

Systems Neurobiology Laboratories

To: Tanya Sharpee & Sam Pfaff Appointments Committee Chair and Co-Chair

From: John Reynolds and Terry Sejnowski

Date: June 28, 2024

Re: Rich Krauzlis Adjunct Reappointment

Dear Tanya, Sam and members of APCOM:

We, John Reynolds, Tom Albright, and Terry Sejnowski, are writing in strong support of Dr. Rich Krauzlis' reappointment as an Adjunct Professor at the Salk Institute. Dr. Krauzlis currently serves as the Lab Chief of the Laboratory of Sensorimotor Research at the National Eye Institute, National Institutes of Health. Prior to his current position, Dr. Krauzlis was a valued faculty member at the Salk Institute, where he made significant contributions to our research community from 1997 to 2011.

Dr. Krauzlis has established himself as a leading figure in the field of visual neuroscience, with groundbreaking contributions to our understanding of eye movements, visual attention, and sensorimotor integration. His research has provided crucial insights into the neural mechanisms underlying pursuit and saccadic eye movements, as well as the role of the superior colliculus in visual attention and decision-making. Dr. Krauzlis' exceptional work has been recognized through numerous prestigious awards, including his election as Vice-Chair of the Eye Movements Gordon Research Conference and his membership in the International Neuropsychological Symposium.

His service to the scientific community is equally impressive, with roles on various NIH committees, editorial boards, and as a frequent reviewer for top-tier journals and funding agencies. We have reviewed Dr. Krauzlis' CV and Salk Adjunct Service/Contributions Form, both of which are attached to this letter.

In his form, Dr. Krauzlis has identified multiple ways in which he can contribute to the Salk Institute as an adjunct faculty member. These include giving lectures in the 200B Neuroscience course, serving on thesis committees for graduate students, participating in Faculty Review Committees, and presenting seminars on his recent research. His willingness to engage in these activities demonstrates his ongoing commitment to the Salk Institute and his desire to contribute to our academic community.

10010 North Torrey Pines Road, La Jolla, CA 92037-1099 PO Box 85800, San Diego, CA 92186-5800 Tel 858.453.4100 x1023 Fax 858.455.7933

reynolds@salk.edu

Given Dr. Krauzlis' exceptional scientific achievements, his history of valuable contributions to the Salk Institute, and his enthusiasm for continued involvement, we wholeheartedly recommend his reappointment as an Adjunct Professor. His expertise and dedication will undoubtedly enrich our research environment and benefit our students and faculty.

Sincerely,

John H Reynold

John H. Reynolds Fiona and Sanjay Jha Chair in Neuroscience Professor, Systems Neurobiology Labs

Thes D. Albry tit

Thomas D. Albright Professor Emeritus

T. Sejnowski

Terrence Sejnowski Francis Crick Chair Director, Computational Neurobiology Laboratory

10010 North Torrey Pines Road, La Jolla, CA 92037-1099 PO Box 85800, San Diego, CA 92186-5800 Tel 858.453.4100 x1023 Fax 858.455.7933

RICH KRAUZLIS

LABORATORY OF SENSORIMOTOR RESEARCH NATIONAL EYE INSTITUTE BUILDING 49 ROOM 2A82 N.I.H. BETHESDA, MD 20892-4435 PHONE (301) 496-2455 · EMAIL richard.krauzlis@nih.gov

EDUCATION		
1981 – 1985	Princeton University, Princeton, New Jersey A.B., Biology	
1985 – 1991	University of California, San Francisco, California Ph.D., Neuroscience	
PROFESSIONAL EXPERIENCE		
November 1991 – June 1997	Post-doctoral Fellow, Laboratory of Sensorimotor Research National Eye Institute, NIH, Bethesda, Maryland	
July 1997 – April 2004	Assistant Professor, Systems Neurobiology Laboratory Salk Institute for Biological Studies, La Jolla, California	
March 1999 – July 2007	Assistant Adjunct Professor, Department of Neurosciences University of California, San Diego, California	
April 2004 – April 2010	Associate Professor, Systems Neurobiology Laboratory Salk Institute for Biological Studies, La Jolla, California	
July 2007 – July 2011	Associate Adjunct Professor, Department of Neurosciences University of California, San Diego, California	
April 2010 – August 2011	Professor, Systems Neurobiology Laboratory Salk Institute for Biological Studies, La Jolla, California	
August 2011 – present	Adjunct Professor, Systems Neurobiology Laboratory Salk Institute for Biological Studies	
August 2011 – present	Senior Investigator and Section Chief Laboratory of Sensorimotor Research National Eye Institute, National Institutes of Health	
March 2015 – present	Joint Appointment, Cellular Neurobiology Branch National Institute on Drug Abuse, National Institutes of Health	
March 2021 – Dec 2022	Acting Lab Chief Laboratory of Sensorimotor Research National Eye Institute, National Institutes of Health	
January 2023 – present	Lab Chief Laboratory of Sensorimotor Research National Eye Institute, National Institutes of Health	

HONORS AND AWARDS

PROFESSIONAL MEMBERSHIPS

Society for Neuroscience	
Association for Research in Vision and Ophthalmology	
Vision Sciences Society	
International Neuropsychological Symposium	

PROFESSIONAL SERVICE

NIH Service:	
2016	ad hoc reviewer, NIH Central Tenure Committee
2017	Member, NIH Stadtman Synapses and Circuits Search Committee
2017 – 2018	Chair, LSR Faculty Search Committee (Search resulted in the successful recruitment of Dr. Hendrikje Nienborg)
2018	Moderator, NEI 50th Anniversary Symposium: Future of Vision Research
2019	Member, NEI Chief Information Officer Search Committee
2020 – 2021	Member, NIMH NIND Neurodevelopmental Search Committee
2020 –	Member, Neurophysiology Imaging Facility (NIF) Steering Committee

2020 – 2023	NEI Representative, Institute for Laboratory Animal Research (ILAR) Roundtable, National Academy of Sciences
2020 – 2023	NIH Building 49 User Committee
2020 – 2023	NEI Scientific IT Advisory Committee (SIAC)
2021 – 2022	NIH Coordinating Group National Academies of Science, Engineering, and Medicine NHP study
2021 – 2022	NEI Quadrennial Review Committee
2021 – 2022	NEI Strategic Plan, Biology and Neuroscience of Vision Working Group
2023	DDIR Representative for tenure-track NIMH BSC presentation
2023	LSR Faculty Search Committee (Search resulted in successful recruitment of Dr. Farran Briggs)
2023	Chair, NIH Animal Research Community Support Task Force
2023 -	Building 49 Central Animal Facility User Committee
2023 –	Executive sponsor, NEI DEIA Quick Start Team
2023 –	NIH Animal Research Advisory Committee
2023 –	Chair, NEI Animal Care and Use Committee
Other Professional Service:	
2007 – present	Board of Editors, Journal of Vision
2008 – 2015	Board of Editors, Vision Research
2011	Organizer, International Workshop on Visual Attention Buenos Aires, Argentina
2010 – 2015	Senior Editor, Vision Research
2011 – 2016	Associate Editor, <i>Journal of Neuroscience</i> (Behavior, Systems and Cognition section)
2011	Organizer, International Workshop on Visual Attention Allahabad, India
2016	External Reviewer, Zanvyl Krieger Mind/Brain Institute Academic Council Review, Johns Hopkins University, MD
2017	Organizer, Workshop on Attention: What is it? Carnegie Mellon University, Pittsburgh, PA
2018 – 2023	Board of Editors, Annual Review of Vision Science
2020	Guest Editor, Proceedings of the National Academy of Sciences
2021	Organizer, Symposium at 20 th Anniversary of Vision Sciences Society What we learn about the visual system by studying non-human primates: Past, present, and future Virtual meeting
2022	Vision Sciences Society Young Investigator Award Committee
2023	Chair, Vision Sciences Society Young Investigator Award Committee
2023 –	Vision Sciences Society Board Member

