CURRICULUM VITAE

Eyal Seidemann
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A. EDUCATION

1993-1998	Ph.D. in Neuroscience, Stanford University
1992-1993	M.Sc. in Neuroscience, Tel Aviv University
1989-1992	Undergraduate Studies, Interdisciplinary Program for Fostering Excellence, Tel Aviv University

B. PROFESSIONAL EXPERIENCE

2015-	Full Professor of Psychology and Neuroscience, Institute for Neuroscience and Center for Perceptual Systems, The University of Texas at Austin
2016-2017	Visiting Professor, Center for Neural Science, New York University
2008-2015	Associate Professor of Psychology and Neuroscience, Institute for Neuroscience and Center for Perceptual Systems, The University of Texas at Austin
2008-2009	Visiting Professor, Dept. of Neurobiology, Weizmann Institute of Science
2002-2008	Assistant Professor of Psychology and Neuroscience, Institute for Neuroscience and Center for Perceptual Systems, The University of Texas at Austin
1998-2002	Postdoctoral fellow and Koshland scholar, Weizmann Institute of Science, with Amiram Grinvald
1998	Postdoctoral fellow, HHMI and Stanford University, with William T. Newsome

C. PUBLICATIONS

Articles in Peer Reviewed Journals - Published

1. Benvenuti, G., Chen, Y., Ramakrishnan, C., Deisseroth, K., Geisler, W.S., and Seidemann, E. (2018). Scale-invariant visual capabilities explained by topographic representations of luminance and texture in primate V1. *Neuron* 100: 1-9

2. Michel, M., Chen, Y., Seidemann, E., and Geisler, W.S. (2018). Nonlinear Lateral Interactions in V1 Population Responses Explained by a Contrast Gain Control Model. *J. Neurosci.* 38: 10069-79

3. Seidemann, E., Chen, Y., Bai, Y., Chen, S.C., Mehta, P., Kajs, B.L., Geisler, W.S., & Zemelman, B.V. (2016). Calcium imaging with genetically encoded indicators in behaving primates. *eLife* 5.

4. Yang Z., Heeger D.J., Blake R., & Seidemann E., (2015) Long-range traveling waves of activity triggered by local dichoptic stimulation in V1 of behaving monkeys. *Journal of Neurophysiology* 113:277-94

5. Tan A.Y.Y., Chen Y., Scholl B., Seidemann E.[*], & Priebe N.J.[*], (2014) Sensory stimulation shifts visual cortex from synchronous to asynchronous states. *Nature* 509: 226–229; [*]Equal contribution

6. Michel M.M., Chen Y., Geisler W.S., & Seidemann E. (2013). An illusion predicted by V1 population activity implicates cortical topography in shape perception. *Nature Neuroscience*, 16(10): 1477-1483

7. Chen Y., & Seidemann E. (2012). Attentional modulations related to spatial gating but not to allocation of limited resources in primate V1. *Neuron* 74:557-66

8. Palmer C.R., Chen Y., & Seidemann E. (2012). Uniform spatial spread of population activity in primate parafoveal V1. *Journal of Neurophysiology* 107:1857-67

9. Chen Y., Palmer C.R., & Seidemann E. (2012). The relationship between voltage-sensitive dye imaging signals and spiking activity of neural populations in primate V1. *Journal of Neurophysiology* 107:3281-95

10. Sit, Y.F., Miikkulainen, R., Chen Y., Geisler, W.S. & Seidemann, E. (2009) Complex dynamics of V1 population responses explained by a simple gain-control model. *Neuron*, 24, 943-56

11. Chen, Y., Geisler, W.S., & E. Seidemann. (2008). Optimal temporal decoding of neural population responses in a reaction time visual detection task. *Journal of Neurophysiology*, 99(3):1366-1379.

12. Palmer, C.R., Cheng, S.Y., & Seidemann, E. (2007). Linking Neuronal and Behavioral Performance in a Reaction-Time Visual Detection Task. *Journal of Neuroscience, 27*(30):8122-8137.

13. Yang, Z., Heeger, D., & Seidemann, E. (2007). Rapid and precise retinotopic mapping of the visual cortex obtained by voltage sensitive dye imaging in the behaving monkey. *Journal of Neurophysiology*, *98*(2): 1002-1014.

14. Chen, Y., Geisler, W.S., & Seidemann, E. (2006). Optimal decoding of correlated neural population responses in the primate visual cortex. *Nature Neuroscience, 9*(11):1412-20.

