16987926.

Benjamin Y. Hayden and Jack L. Gallant

Timecourse of attentional modulation reveals differences in mechanisms of spatial and feature-based attention
Neuron (2005) vol. 47(5) p. 637-643. PMID 16129394.

Yuxi Fu, Kaj Djupsund, Hongfeng Gao, **Benjamin Y. Hayden**, Kai Shen and Yang Dan.

Temporal Specificity in the Cortical Plasticity of Visual Space Representation
Science (2002) vol. 296 p. 1999-2003. PMID 12065829.

CHAPTERS AND PREVIEWS

Benjamin Y. Hayden and Michael L. Platt

Risky decisions and fictive learning: case studies on the difficulties of integrating evidence from fMRI and electrophysiology in cognitive neuroscience

In Attention and Performance (2010), Robbins and Delgado, editors

Benjamin Y. Hayden

Neuroethology of Vision

In Primate Neuroethology (2009), Platt and Ghazanfar, editors

Sarah R. Heilbronner, **Benjamin Y. Hayden**, and Michael L. Platt

Neuroeconomics of risk sensitive decision making

In Impulsivity: The Behavioral and Neurological Science of Discounting (August, 2009)

Madden, Bickel, and Critchfield, editors

Benjamin Y. Hayden and Michael L. Platt

Animal cognition: great apes wait for grapes

Current Biology (2008) 17:21

Benjamin Y. Hayden and Michael L. Platt

Cingulate Cortex

New Encyclopedia of Neuroscience, Elsevier (2008)

Benjamin Y. Hayden and Michael L. Platt
Fool me once, shame on me; fool me twice, blame ACC
Nature Neuroscience 2006 9:7 857-859

MANUSCRIPTS IN PREPARATION OR UNDER REVIEW

John M. Pearson, **Benjamin Y. Hayden**, and Michael L. Platt
Explicit information reduces impulsivity in monkeys

Benjamin Y. Hayden and Jack L. Gallant
Working memory and decision processes in area V4: evidence for highly distributed processing of complex cognitive functions

Benjamin Y. Hayden and Michael L. Platt
Task-switching signals in macaque posterior cingulate cortex

Benjamin Y. Hayden, Sarah R. Heilbronner, and Michael L. Platt
Ambiguity aversion in monkeys

Benjamin Y. Hayden, Sarah R. Heilbronner, and Michael L. Platt
Neural correlates of variables related to risky decisions in ACC

Sarah R. Heilbronner, **Benjamin Y. Hayden**, and Michael L. Platt
Context-dependent decision signals in posterior cingulate cortex

RECENT ABSTRACTS

Benjamin Y. Hayden, Sarah R. Heilbronner, and Michael L. Platt
The role of anterior cingulate cortex in self-control
Poster at the Society for Neuroeconomics Conference, Park City, Evanston, Illinois (2009)
And Society for Neuroscience Conference, Chicago, Illinois (2009)

Benjamin Y. Hayden, Sarah R. Heilbronner, and Michael L. Platt
Ambiguity-sensitive neurons in macaque anterior cingulate cortex
Poster at the Society for Neuroeconomics Conference, Park City, Utah (2008)

Sarah R. Heilbronner, **Benjamin Y. Hayden**, and Michael L. Platt
Responses of single neurons in posterior cingulate cortex in three reward-based tasks
Poster at the Society for Neuroeconomics Conference, Park City, Utah (2008)

John M. Pearson, **Benjamin Y. Hayden**, Michael L. Platt
Single neurons in CGp predict explore/exploit decisions in a dynamic foraging task
Talk at the Society for Neuroeconomics Conference, Park City, Utah (2008)

Benjamin Y. Hayden, Sarah R. Heilbronner, and Michael L. Platt
Ambiguity-sensitive neurons in macaque anterior cingulate cortex
Talk at the Society for Neuroscience Conference, Washington, D.C. (2008)

David V. Smith, **Benjamin Y. Hayden**, and Michael L. Platt
Functional Dynamics of 'Default Mode' in Macaque Posterior Cingulate Cortex
Poster at the Society for Neuroscience Conference, Washington, D.C. (2008)

GRANTS

Benjamin Y. Hayden (2010-2015)
Dopamine and the Role of Anterior Cingulate Cortex in Executive Processes
NIDA K99 027718-01

Benjamin Y. Hayden (2008-2010)
The role of the posterior cingulate cortex in reward-guided decision-making
NIDA Kirschstein NRSA 023338-01

Benjamin Y. Hayden (2005-2006)
Neural mechanisms of reward-based decision-making
Duke Translational Neuroscience Fellowship

HONORS

Young Investigator Award (Sept, 2009)
Society for Neuroeconomics

Best post-doc talk (March, 2009)
Department of Neurobiology Retreat
Duke University Medical School

Valedictorian (May, 2005)
Department of Molecular and Cell Biology
University of California Berkeley

INVITED TALKS

Monitoring an uncertain world: cingulate cortex
University of Pennsylvania, August 2009

Uncertainty, monitoring, and the cingulate cortex
Yale University Medical School, May 2009

Cingulate cortex monitors outcomes of risky decisions
NIMH, October 2008

What causes risk sensitivity among primates?
Economics for Apes Conference,
Max Planck Institute Leipzig, July 2007

Attention, working memory, and decision in V4
Oxyopia Seminar, Dept Vision Sciences
University of California Berkeley, January 2005

OTHER ACTIVITY

Co-creator, Neurotree website (<http://www.neurotree.org>) with Stephen V. David

Co-director, Duke Neuroeconomics Journal Club (2006-2007) with Bethany Weber

Director, Duke Center for Neuroeconomic Studies Summer Journal Club (2007-2008)

Coordinator, Duke Center for Neuroeconomic Studies Major Speaker Series (2007-present)