Reviewer for the following funding agencies and foundations:

Autism Speaks Deutsche Forschungsgemeinschaft (Germany) European Research Council Fondation pour la Recherche Médicale (France) Fund for Scientific Research – FNRS (Belgium) The Icelandic Centre for Research (Iceland) The Israel Science Foundation (Israel) Leverhulme Trust Medical Research Council (UK) National Science Foundation Natural Sciences and Engineering Research Council of Canada NIH Director's Early Independence Award **NIH Special Emphasis Panel** NIH Study Section, ad hoc Research Grants Council (Hong Kong, China) Swiss National Science Foundation Unites States – Israel Binational Science Foundation Wellcome Trust (UK) Whitehall Foundation

Associate Editor for The New Encyclopedia of Neuroscience (Elsevier)

Author of chapter "Eye Movements" in graduate level textbook *Fundamental Neuroscience* (3rd and 4th editions, Elsevier)

Consulting referee for the following journals:

American Journal of Psychiatry Behavioral and Brain Sciences Behavioral Brain Research Biosystems Brain Cell Reports Cerebral Cortex Current Biology eLife eNeuro European Journal of Neuroscience Experimental Brain Research Investigative Ophthalmology and Visual Science Journal of Anatomy Journal of Cognitive Neuroscience Journal of Comparative Neurology Journal of Computational Neuroscience Journal of Experimental Biology Journal of Neurophysiology Journal of Neuroscience Journal of Physiology Journal of the Optical Society of America A Journal of Vestibular Research Journal of Vision Nature Nature Communications Nature Neuroscience

Nature Reviews Neuroscience Neural Computation Neuron Neuroscience Neuroscience and Biobehavioral Reviews Proceedings of the National Academy of Sciences Science Science Science Advances Scientific Reports Trends in Neurosciences Vision Research Visual Neuroscience

PUBLICATIONS

Original Research Articles:

- 79. Yu, G., Katz, L.N., Quaia, C., Messinger, A., and Krauzlis, R.J., Short-latency preference for faces in the primate superior colliculus. *bioRxiv*, 2023, doi: https://doi.org/10.1101/2023.09.06.556401
- 78. Katz, L.N., Yu, G., Herman, J.P., and Krauzlis, R.J., Correlated variability in primate superior colliculus depends on functional class. *Commun Biol.*, 6(1):540, 2023.
- 77. Yu, G., Herman, J.P., Katz, L.N., and Krauzlis, R.J., Microsaccades as a marker not a cause for attention-related modulation, *eLife*, 11: e74168, 2022.
- 76. Wang, L., Herman, J.P., and Krauzlis, R.J., Neuronal modulation in the mouse superior colliculus during covert visual selective attention, *Scientific Reports*, 12, 2482, 2022.
- 75. Goldstein, S., Wang, L., McAlonan, K., Torres-Cruz, M., and Krauzlis, R.J., Stimulus-driven visual attention in mice, *J. Vision*, 22: 11, 2022.
- 74. Bogadhi, A.R., Katz, L.N., Bollimunta, A., Leopold, D.A., and Krauzlis, R.J., Midbrain activity shapes high-level visual properties in the primate temporal cortex, *Neuron*, 109: 690-699, 2021.
- 73. Wang, L., and Krauzlis, R.J., Involvement of striatal direct pathway in visual spatial attention in mice, *Current Biology*, 30: 4739-4744, 2020.
- 72. Herman, J.P., Arcizet, F., and Krauzlis, R.J., Attention-related modulation of caudate primate caudate neurons depends on superior colliculus activity, *eLife*, 9: e53998, 2020. doi: 10.7554/eLife.53998.
- 71. Wang, L., McAlonan, K., Goldstein, S., Gerfen, C.R., and Krauzlis, R.J., A causal role for mouse superior colliculus in visual perceptual decision-making, *J. Neuroscience*, 40: 3768-3782, 2020.
- 70. Krauzlis, R.J., Nichols, N., Rangarajan, K.V., McAlonan, K., Goldstein, S., Yochelson, D. and Wang, L., Visual psychophysics in head-fixed mice, *Current Protocols in Neuroscience*, 92: e95, 2020.
- 69. Bogadhi, A.R., Bollimunta, A., Leopold, D.A., and Krauzlis, R.J., Spatial attention deficits are causally linked to an area in macaque temporal cortex, *Current Biology*, 29: 726-736, 2019.
- 68. Herman, J.P, Katz, L.N., and Krauzlis, R.J., Midbrain activity can explain perceptual decisions during an attention task, *Nature Neuroscience*, 21: 1651-1655, 2018.
- 67. Arcizet, F., and Krauzlis, R.J., Covert spatial selection in primate basal ganglia, *PLoS Biology*, 16: e2005930, 2018.
- 66. Bogadhi, A.R., Bollimunta, A., Leopold, D.A., and Krauzlis, R.J., Brain regions modulated during covert visual attention in the macaque, *Scientific Reports*, 8: 15237, 2018.
- 65. Bollimunta, A., Bogadhi, A.R., and Krauzlis, R.J., Comparing frontal eye field and superior colliculus contributions to covert spatial attention, *Nature Communications*, 9: 3553, 2018.
- 64. Wang, L., Rangarajan, K.V., Gerfen, C.R., and Krauzlis, R.J., Activation of striatal neurons causes a perceptual decision bias during visual change detection in mice, *Neuron*, 97: 1-13, 2018.
- 63. Wang, L., and Krauzlis, R.J., Visual selective attention in mice, Current Biology, 28: 676-685, 2018.