15. Seidemann, E., Arieli, A., Grinvald, A., & Slovin, H. (2002). Dynamics of depolarization and hyperpolarization in the frontal cortex and saccade goal. *Science*, *295*(5556):862-5.

16. Seidemann, E., Poirson, A.B., Wandell, B.A., & Newsome, W.T. (1999). Color signals in area MT of the macaque monkey. *Neuron*, *24*(4):911-7.

17. Heeger, D.J., Boynton, G.M., Demb, J.B., Seidemann, E**.**, & Newsome, W.T. (1999). Motion opponency in visual cortex. *The Journal of Neuroscience*, *19*(16):7162-74.

18. Seidemann, E., & Newsome, W.T. (1999). Effect of spatial attention on the responses of area MT neurons. *Journal of Neurophysiology, 81*(4):1783-94.

19. Seidemann, E**.**, Zohary, E., & Newsome, W.T. (1998). Temporal gating of neural signals during performance of a visual discrimination task. *Nature, 394*(6688):72-5.

20. Seidemann, E., Meilijson, I., Abeles, M., Bergman, H., & Vaadia. E. (1996). Simultaneously recorded single units in the frontal cortex go through sequences of discrete and stable states in monkeys performing a delayed localization task. *Journal of Neuroscience, 16*(2):752-68.

21. Abeles, M., Bergman, H., Gat, I., Meilijson, I., Seidemann, E., Tishby, N., Vaadia, E. (1995). Cortical activity flips among quasi-stationary states. *Proceedings of the National Academy of Science U S A.* 92(19):8616-20.

22. Lancet, D., Sadovsky, E., Seidemann, E. (1993). Probability model for molecular recognition in biological receptor repertoires: Significance to the olfactory system. *Proceedings of the National Academy of Science U S A.* 90(8):3715-9.

23. Lancet, D., Gross-Isseroff, R., Margalit, T., Seidemann, E., & BenArie, E. (1993). Olfaction – from signal transudation and termination to human gnome mapping. *Chemical Senses 18*: (2) 217-225.

Articles in Peer Reviewed Journals – Under review

1. Mehta, P., Kajs, B.L., Pattadkal, P., Chen, Y., Whitmire, M.P., Seidemann, E., Priebe, N.J., Losonczy, A., and Zemelman, B.V. (2018). Functional Access to Neuron Subclasses in Rodent and Primate.

2. Michelson C.A., Pillow J.W., & Seidemann E. (2018). Perceptual decisions are limited primarily by variability in early sensory cortex.

Articles in Peer Reviewed Journals – In Preparation

1. Trautmann, E., O'Shea, D.J., Sun, X., Chen, Y., Whitmire, M., Sahani, M., Seidemann, E., Ryu, S.I., Deisseroth, K., and Shenoy, K.V. (2018). Two-photon calcium imaging in behaving nonhuman primate enabling all-optical brain-machine interfaces.

2. Li B., Priebe N.J.*, & Seidemann E.* (2018) Whole cell recording of synaptic and intrinsic conductances in V1 of behaving monkeys. *Equal contribution

Reviews and book chapters

1. Seidemann, E., and Geisler, W.S. (2018). Linking V1 Activity to Behavior. *Annual review of vision science 4, 287-310*

2. Seidemann, E., Chen, Y., Geisler, W. S. (2009). Encoding and Decoding with Neural Populations in the Primate Cortex, *The Cognitive Neuroscience IV*, Ed. Gazzaniga M.S.

3. Groh, J.M., Seidemann, E., & Newsome, W.T. (1996). Neurophysiology: neural fingerprints of visual attention. *Current Biol*ogy, 6(11):1406-9.

Selected Abstracts

1. Benvenuti G, Chen Y, Geisler WS, Seidemann E. (2018) Two complementary population coding schemes in primate V1 contribute to scale-invariant pattern discrimination. *Society for Neuroscience*

2. Chen Y, Ko HK, Zemelman Z, Seidemann E, Nauhaus I. (2018) Receptive field size and spatial phase organization in macaque V1 with two-photon imaging. *Society for Neuroscience*

3. Whitmire MP, Chen Y, Mehta P, Kajs BL, Zemelman BV, Seidemann, E. (2018). Calcium imaging of population responses from putative inhibitory neurons in macaque visual cortex. *Society for Neuroscience*

4. Chen SC, Benvenuti B, Whitmire MP, Chen Y, Geisler WS, Seidemann E. (2018). Optical Stimulation and Imaging in Macaque V1 Reveals Neural and Behavioral

Masking Effects of Optogenetic Stimulation in a Threshold Detection Task. *Society for Neuroscience*

5. Priebe P, Li B, Seidemann E. (2018) Effects of single-cell stimulation in macaque V1 on performance in a threshold detection task. *Society for Neuroscience*

6. Li B, Priebe P, Seidemann E. (2018) Whole cell recording reveals distinct top-down and choice-related signals in macaque V1. *Society for Neuroscience*

7. Spencer C. Chen, Yuzhi Chen, Wilson S. Geisler & Eyal Seidemann (2017) Correlations between perceptual and neural effects of target-background similarity on target detection in primate V1. *Society for Neuroscience*

8. G. Benvenuti*, Y. Chen, W.S. Geisler & E. Seidemann (2017) Possible Contribution of Retinotopic-scale Luminance Signals in Primate V1 to Visual Pattern Discrimination. *Society for Neuroscience*

9. Matthew P. Whitmire, Yuzhi Chen, Preeti Mehta, Bridget L. Kajs, Giacomo Benvenuti, Boris V. Zemelman, Eyal Seidemann (2017) A virus-based toolkit for heterologous protein expression in the macaque cortex. *Society for Neuroscience*

10. Baowang Li, Nicholas Priebe, Eyal Seidemann (2017) Whole cell recording of synaptic and intrinsic conductances in V1 of behaving monkeys. *Society for Neuroscience*

11. Chen Y., Bai Y., Geisler W.S., & Seidemann E. (2015) Inconsistencies between simultaneously measured neural and behavioral sensitivities in monkeys performing a fine orientation discrimination task. *Vision Sciences Society Meeting*

12. Bai Y., Chen Y., Geisler W.S., & Seidemann E. (2015) Human and monkey detection performance in natural images compared with V1 population responses. *Vision Sciences Society Meeting*

13. Michelson C.A., Pillow J.W., & Seidemann E. (2013). Perceptual decisions are limited primarily by variability in early sensory cortex. *Computational and Systems Neuroscience Meeting.*

14. Seidemann E., Chen Y., Scholl B., Tan A., & Priebe N. (2012). Simultaneous intracellular recordings and LFP measurements in V1 of awake behaving macaque reveal widespread and highly correlated ongoing fluctuations that are disrupted by visual stimulation. *Society for Neuroscience*

15. Chen Y., Michel M.M., Geisler W.S., & Seidemann E. (2012). Testing lower-envelope vs. distributed coding in sensory perception using neural population metamers. *Society for Neuroscience.*

16. Michelson C.A., Pillow J.W., & Seidemann E. (2012). Picture of a decision: intrinsic position uncertainty leads to sub-optimal decoding of sensory signals. *Society for Neuroscience.*

17. Seidemann E., & Chen Y. (2011). Attentional effects in V1 are related to spatial gating but not to allocation of limited resources. *Computational and Systems Neuroscience Meeting*.

18. Michel M.M., Chen Y., Geisler W.S., & Seidemann E. (2011). Effects of local orientation on large-scale representations in V1 bias perceived global shape *Computational and Systems Neuroscience Meeting*.

19. Michel M.M., Seidemann E., & Geisler W.S. (2011). Lateral interactions in V1 population responses to collinear and orthogonal contour elements. *Society for Neuroscience.*

20. Seidemann E., Chen Y., Scholl B., Tan A., & Priebe N. (2011). Whole cell intracellular recordings in primary visual cortex of awake behaving macaque. *Society for Neuroscience*

21. Chen Y., & Seidemann E. (2011). Orientation-dependent spread of cortical responses in primate primary visual cortex. *Society for Neuroscience*

22. Chen, Y., & Seidemann, E. (2010) Top-down attentional modulations in primate V1 measured with voltage-sensitive dye imaging. *Society for Neuroscience.*

23. Michelson, C., & Seidemann E. (2010) Neural Correlates of Perceptual Decisions by Population Activity in Primate V1. *Society for Neuroscience.*

24. Seidemann, E., Palmer, C.R., & Chen, Y. (2010) Quantitative Relationship between Voltage Sensitive Dye Imaging and Electrophysiology. *Society for Neuroscience.*