- 62. Lovejoy, L.P., and Krauzlis, R.J., Changes in perceptual sensitivity related to spatial cues depends on subcortical activity, *PNAS*, 114: 6122-6126, 2017.
- 61. Herman, J.P., and Krauzlis, R.J., Color-change detection activity in the primate superior colliculus, *eNeuro*, 4(2), 2017.
- 60. Herman, J.P., Bogadhi, A.R., and Krauzlis, R.J., Effects of spatial cues on color-change detection in humans, *J. Vision*, 15(6):3, 1-16, 2015.
- 59. Perrone, J.A., and Krauzlis, R.J., Simulating component-to-pattern dynamic effects with a computer model of middle temporal pattern neurons, *J. Vision*, 14(1):19, 1-17, 2014.
- 58. Chukoskie, L., Snider, J., Mozer, M.C., Krauzlis, R.J., and Sejnowski, T.J., Learning where to look for a hidden target. *PNAS*, 110 (suppl. 2): 10438-10445, 2013.
- 57. Eckstein, M.P., Mack, S.C., Liston, D.B., Bogush, L., Menzel, R., and Krauzlis, R.J., Rethinking human visual attention: Spatial cueing effects and optimality of decisions by honeybees, monkeys and humans. *Vision Res.*, 85: 5-19, 2013.
- 56. Hafed, Z., Lovejoy, L., and Krauzlis, R.J., Superior colliculus inactivation alters the relationship between covert visual attention and microsaccades. *Eur. J. Neurosci.*, 37: 1169-1181, 2013.
- 55. Krauzlis, R.J., Dill, N., and Fowler, G.A., Dissociation of pursuit target selection from saccade execution. *Vision Res.*, 74: 72-79, 2012.
- 54. Zénon, A., and Krauzlis, R.J., Attention deficits without cortical neuronal deficits, *Nature*, 489: 434-437, 2012.
- 53. Goffart, L., Hafed, Z.M., and Krauzlis, R.J., Visual fixation as equilibrium: evidence from superior colliculus inactivation, *J. Neurosci.*, 32: 10627-10636, 2012.
- 52. Nielsen, K.J., Callaway, E.M., and Krauzlis, R.J., Viral vector-based reversible neuronal inactivation and behavioral manipulation in the macaque monkey, *Front. Syst. Neurosci.*, 6:48, 2012.
- 51. Hafed, Z., and Krauzlis, R.J., Similarity of superior colliculus involvement in microsaccade and saccade generation, *J. Neurophysiol.*, 107: 1904-1916, 2012.
- 50. Hafed, Z., Lovejoy, L., and Krauzlis, R.J., Modulation of microsaccades in monkey during a covert visual attention task, *J. Neurosci.*, 31: 15219-15230, 2011.
- 49. Mahaffy, S., and Krauzlis, R.J., Inactivation and stimulation of the frontal pursuit area change pursuit metrics without affecting pursuit target selection, *J. Neurophysiol.*, 106: 347-360, 2011.
- 48. Nummela, S.U., and Krauzlis, R.J., Superior colliculus inactivation alters the weighted integration of visual stimuli, *J. Neurosci.*, 31: 8059-8066, 2011.
- 47. Mahaffy, S., and Krauzlis, R.J., Neural activity in the frontal pursuit area does not underlie pursuit target selection, *Vision Res.*, 51: 853-866, 2011.
- 46. Nummela, S.U., and Krauzlis, R.J., Inactivation of primate superior colliculus biases target choice for smooth pursuit, saccades, and button press responses, *J. Neurophysiol.*, 99: 1743-1757, 2010.
- 45. Hafed, Z.M., and Krauzlis, R.J., Microsaccadic suppression of visual bursts in the primate superior colliculus, *J. Neuroscience*, 30: 9542-9547, 2010.
- 44. Lovejoy, L.P., and Krauzlis, R.J., Inactivation of the primate superior colliculus impairs covert selection of signals for perceptual judgments, *Nature Neuroscience*, 13: 261-266, 2010.
- 43. Lovejoy, L.P., Fowler, G.A., and Krauzlis, R.J., Spatial allocation of attention during smooth pursuit eye movements, *Vision Res.*, 49: 1275-1285, 2009.
- 42. Hafed, Z.M., Goffart, L., and Krauzlis, R.J., A neural mechanism for microsaccade generation in the primate superior colliculus, *Science*, 323: 940-943, 2009.
- 41. Perrone, J.A., and Krauzlis, R.J., Vector subtraction using visual and extraretinal motion signals: A new look at efference copy and corollary discharge theories, *J. Vision*, 8:24, 1-14, 2008.
- 40. Hafed, Z.M., and Krauzlis, R.J., Goal representations dominate superior colliculus activity during extrafoveal tracking, *J. Neuroscience*, 28: 9426-9439, 2008.
- 39. Hafed, Z.M., Goffart, L., and Krauzlis, R.J., Superior colliculus inactivation causes stable offsets in eye position during tracking, *J. Neuroscience*, 28: 8124-8137, 2008.