25. Palmer, C.R., Chen, Y., & Seidemann, E. (2008) The relationship between the voltage sensitive dye imaging signal and spiking activity of cortical neurons described with a non-linear transfer function, *Society for Neuroscience.*

26. Sit, Y.F., Chen, Y., Geisler, W.S., & Seidemann, E. (2008) A normalization model for V1 population responses, *Society for Neuroscience.*

27. Zhiyong, Y., Heeger, D.J., & Seidemann, E. (2007). High Resolution Retinotopy Obtained by Voltage Sensitive Dye Imaging in the Behaving Monkey. *Computational and Systems Neuroscience Meeting*.

28. Chen, Y., Geisler, W.S., & Seidemann, E. (2006). Optimal temporal pooling of neural population responses in the primary visual cortex, *Society for Neuroscience.*

29. Chen, Y., Geisler, W.S., & Seidemann, E. (2006). Optimal Spatial Pooling of Neural Population Responses in the Visual Cortex, *Computational and Systems Neuroscience Meeting,*

30. Chen, Y., Geisler, W.S., & E. Seidemann, E. (2005). Sensitivity of V1 Population Responses Exceeds Monkey's Behavioral Sensitivity, *Society for Neuroscience.*

31. Palmer, C.R., Cheng, S.Y., & Seidemann, E. (2005) Linking neuronal and psychophysical performance in a visual detection task, *Society for Neuroscience.*

32. Seidemann, E., Slovin, H., Arieli, A., & Grinvald, A. (2000). Cortical activity evoked by electrical microstimulation in visual and frontal cortical areas of behaving monkeys imaged with voltage sensitive dyes. *Society for Neuroscience.*

33. Seidemann, E., Glaser, D.E., Slovin, H., Arieli, A. & Grinvald, A. (2000). Spatio-temporal dynamics of cortical activity evoked by electrical microstimulation imaged with voltage sensitive dyes. *Federation of European Neuroscience.*

34. Seidemann, E., Glaser, D., Arieli, A., & Grinvald, A. (1999). Large spread of electrical activity evoked by microstimulation imaged with voltage sensitive dyes. *Society for Neuroscience*

35. Seidemann, E., Hastie, T. & Newsome, W.T. (1998). Modeling the sources of decision bias at the neuronal and psychophysical level. *Society for Neuroscience*.

36. Seidemann, E. & Newsome, W.T. (1997). Influence of spatial attention on the responses of area MT neurons. *Society for Neuroscience.*

37. Seidemann, E. & Newsome, W.T. (1996). Microstimulation in area LIP influences choices in a direction discrimination task. *Society for Neuroscience.*

D. GRANTS SUPPORT

<u>Ongoing</u>

08/2018-07/2021 DARPA-NESD
"IBIS: Implantable bioluminescence interface system for an all-optical neuroprosthesis to the visual cortex"
MPI (Lead PI: Pieribone; additional PIs: Gruber, Shepard, Robinson, Bankiewicz, Kording, Gather)

11/2016-10/2019 NIH/NINDS (BRAIN-U01NS099720-01)
"An optical-genetic toolbox for reading and writing neural population codes in functional maps"

MPI (additional PIs: Geisler, Zemelman)

11/2017-10/2019 NIH/NINDS (BRAIN-U01NS099720-01), Equipment supplement
"An optical-genetic toolbox for reading and writing neural population codes in functional maps"
MPI (additional PIs: Geisler, Zemelman)

02/2015-01/2019 NIH/NEI (R01EY016454-14)
"Linking neural population activity and visual perception"
PI

08/2014-07/2019 NIH/NEI (R01EY024071-04)
"Cortical mechanisms mediating visual function and behavior"
MPI (additional PI: Nicholas Priebe)

08/2015-07/2019 NIH/NEI (R01EY024662-03)
"Mechanisms of Visual Performance"
MPI (Additional PI: Wilson Geisler)

08/2016-12/2018 DARPA/NeuroFAST
"BIGMAPS: Brain Imaging for Global Motifs of Activity Pattern and Structure"
Subcontract (PIs: Deisseroth; Shenoy)

09/2017-08/2019 Faculty STARs Program award, University of Texas
Support to build a two-photon setup for behaving non-human primate
PI

Pending

06/2019-05/2024 NIH/NINDS (BRAIN-U19)
"Illuminating the path from sensation to action: integrated theory and measurement for probing neural computation in the face of noise and uncertainty"
MPI (additional PI: Shenoy, Deisseroth, Sahani, Giocomo)

03/2019-02/2022 NIH/NINDS (BRAIN-U01)
"Deep and stable imaging in the cortex of non-human primates"
MPI (additional PI: van Kerkoerle, Xu)

Consultant

09/2017-08/2020 NIH (BRAIN-U01)
"A monkeyscope optimized for brain-scale 2-photon imaging"
PI: Pesaran

Completed

09/2015-08/2016 Texas BRAIN seed grant
"A novel optogenetic toolkit for identifying the neural circuits mediating primate perception in natural scenes"
MPI (Additional PIs: Geisler; Nauhaus)

06/2005-01/2015 NIH/NEI (R01EY016454)
"Linking neural population activity and visual perception"
PI

09/2005-08/2010 NIH/NEI (R01EY016752)
"Traveling waves in visual cortex during binocular rivalry"
MPI (Additional PIs: David Heeger; Randolph Blake)

01/2010-12/2010 NIH/NEI (R01EY016454-05S1)
ARRA supplement
"Linking neural population activity and visual perception"
PI

06/2005-05/2010 NIH/NEI (R01EY016454-01S1)
Equipment supplement award.
"Linking neural population activity and visual perception"
PI

02/2007-01/2010 NIH (F31 NS056833)
NRSA Predoctoral Fellowship: Charles Michelson
"Neural correlates of perceptual decisions"
PI

07/2007-06/2010 NIH (F32EY18545)
NRSA Postdoctoral Fellowship: William H. Bosking
"The physiological basis for lateral interactions in contour detection"
PI

09/2004-08/2009 NSF (ITR/IMG 0427372)
"Foundations of Visual Search"
CO-PI, (PI: Alan Bovik; Additional CO-PIs: Wilson Geisler, Lawrence Cormack)

E. AWARDS AND HONORS

2016-2017 Visiting Professor, Center for Neural Science, New York University

2009	HHMI Early Career semifinalist
2008-2009	Dean's Fellowship, The University of Texas at Austin
2008-2009	Visiting scientist fellowship, Dept. of Neurobiology, Weizmann Institute of Science
2006	S. Cheng, E. Seidemann, Recipients of an Outstanding Graduate Dissertation award, The University of Texas at Austin
2004	Invited to participate in the 16th Beckman Frontiers of Science Symposium, the National Academy of Sciences
2003-2005	Alfred P. Sloan Research Fellowship in Neuroscience
2003	Summer Research Assignment by the Faculty Development Program at The University of Texas at Austin
1999-2002	The first recipient of the Koshland scholarship, The Weizmann Institute of Science
1999	Abisch-Frankel grant, in collaboration with Professor Amiram Grinvald
1998	Postdoctoral fellowship, HHMI and Department of Neurobiology, Stanford University
1997	The Feldman Foundation travel award, Stanford University
1993-1998	Predoctoral fellowship, the Neuroscience program, Stanford University
1992-1993	M.Sc. scholarship, M.Sc. program in Medical Studies, Tel Aviv University
1989-1992	Undergraduate fellowship, the Interdisciplinary Program, Tel Aviv University
1992	Scholarships for attending the course: "Methods in Computational Neuroscience", from: Marine Biological Laboratory, Woods Hole; the Katzir Foundation; the Psychobiology Center, the Hebrew University
1992	Scholarship covering the expenses of the course: "Neural Modeling and Neural Networks" in Capri, Italy
1991	Scholarship recipient in the Weizmann Institute Summer Student Program