- 38. Perrone, J.A., and Krauzlis, R.J., Spatial integration by MT pattern neurons: A closer look at patternto-component effects and the role of speed tuning, *Journal of Vision*, 8:1, 1-14, 2008.
- 37. Nummela, S.U., Lovejoy, L.P., and Krauzlis, R.J., Saccade selection when reward probability is dynamically manipulated using Markov chains, *Exp. Brain Res.*, 187: 321-330, 2008.
- 36. Harwood, M.R., Madelain, L., Krauzlis, R.J., and Wallman, J., The spatial scale of attention strongly modulates saccade latencies, *J. Neurophysiol.*, 99: 1743-1757, 2008.
- 35. Hafed, Z.M., and Krauzlis, R.J., Ongoing eye movements constrain visual perception, *Nature Neuroscience*, 9: 1449-1457, 2006.
- 34. Madelain, L., Krauzlis, R.J., and Wallman, J., Spatial deployment of attention influences both saccadic and pursuit tracking, *Vision Res.*, 45: 2685-2703, 2005.
- 33. Liston, D., and Krauzlis, R.J., Shared decision signal explains performance and timing of pursuit and saccadic eye movements, *J. Vision*, 5: 678-689, 2005.
- 32. Carello, C.D. and Krauzlis, R.J., Manipulating intent: evidence for a causal role of the superior colliculus in target selection, *Neuron*, 43: 575-583, 2004.
- 31. Krauzlis, R.J., Activity of rostral superior colliculus neurons during passive and active viewing of motion, *J. Neurophysiol.*, 92: 949-958, 2004.
- 30. Liston, D., and Krauzlis, R.J., Shared response preparation for pursuit and saccadic eye movements, *J. Neuroscience*, 23: 11305-11314, 2003.
- 29. Stone, L.S., and Krauzlis, R.J., Shared motion signals for human perceptual decisions and oculomotor actions, *J. Vision*, 3: 725-736, 2003.
- 28. Madelain, L., and Krauzlis, R.J., Pursuit of the ineffable: perceptual and motor reversals during the tracking of apparent motion, *J. Vision*, 3: 642-653, 2003.
- 27. Madelain, L., and Krauzlis, R.J., Effects of learning on smooth pursuit during transient disappearance of a visual target, *J. Neurophysiol.*, 90: 972-982, 2003.
- 26. Krauzlis, R.J., Neuronal activity in the rostral superior colliculus related to the initiation of pursuit and saccadic eye movements, *J. Neuroscience*, 23: 4333-4344, 2003.
- 25. Kornylo, K., Dill, N., Saenz, M., and Krauzlis, R.J., Canceling of pursuit and saccadic eye movements in humans and monkeys, *J. Neurophysiol.*, 89: 2984-2999, 2003.
- 24. Adler, S.A., Bala, J., and Krauzlis, R.J. Primacy of spatial information in guiding target selection for pursuit and saccades. *J. Vision*, 2: 627-644, 2002.
- 23. Krauzlis, R.J., and Dill, N., Neural correlates of target choice for pursuit and saccades in the primate superior colliculus, *Neuron*, 35: 355-363, 2002.
- 22. Krauzlis, R.J., Dill, N., and Kornylo, K., Activity in the primate rostral superior colliculus during the "gap effect" for pursuit and saccades, *Ann. NY Acad. Sci.*, 956: 409-413, 2002.
- 21. Krauzlis, R.J., Extraretinal inputs to neurons in the rostral superior colliculus of the monkey during smooth-pursuit eye movements. *J. Neurophysiol.*, 86: 2629-2633, 2001.
- 20. Krauzlis, R.J. and Adler, S.A., Effects of directional expectations on motion perception and pursuit eye movements. *Visual Neuroscience*, 18: 365-376, 2001.
- 19. Krauzlis, R.J., Population coding of movement dynamics by cerebellar Purkinje cells. *NeuroReport*, 11: 1045-1050, 2000.
- 18. Basso, M.A., Krauzlis, R.J., and Wurtz, R.H., Activation and inactivation of rostral superior colliculus neurons during smooth-pursuit eye movements in monkeys. *J. Neurophysiol.*, 84: 892-908, 2000.
- 17. Krauzlis, R.J., Basso, M.A., and Wurtz, R.H., Discharge properties of neurons in the rostral superior colliculus of the monkey during smooth-pursuit eye movements. *J. Neurophysiol.*, 84: 876-891, 2000.
- 16. Krauzlis, R.J., Zivotofsky, A.Z., and Miles, F.A., Target selection for pursuit and saccadic eye movements in humans. *J. Cog. Neurosci.*, 11: 641-649, 1999.
- 15. Krauzlis, R.J. and Miles, F.A., Role of the oculomotor vermis in generating pursuit and saccades: Effects of microstimulation. *J. Neurophysiol.* 80: 2046-2062, 1998.

- 14. Krauzlis, R.J., Basso, M.A., and Wurtz, R.H., Shared motor error for multiple eye movements. *Science*, 276: 1693-1695, 1997.
- 13. Krauzlis, R.J. and Miles, F.A., Initiation of saccades during fixation or pursuit: Evidence in humans for a single mechanism. *J. Neurophysiol.*, 76: 4175-4179, 1996.
- 12. Krauzlis, R.J. and Miles, F.A., Release of fixation for pursuit and saccades in humans: Evidence for shared inputs acting on different neural substrates. *J. Neurophysiol.*, 76: 2822-2833, 1996.
- 11. Krauzlis, R.J. and Miles, F.A., Transitions between pursuit eye movements and fixation in the monkey: dependence on context. *J. Neurophysiol.*, 76: 1622-1638, 1996.
- 10. Krauzlis, R.J. and Miles, F.A., Decreases in the latency of smooth pursuit and saccadic eye movements produced by the "gap paradigm" in the monkey. *Vision Res.*, 36: 1973-1985, 1996.
- 9. Busettini, C., Miles, F.A., and Krauzlis, R.J., Short latency disparity vergence responses and their dependence on a prior saccadic eye movement. *J. Neurophysiol.*, 75: 1392-1410, 1996.
- 8. Krauzlis, R.J. and Lisberger, S.G., Directional organization of eye movement and visual signals in the floccular lobe of the monkey cerebellum. *Exp. Brain Res.*, 109: 289-302, 1996.
- 7. Krauzlis, R.J. and Lisberger, S.G., A model of visually-guided smooth pursuit eye movements based on behavioral observations. *J. Comp. Neurosci.* 1: 265-283, 1994.
- Krauzlis, R.J. and Lisberger, S.G., Simple spike responses of gaze velocity Purkinje cells in the floccular lobe of the monkey during the onset and offset of pursuit eye movements. J. Neurophysiol., 72: 2045-2050, 1994.
- 5. Krauzlis, R.J. and Lisberger, S.G., Temporal properties of visual motion signals for the initiation of smooth pursuit eye movements in monkeys. *J. Neurophysiol*. 72:150-162, 1994.
- 4. Goldreich, D., Krauzlis, R.J., and Lisberger, S.G., Effect of changing feedback delay on spontaneous oscillations in smooth pursuit eye movements of monkeys. *J. Neurophysiol.* 67: 625-638, 1992.
- 3. Krauzlis, R.J. and Lisberger, S.G., Visual motion commands for pursuit eye movements in the cerebellum. *Science* 253: 568-571, 1991.
- 2. Movshon, J.A., Lisberger, S.G., and Krauzlis, R.J., Visual cortical signals supporting smooth pursuit eye movements. *CSH Symp. Quant. Biol.* 55: 707-716, 1990.
- 1. Krauzlis, R.J. and Lisberger, S.G., A control systems model of smooth pursuit eye movements with realistic emergent properties. *Neural Computation* 1:116-122, 1989.

Reviews, Book Chapters, and Commentaries:

- 43. Krauzlis, R.J., Krauzlis R.J., Wang L., Yu G., Katz L.N., What is attention? Wiley Interdiscip Rev Cogn Sci. 2021 Jun 24:e1570.
- 42. Klink P.C., Aubry J.F., Ferrera V.P., Fox A.S., Froudist-Walsh S., Jarraya B., Konofagou E.E., Krauzlis R.J., Messinger A., Mitchell A.S., Ortiz-Rios M., Oya H., Roberts A.C., Roe A.W., Rushworth M.F.S., Sallet J., Schmid M.C., Schroeder C.E., Tasserie J., Tsao D.Y., Uhrig L., Vanduffel W., Wilke M., Kagan I., Petkov C.I., Combining brain perturbation and neuroimaging in non-human primates. *Neuroimage* 235: 118018, 2021.
- 41. Krauzlis, R.J., Visual neuroscience: What to do with all of these cortical visual areas? *Current Biology* 30: R1428-1431, 2020.
- 40. Leopold, D.A., and Krauzlis, R.J., How the brain pays attention to others' attention. *PNAS* 117: 3901-3903, 2020.
- 39. Krauzlis, R.J., Visual neuroscience: Locomotion changes how mice see. *Current Biology* 29: R358-R360, 2019.
- 38. Krauzlis, R.J., Bogadhi, A.R., Herman, J.P., and Bollimunta, A., Selective attention without a neocortex. *Cortex* 102: 161-175, 2018.
- 37. Krauzlis, R.J., Goffart., L., and Hafed, Z.M., Neuronal control of fixation and fixational eye movements. Phil. Trans. R Soc Lond B Biol Sci, 372(1718), 2017.
- 36. Krauzlis, R.J. Target selection for pursuit and saccades. In: *Reference Module in Neuroscience and Biobehavioral Psychology*, Elsevier, Oxford, 2017.