F. SCHOLARLY PRESENTATIONS

September, 2018	Yale University, Department of Neuroscience

February, 2017	Invited talk in workshop "Joint Modeling of Encoding and Decoding in Specific Sensory-Perceptual Tasks", Cosyne meeting, Snow Bird, Utah
December, 2016	Invited talk in the annual meeting of the Center of Integrative Brain Function, Sydney Australia
November, 2016	Invited talk in Colloquium series, Department of Neuroscience, Albert Einstein College of Medicine
November, 2016	Invited talk in Colloquium series, Center for Neural Science, NYU
May, 2016	Invited talk in the "Natural Environments Tasks and Intelligence" workshop, UT Austin
May, 2015	Invited talk in the symposium "What is ground truth for understanding neural mechanisms supporting behavioral effects of visual spatial attention when different measurements give conflicting evidence?" at the Vision Sciences Society, St. Pete Beach Florida
February, 2015	Invited speaker at the annual retreat of the Edmond and Lily Safra Center for Brain Sciences, Ein Gedi, Israel
January, 2015	Invited speaker in Colloquium series of Edmond and Lily Safra Center for Brain Sciences, Hebrew University, Jerusalem, Israel
October, 2014	Invited talk in a symposium "Population coding in the visual pathways" Fall Vision Meeting of the Optical Society of America, Pennsylvania
April, 2013	Center for Perceptual Systems, University of Texas at Austin
September, 2012	Invited speaker in campus-wide Neuroscience seminar series, NIH, Bethesda
April, 2012	Invited talk in the Natural Environments Tasks and Intelligence workshop, The University of Texas at Austin
February, 2012	Invited talk in the 37th Annual Interdisciplinary Conference, Breckenridge, Colorado
September, 2011	Trinity University, invited speaker in Neuroscience Program Seminar Series
January, 2011	Invited talk in the 15th Annual Institute for Neuroscience Symposium, The University of Texas at Austin

October, 2010	Invited talk in a symposium "Normalization mechanisms and contrast gain control," Fall Vision Meeting of the Optical Society of America, Rochester
June, 2010	Invited talk in a symposium "*Photons & Neurons*," Center for Visual Science, University of Rochester
February, 2010	Invited talk in workshop "Correlations between the activity of sensory neurons and behavior", Cosyne meeting, Snow Bird, Utah
January, 2010	Yale University, invited speaker in Neuroscience Colloquium series
December, 2009	New York University, invited speaker in Computational Neuroscience Colloquium series
November, 2009	University of Utah, invited speaker in Neuroscience Colloquium series
December, 2008	The Weizmann Inst., invited speaker in Neuroscience Colloquium series
July, 2008	Invited speaker in 2008 Summer Institute in Cognitive Neuroscience, Tahoe, California
May, 2008	University of Pennsylvania, invited speaker in bi-weekly Vision Colloquium series
March, 2008	Texas A&M University, invited speaker in Neuroscience Colloquium series
March, 2008	Invited talk in workshop "What can functional imaging tell us about population coding in sensory systems?: Bridging computation, single neurons and imaging", Cosyne meeting, Snow Bird, Utah
February, 2008	University of Texas Medical School in Houston, invited speaker in weekly Colloquium series of the Department of Neurobiology and Anatomy
November, 2007	Invited talk in a mini symposium "How can perceptual decisions be predicted from the activity of sensory neurons?" Society for Neuroscience Meeting, San Diego
October, 2007	New York University, invited speaker in Center for Neural Science Colloquium series
September, 2007	Invited talk in a symposium "Imaging the Cortex," Fall Vision Meeting of the Optical Society of America, Berkeley
September, 2007	Stanford University, Department of Neurobiology

April, 2007	Invited talk in a symposium "Real time voltage sensitive dye imaging of cortical network activity," Meeting of the German Neuroscience Society, Gottingen
March, 2007	The Weizmann Institute for Science, Department of Neurobiology
March, 2007	Max Planck Institute for Biological Cybernetics, Tubingen
December, 2006	Invited talk in symposium "Decoding the Neural Code," Neural Information Processing Meeting, Whistler
November, 2006	Invited speaker in the Third Annual Houston Conference on Theoretical Neuroscience
2005	The University of Texas at Austin, Section of Neurobiology
2003	Washington University, Department of Anatomy and Neurobiology
2002	MIT, Center for Learning and Memory and Department of Brain and Cognitive Science
	UCSF, Keck Center and Department of Physiology
	University of Pittsburgh, Center for the Neural Basis of Cognition and Department of Neuroscience
	Smith-Kettlewell Institute, San Francisco
	The University of Texas at Austin, Center for Perceptual Systems
	Vanderbilt University, Department of Psychology
2001	Baylor College of Medicine, Division of Neuroscience
	Brandeis University, Volen Center of Complex Studies
	Stanford University, Department of Neurobiology
	University of California, San Francisco, Department of Physiology
	University of California, Berkeley, Helen Wills Neuroscience Institute
	Rockefeller University
	New York University, Center for Neural Science

Harvard University, Department of Neurobiology

Harvard University, MGH-NMR Center

G. ADVISING ACTIVITIES

Postdoctoral Fellows

2018- Satwant Kumar

2015- Giacomo Benvenuti

2015- Spencer Chen (co-advisor with Bill Geisler)

2015- Baowang Li (co-advisor with Nicholas Priebe)

2010-2012 Melchi Michel (co-advisor with Bill Geisler), currently Assist. Prof., Dept. of Psychology, Rutgers University

2009 Yui Fai Sit, currently Computer Scientist, Hong Kong

2006-2009 William Bosking, currently Res. Scientist., Max Planck Florida Institute

2005-2009 Zhiyong Yang, currently Assist. Prof., Dept. of Ophthalmology, Georgia Health Sciences University

2004-2009 Yuzhi Chen, currently Res. Scientist, Depts. of Neuroscience and Psychology, University of Texas at Austin

Graduate Students

2017- Shun Kobayashi

2016- Matthew Whitmire

2013- Yoon Bai, M.Sc., (co-advisor with Wilson Geisler)

2004-2012 Charles Michelson, M.Sc., currently Postdoctoral Fellow, Dept. of Psychology, University of Texas at Austin

2004-2009 Yiu Fai Sit (co-advisor with Risto Miikkulainen), currently Computer Scientist, Hong Kong

2003-2009 Christopher Palmer, currently postdoctoral fellow, University of California, San Diego

Lab Rotations

2008-present Teppei Matsui, Jacob Yates, Mathew Goodman, Joseph Corey, Jagruti Pattadkal, Eric Hart, Matthew Whitmire, Shun Kobayashi

Undergraduate Students

2008-present Ryan Ash, Bryan Barksdale, Jonathan Izygon, Hanna Korman, Whitney Franklin, Mark Watts, Ingrid Gropp, Anamaria Dragan

Thesis Committees

2017- Aaron Levi
Neuroscience
Supervisor Alex Huk

2017- Issac Rhim
Psychology
Supervisor Ian Nauhaus

2015-2018 Kate Bonnen
Neuroscience
Supervisor Larry Cormack

2013-2017 Steve Sebastian
Psychology
Supervisor Bill Geisler

2013-2017 Leor Katz
Neuroscience
Supervisor Alex Huk

2013-2017 Jacob Yates
Neuroscience
Supervisors Alex Huk and Jonathan Pillow

2011-2015 Vijay Aditya Tadipatri
Electrical and Computer Engineering
Supervisor Brian Evans

2010-2015 Wenke Li
Neuroscience
Supervisor Mike Mauk

2008-2014 Christopher Bradley
Psychology
Supervisor Bill Geisler

2008-2012 Miriam Meister
Neuroscience
Supervisor Alex Huk

2007-2011 Chung Sub Kim
Neuroscience
Supervisor Dan Johnston

H. PROFESSIONAL SERVICES

UNIVERSITY SERVICE

2015- present Promotion committees, Department of Neuroscience

2015- present Promotion committees, Department of Psychology

2013-2015 Campus wide Academic Calendar Committee

2012-2015 Neuroscience Institute Graduate Program, Progression Committee

2012-2015 Neuroscience Institute Graduate Program, Admissions Committee

2011-2014 Campus wide Animal Research Needs Task Force

2009-2015 Department of Psychology, Teaching award committee

2003-2007 Department of Psychology, Executive Committee

2002-2009 Center for Perceptual Systems, Seminar Series Organizer

REVIEWING

Grant reviewing

2014-present Reviewer for the German Research Foundation

2012-present Reviewer for NSF

2014-present The Israeli Science Foundation

2014-present Reviewer for UT Health Brain Initiative

2012-present Reviewer for the French National Research Agency

2011-present Reviewer on Special Emphasis Panel Review Group, SPC NIH/NEI

2009-2010 Reviewer on Special Emphasis Panel Review Group, CVP NIH/NEI

2009-present Reviewer for the Wellcome Trust

Editorial

2007-present Review Editor of *Frontiers in Systems Neuroscience*

2018 Guest editor, PLOS computational Biology

Manuscript reviewing

Ad Hoc Reviewer:

Brain, Cell, Cerebral Cortex, Current Biology, eLife, Journal of Neurophysiology, Journal of Neuroscience, Journal of Vision, Nature, Nature Neuroscience, Nature Communications, Neuron, Neurophotonics, PLOS-One, PLOS Computational Biology, Proc. Nat. Acad. Sci., Science