- 35. Rucci, M., McGraw, P.V., Krauzlis, R.J., Fixational eye movements and perception. *Vision Research* 118: 1-4, 2016.
- 34. Krauzlis, R.J., Bollimunta, A., Arcizet, F., and Wang, L., Attention as an effect not a cause. *Trends in Cognitive Sciences* 18:457-464, 2014.
- 33. Zénon, A., and Krauzlis, R.J., Le colliculus supérieur [Superior colliculus as a subcortical center for visual selection]. *Medecine/Sciences* 30:637-643, 2014.
- 32. Krauzlis, R.J., Superior colliculus and visual attention. In: *The New Visual Neurosciences*, J.S. Werner and L. M. Chalupa, eds., MIT Press, pp. 323-337, 2014.
- 31. Krauzlis, R.J., Attentional functions of the superior colliculus. In: *The Oxford Handbook of Attention*, A.C. Nobre and S. Kastner, eds., Oxford University Press, pp. 423-445, 2014.
- 30. Carrasco, M., Eckstein, M., Krauzlis, R.J., and Verghese, P., Attentional modulation: Target selection, active search and cognitive processing. *Vision Research*, 85: 1-4, 2013.
- 29. Krauzlis, R.J., Lovejoy, L.P., and Zénon, A., Superior colliculus and visual spatial attention. *Annual Review of Neuroscience*, 36: 165-182, 2013.
- 28. Krauzlis, R.J., Eye Movements. In: *Fundamental Neuroscience*, 4th Edition, L.R. Squire, ed., Elsevier, pp. 697-714, 2013.
- 27. Carrasco, M., Eckstein, M., Krauzlis, R.J., and Verghese, P., *Vision Research* special issue on "Visual attention". *Vision Research*, 74: 1, 2012.
- 26. Gegenfurtner, K., Bremmer, F., Fiehler, K., Henriques, D., and Krauzlis, R.J., Recent advances in perception and action. *Vision Research*, 51: 801-803, 2011.
- 25. Krauzlis, R.J., and Nummela, S.U., Attention points to the future. *Nature Neuroscience*, 14: 130-131, 2011.
- 24. Gegenfurtner, K., Bremmer, F., Fiehler, K., Henriques, D., and Krauzlis, R.J., Vision Research special issue on "Perception and action". *Vision Research*, 50: 2617, 2010.
- 23. Krauzlis, R.J., Eye Movements: Physiological. In: Encyclopedia of Perception, E. Bruce Goldstein, ed., SAGE Publications, Inc., 2010.
- Hafed, Z.M., and Krauzlis, R.J., Interactions between perception and smooth pursuit eye movements. In: Dynamics of Visual Motion Processing: Neuronal, Behavioral and Computational Approaches, R. Born, D. Dong, M. Ibbotson, G. Masson and U. Ilg, eds., Springer Verlag, 2010.
- Hafed, Z.M., Goffart, L., and Krauzlis, R.J., Comment on "Tracking an Invisible Target Reveals Spatial Tuning of Neurons in the Rostral Superior Colliculus Is Not Dependent on Visual Stimuli". *J. Neuroscience*, 29: 589-590, 2009.
- 20. Krauzlis, R.J., and Chukoskie, L., Oculomotor control: Target selection for pursuit and saccades. In: *The New Encyclopedia of Neuroscience*, L.R. Squire, Editor-in-Chief, Academic Press, Oxford, 2009.
- 19. Martinez-Conde, S., Krauzlis, R.J., Miller, J., Morrone, C., Williams, D., & Kowler, E., Eye movements and the perception of a clear and stable visual world. *J. Vision*, 8(14): i, 1, 2008.
- 18. Krauzlis, R.J., and Lovejoy, L.P., Walk this way. Neuron, 60: 7-8, 2008.
- 17. Krauzlis, R.J., Eye Movements. In: *Fundamental Neuroscience*, 3rd Edition, L.R. Squire, ed., Elsevier, pp. 775-792, 2008.
- 16. Krauzlis, R.J., and Hafed, Z.M., Finding our way around the sensory-motor corner. *Neuron*, 54: 852-854, 2007.
- 15. Krauzlis, R.J., Target selection, attention, and the superior colliculus. *Behavioral and Brain Sciences*, 30: 98-99, 2007.
- 14. Krauzlis, R.J. The control of voluntary eye movements: New perspectives. *The Neuroscientist,* 11: 124-137, 2005.
- 13. Krauzlis, R.J., Target selection and the superior colliculus: goals, choices and hypotheses, *Vision Res*, 44: 1445-1451, 2004.
- 12. Krauzlis, R.J., Recasting the smooth pursuit eye movement system, *J. Neurophysiol.*, 91: 591-603, 2004.

- 11. Krauzlis, R.J., and Stone, L.S., Eye movement: tracking. In: *Encyclopedia of Neuroscience*, 3rd Edition, G. Adelman and B. Smith, ed., Elsevier, 2003.
- 10. Krauzlis, R.J., and Carello, C.D., Going for the goal, *Nature Neuroscience*, 6: 332-333, 2003.
- 9. Krauzlis, R.J. and Stone, L.S., Pursuit eye movements. In: *The Handbook of Brain Theory and Neural Networks, Second Edition*, M.A. Arbib, ed., MIT Press, pp. 929-934, 2002.
- 8. Krauzlis, R.J., Reaching for answers, Neuron, 34: 673-674, 2002.
- 7. Krauzlis, R.J., Eye movement: tracking. In: *Encyclopedia of Neuroscience*, 2nd Edition, G. Adelman and B. Smith, ed., Elsevier, <u>http://www.elsevier.com/locate/encneu</u>, 1999.
- 6. Krauzlis, R.J. and Stone, L.S. Tracking with the mind's eye. *Trends in Neurosciences*, 22: 544-550, 1999.
- 5. Krauzlis, R.J., Pursuit eye movements. In: *The Handbook of Brain Theory and Neural Networks*, M.A. Arbib, ed., MIT Press, pp. 775-779, 1995.
- 4. Busettini, C., Krauzlis, R.J., and Miles, F.A. Short-latency vergence responses. In: *Contemporary Ocular Motor and Vestibular Research: A Tribute to David A. Robinson*, U. Buttner, T. Brandt, A. Fuchs, D. Zee, ed., Verlag, pp. 312-319, 1994.
- 3. Krauzlis, R.J. and Lisberger, S.G., A model of eye velocity memory for pursuit. In: *Contemporary Ocular Motor and Vestibular Research: A Tribute to David A. Robinson*, U. Buttner, T. Brandt, A. Fuchs, D. Zee, ed., Verlag, pp. 418-420, 1994.
- Krauzlis, R.J. and Miles, F.A., Similar changes in the latency of pursuit and saccadic eye movements observed with the "gap paradigm". In: *Information Processing Underlying Gaze Control*, J.M. Delgado-Garcia, ed., Oxford and New York, Pergamon Press, pp. 269-277, 1994.
- 1. Krauzlis, R.J., The visual drive for smooth eye movements. In: *Visual detection of motion*, A.T. Smith and R.J. Snowden, ed., London, Academic Press, pp. 437-473, 1994.

INVITED TALKS

Refining Ocular Motor Models through Simulation, Cold Spring Harbor Laboratory, New York. 1988 1989 Laboratory for Sensorimotor Research, National Institutes of Health. 1990 Afternoon of Physiology, University of California at San Francisco. Speech and Hearing Sciences seminar series, University of California at San Francisco. Gordon Research Conference on Theoretical Biology and Mathematics, Tilton, New Hampshire. Bioengineering seminar series, Topics in Neuroscience Research (E298B-3), University of 1991 California at Berkeley. National Student Research Forum, Galveston Texas. Workshop sponsored by the Hereditary Disease Foundation, Santa Monica, California. 1992 1993 Life sciences division, NASA Ames Research Center, Moffet Field, California. 1995 Center for Neuroscience, University of California at Davis. Department of Psychology, University of California at Davis. National Eye Institute, National Institutes of Health, Bethesda, Maryland. 1996 Department of Neurobiology and Anatomy, Bowman Gray School of Medicine, Winston-Salem, North Carolina. Department of Anatomy and Neurobiology, Washington University School of Medicine, St. Louis, Missouri. Georgetown Institute for Cognitive and Computational Sciences, Georgetown University, Washington, D.C. The Rockefeller University, New York, New York. The Salk Institute, La Jolla, California. Dartmouth College, Hanover, New Hampshire.

University College, London, England.

- 1997 Integrative Neuroscience Seminar, National Institutes of Health, Bethesda, Maryland. Laboratory of Neural Control, National Institutes of Health, Bethesda, Maryland. Helmholtz Club, University of California, Irvine, California.
- 1998 Sloan Summer Meeting, Pasadena, California.
- 1999 The Smith-Kettlewell Eye Research Institute, San Francisco, California. NASA Ames Research Center, Moffett Field, California.
- 2001 Laboratoire de Physiologie Neurosensorielle, College de France, Paris, France.
 Centre de Recherche en Neurosciences Cognitives, Centre National de la Recherche Scientifique, Marseille, France.
 Inserm unit "Espace et Action", Lyon, France.
 The Society for the Neural Control of Movement, Sevilla, Spain.
 - Sloan Seminar Series, The Salk Institute, La Jolla, California.
- 2002 City University of New York, New York, New York.
 Helmholtz Club, University of California, Irvine, California.
 The Society for the Neural Control of Movement, Naples, Florida.
 Joint Symposium on Neural Computation, Pasadena, California.
 University of California, Santa Barbara, California
- 2003 Center for Visual Science, Rochester University, Rochester, New York Centre for Vision Research, York University, Toronto, Canada International Workshop on Visual Attention, San Miniato, Italy Laboratory of Sensorimotor Research, 25th Anniversary Meeting, Bethesda, Maryland. The Smith-Kettlewell Eye Research Institute, San Francisco, California. NASA Ames Research Center, Moffett Field, California. Columbia University, New York, New York.
- 2004 11th Joint Symposium on Neural Computation, University of Southern California, CA The Salk Institute, La Jolla, CA McKnight Conference on Neuroscience, Aspen, Colorado.
- 2005 Vision Science Research Center, University of Alabama, Birmingham, AL Neurobiology Department, Harvard University, Cambridge, MA Annual Spring Retreat for Cognitive Neuroscience, San Diego, CA Structure, Function and Development of the Visual System, Cold Spring Harbor, NY

Oculomotor System Biology, Gordon Research Conference, Lewiston, ME

- 2006 The Society for the Neural Control of Movement, Key Biscayne, FL UCSD Neuroscience Graduate Program Annual Retreat, Lake Arrowhead, CA British Association for Cognitive Neuroscience (Keynote lecture), Coventry, United Kingdom Université catholique de Louvain, Brussels, Belgium
- 2007 2nd International Workshop on Visual Attention, Buenos Aires, Argentina Centre de Recherche en Neurosciences Cognitives, CNRS, Marseille, France. Structure, Function and Development of the Visual System, Cold Spring Harbor, NY
- 2008 UCSD Neuroscience Graduate Program Annual Retreat, Lake Arrowhead, CA Institute for Neural Computation Spring Retreat, San Diego, CA Center for Neural Science, New York University, New York, NY Mahoney Center for Brain and Behavior Research, Columbia University, New York, NY Department of Psychology, University of California, Santa Barbara, California.

Department of Cognitive Sciences, University of California, Irvine, California. Center for the Neural Basis of Cognition, Univ. of Pittsburgh and Carnegie Mellon, Pittsburgh, PA 2009 Computational and Systems Neuroscience (Cosyne) Workshop, Snow Bird, UT Neuromorphic Engineering Student Society Retreat, La Jolla, CA Eye Movements and Vision: A Symposium in Honor of Fred Miles, St John's College, Oxford, UK Center for Neuroscience, University of Wisconsin-Madison, Madison, WI The Society for the Neural Control of Movement, Waikoloa, HI Joint Symposium on Neural Computation, USC, Los Angeles, CA International Conference on Cognitive and Neural Systems, Boston University, Boston, MA Structure, Function and Development of the Visual System, Cold Spring Harbor, NY Optical Society's Fall Vision Meeting, Seattle, WA NIH Neuroscience Seminar Series, Bethesda, MD International Symposium on Cognition and Action, Tamagawa University, Yokahama, Japan National Institute for Physiological Sciences, Okazaki, Japan Kyoto University, Kyoto, Japan Hokkaido University, Sapporo, Japan 2010 Barrow Neurological Institute, Phoenix, AZ The Salk Institute, La Jolla, CA International Meeting for Autism Research, Philadelphia, PA Department of Psychology, UCSD, San Diego, CA Workshop on Perception and Action, Rauischholzhausen Castle, Marburg, Germany University of Tübingen, Tübingen, Germany Center for the Neural Basis of Cognition, Univ. of Pittsburgh and Carnegie Mellon, Pittsburgh, PA Mahoney Center for Brain and Behavior Research, Columbia University, New York, NY Laboratory of Sensorimotor Research, National Eye Institute, Bethesda, MD Center for Neuroscience, UC Davis, Davis, CA Oxyopia Seminar, UC Berkeley, Berkeley, CA 2011 Georgia Health Sciences University, Augusta, GA VisioNYC Seminar, New York City, NY University of Western Ontario, London, Canada Bronowski Art and Science Forum, Neurosciences Institute, La Jolla, CA Autism Discovery Institute, Rady Children's Hospital, San Diego, CA European Conference on Eye Movements, Marseille, France 3rd International Workshop on Visual Attention, Allahabad, India Perceptual Science Talk Series, Rutgers University, Piscataway, NJ 2012 UCLA Joint Seminar in Neuroscience, UCLA, Los Angeles, CA Systems Neuroscience Forum, Janelia Farm, HHMI, Ashburn, VA Brown-NIH Neuroscience Graduate Program Partnership Retreat, Woods Hole, MA Center for Interdisciplinary Research, Bielefeld University, Bielefeld, Germany Justus-Liebig University, Giessen, Germany Stanford School of Medicine, Stanford University, Stanford, CA 2013 Plenary Lecture, German Primate Neurobiology Meeting, Goettingen, Germany Workshop on Corollary Discharge, Janelia Farm, HHMI, Ashburn, VA Interactions in Vision, Centre for Vision Research, York University, Toronto, Canada

European Conference on Eye Movements, Lund, Sweden

- 2014 University of Louvain, Brussels, Belgium Laboratoire Psychologie de la Perception, University of Paris Descartes, Paris, France Institut du Cerveau et de la Moelle epiniere (ICM), Pitie-Salpetriere, Paris, France Neural Control of Movement, Amsterdam, Netherlands Conference on Signal Transforms in the Early Visual System, Janelia Farm, HHMI, Ashburn, VA Zanvyl Krieger Mind/Brain Institute, Johns Hopkins University, Baltimore, MD
- 2015 Center for Perceptual Systems, University of Texas, Austin, TX Vision Sciences Retreat, University of Pennsylvania, Philadelphia, PA Vision: A Platform for Linking Circuits, Perception & Behavior, Cold Spring Harbor, NY McGovern Institute for Brain Research, Peking University, Beijing, China Shanghai Neuroeconomics Collective, Shanghai New York University, Shanghai, China
- 2016 Cognitive Science Colloquium, Cornell University, Ithaca, NY Computational and Systems Neuroscience (Cosyne) Workshop, Snow Bird, UT Neuroscience Winter Conference, Soelden, Austria Keynote lecture, Symposium on "The Future of Visual Attention", Rochester, NY International Neuropsychological Symposium, Baiona, Spain
- 2017 Workshop on Attention, Carnegie Mellon University, Pittsburgh, PA Center for Neural Science, New York University, New York, NY National Institute on Drug Abuse, National Institutes of Health, Baltimore, MD Vision: A Platform for Linking Circuits, Perception & Behavior, Cold Spring Harbor, NY The Smith-Kettlewell Eye Research Institute, San Francisco, California Netherlands Institute for Neuroscience, Amsterdam, Netherlands Control Processes Meeting, Amsterdam, Netherlands
- 2018 Neuroscience Seminar Series, Cold Spring Harbor Laboratory, Cold Spring Harbor, NY Sainsbury Wellcome Centre, London, UK
 Institut de Neuroscience de la Timone, Aix-Marseille University, Marseille, France Vision / Action: A symposium in celebration of Lance Optican, San Diego, California
- 2019 Distinguished Lecture in Ophthalmology, University of Pittsburgh, Pittsburgh, PA Department of Psychological & Brain Sciences, Johns Hopkins University, Baltimore, MD Department of Neuroscience, Washington University, St. Louis, MO Vision: A Platform for Linking Circuits, Perception & Behavior, Cold Spring Harbor, NY Summer School for Primate Cognitive Neuroscience, Bad Bevensen, Germany Columbia Neuroscience Seminar, Columbia University, New York, NY
- 2020 School of Optometry, University of Montreal, Montreal, Canada Institute of Science and Technology, Klosterneuburg, Austria
- 2022 Guest lecture on attention (Wayne Wu), Carnegie Mellon University, Pittsburgh, PA Basal Ganglia Gordon Research Conference, Ventura, CA Neurobiology of Cognition Gordon Research Conference, Newry, ME Summer School for Primate Cognitive Neuroscience, Bad Bevensen, Germany
- 2023 Departments of Neurology, Ophthalmology, Otolaryngology, and Neuroscience Division of Neuro-Visual and Vestibular Disorder, Johns Hopkins University, Baltimore, MD Vision: A Platform for Linking Circuits, Perception & Behavior, Cold Spring Harbor, NY Ernst Strüngmann Institute, Frankfurt, Germany Rovereto Attention Workshop, University of Trento, Rovereto, Italy

MENTORING AND OUTREACH ACTIVITIES

Predoctoral Mentees:

Dorion Liston (2000 – 2005). UCSD graduate student that studied the mechanisms underlying the timing and accuracy of pursuit and saccade choices, and the role of the superior colliculus in saccade choices. Left in June 2005 for post-doctoral position at NASA Ames Research Center.

Christopher Carello (2001 – 2005). UCSD graduate student that studied the causal relationship between superior colliculus activity and pursuit and saccade choices. After graduating in December 2005, he did a short post-doc in my lab before joining the Sleep Research Training Program at Harvard Medical School in July 2006.

Lee Lovejoy (2003 – 2009). MD/PhD student at UCSD that studied the role of the superior colliculus in the control of spatial attention. After graduating in December 2009, he did a short post-doc before returning to medical school in June 2010. Current position: Postdoctoral Clinical Fellow in the Department of Psychiatry and Assistant in Clinical Psychiatry, Columbia University.

Shaun Mahaffy (2006 – 2010). UCSD graduate student that studied the role of the frontal cortex in controlling voluntary pursuit and saccadic eye movements. After graduating in 2010, he entered Yale Law School.

Sam Nummela (2005 – 2010). UCSD graduate student that studied the role of the superior colliculus in visual target selection tasks involving eye movements and manual responses. After graduating, he joined the lab of Kristina Nielsen at Johns Hopkins University.

Sheridan Goldstein (2018 – 2020). NIH postbaccalaureate student that studied stimulus-driven visual selective attention in mice. Left NIH to enter the Interdepartmental Neuroscience Graduate Program at Northwestern University.

Mateus Cruz (2020). Ph.D. student at the University of Sao Paulo under Dr. Gilberto Xavier who obtained a CAPES fellowship to do research at NIH on endogenous and exogenous mechanisms of visual attention in mice. Obliged to return to Brazil in early 2020 due to the pandemic.

Hannah Goldbach (2021 – present). NIH-Brown University GPP student investigating the visual pathways through the basal ganglia in the mouse and their roles in visual learning. Co-mentored with Dr. Veronica Alvarez (NIAAA).

Sarah Preuss (2022 – 2023). NIH postbaccalaureate student studying circuits underlying visual attention in the mouse.

Samantha Sutcliffe (2023 – present). NIH postbaccalaureate student studying striatal circuits and dopamine transmission underlying visual learning in the mouse.

Postdoctoral Mentees:

Scott Adler (1998 – 2000). Studied the effects of prior information on the selection of targets for pursuit and saccades in humans. Left in August 2000 to take a position as an assistant professor at York University in Toronto, Canada. Current position: Associate Professor, Department of Psychology, York University; Director, Visual and Cognitive Development Project.

Jagdeep Bala (1998 – 2000). Studied the mechanisms of target selection and release of fixation in human and non-human primates. Left in September 2000 to take a post-doctoral position in the laboratory of Dr. Paul Dassonville at the University of Oregon. Current position: Adjunct Instructor, Department of Psychology, University of Oregon.

Laurent Madelain (2000 – 2002). Studied the effects of operant conditioning and attention on the sensorimotor processes underlying pursuit and saccadic eye movements. Left in October 2002 to take a position as Maître de Conférence in Psychology at the Université de Lille in France. Current position: Professeur des universités (highest rank), Université de Lille III.

Garth Fowler (2002 – 2005). Studied the effects of attentional shifts on pursuit and saccadic eye movements, and the role of the superior colliculus in these phenomena. Left in June 2005 to take

a position with the American Association for the Advancement of Science (AAAS), and later, Associate Chair and Director, Department of Neurobiology and Physiology, Northwestern University.

Leanne Chukoskie (2002 – 2006). Studied the mechanisms underlying visual search, and the effects of search context on neurons in the superior colliculus. After leaving the lab, she was recruited to be the Assistant Director for Science Communication and Special Projects, Autism Speaks; Project Scientist, University of California, San Diego.

Ziad Hafed (2003 – 2009). Studied the role of the superior colliculus in the control of microsaccades and smooth pursuit eye movements. Left in October 2009 to take a position as Assistant Professor at University of Tübingen, Germany. Current position: Tenured Professor, University of Tübingen.

Alexandre Zenon (2008 – 2011). Studied how superior colliculus activity influences sensory responses and attentional modulation of activity in cerebral cortex. Current position: Research Associate (HDR), Institut de Neurosciences Cognitives et Intégratives d'Aquitaine.

Kristina Nielsen (2006 – 2011). Developed the use of viral vectors to selectively manipulate the activity of neurons in the awake behaving non-human primate. Current position: Associate Professor of Neuroscience (tenured) at the Johns Hopkins University School of Medicine and member of the Zanvyl Krieger Mind/Brain Institute.

Anushree Karnik (2010 – 2011). Studied how superior colliculus activity influences saliencerelated activity in cerebral cortex.

Fabrice Arcizet (2012 – 2016). Investigated the role of the caudate nucleus during the performance of visual spatial attention tasks. Current position: Research Fellow, Institut de la Vision, Paris, France.

Anil Bollimunta (2011 – 2017). Studied how superior colliculus activity influences visual signal processing and attentional modulation in frontal cortex. Current position: Research Scientist, Inscopix, Inc.

Amar Bogadhi (2012 – 2018). Identified neural circuits implicated in the control of spatial attention using functional imaging. Current position: Staff Scientist, Max Planck Institute for Biological Cybernetics, Tübingen, Germany.

James Herman (2012 – 2021). Studied how activity in the superior colliculus contributes to the control of visual spatial attention. Current position: Assistant Professor in the Department of Ophthalmology, University of Pittsburgh (as of March 2021).

Lupeng Wang (2012 – 2021). Studied neuronal mechanisms of visual selection and spatial attention in the mouse. Current position: Staff Scientist, National Institute of Ageing (NIA).

Leor Katz (2017 – present). Investigating the role of cortical area fSTS in selective attention and object recognition.

Gongchen Yu (2019 – present). Investigating the interaction between microsaccades and attention-related modulation of neuronal activity.

Kara Cover (2021 – present). Investigating visual pathways through basal ganglia in the mouse and their role in visual attention.

Divya Subramanian (2022 – present). Investigating interactions between cortical and subcortical visual circuits.

External examiner for Ph.D. students (since 2011):

Michele Cox (advisor: Alexander Maier), Vanderbilt University, 2017

Jean-Bernard Damasse (advisors: Anna Montagnini, Laurent Perrinet), Institut de Neurosciences de la Timone, 2018

Florian Schmidt (advisor: Maximilian Jösch), IST Austria, 2021

Other mentoring and outreach-related activities:

Vision: A Platform for Linking Circuits, Perception and Behavior, (2015, 2017, 2019) Lecturer and discussion leader on topics: visual attention and goal-directed behavior Multi-day intensive sessions with graduate students and postdoctoral fellows Cold Spring Harbor Laboratory, NY

Scholar-in-Residence, 2015 Vision Sciences and Systems & Integrative Biology Graduate Program Retreat 2-day visit mentoring/advising graduate students University of Pennsylvania, PA

Provost Research Studio, 2017 External academic advisor for junior faculty member 2-day visit with Dr. Anita Disney and her research team, and Vanderbilt faculty Department of Psychology, Vanderbilt University, TN

Primate Cognitive Neuroscience Summer School, 2019, 2022 Lecturer and discussion leader 1-week intensive daily sessions with international graduate students and postdoctoral fellows Bad Bevensen, Germany

Outreach to students from traditionally underrepresented groups, 2021-Coordinating with Rita Devine and Yvette Pittman (NINDS) to contact undergraduates at colleges that historically serve underrepresented groups and to recruit candidates for summer internships and postbaccalaureate positions at the LSR



Salk Adjunct Service/Contributions Form

Name: Sponsors:

Appointment Start Date:

To be eligible for appointment and reappointment in the Adjunct series, appointees are expected to be engaged in <u>at least two</u> Institute-related activities outlined below. If you are being considered for your first Adjunct Professor appointment, provide information about your plans to engage in the Salk community and select any of the activities you would be interested in below. If you are being considered for reappointment, select your ongoing activities and give a brief summary of your engagement in each activity during the past appointment period. Also provide a summary of your plans to engage in the Salk activities during the next appointment period.

Salk Activities (list the course/seminar titles, committees, and student names if known)

* Please note research collaborations with a Salk Faculty sponsor(s) do not qualify as Institute-related activities expected for an Adjunct position

- $\hfill\square$ Giving Seminars, such as those hosted by Sponsors or by the Institute
- □Teaching in Salk-organized courses
- □ Serving on UCSD Student Review committees and/or Thesis Committees in Salk Labs
- □ Reviewing Postdoctoral and other Internal Grants

□Participating in Salk's outreach and educational efforts to recruit underrepresented minority student applicants

Consulting on Salk scientific initiatives or multi-PI grants

- □Serving on Faculty Review Committees
- □Promoting award and nomination opportunities for Salk Faculty
- □ Organizing or participating on Salk Meetings or Conferences
- □ Other

Salk Service Summary & Plans: Describe your plans to engage in the activities marked above during the next appointment period (i.e.: Salk Course or Seminar Titles, names of Student or Faculty review committee, description of contributions to grants, etc. if unable to fit above). If you are being considered for reappointment, also describe your engagement in the Salk activities during the last appointment period. You may attach a supplemental letter with these activities as needed.