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## Education

- Ph.D. in Biophysics, thesis with Howard Berg, Harvard University 1999
- B.A. in Physics, Harvard University 1993

## Research Appointments

- Professor of Physics, Harvard University 2010-present
- Visiting Scientist, Janelia Research Campus/HHMI 2011-present
- Professor of Physics, Harvard University 2010-present
- Student, Neurobiology of Drosophila course at Cold Spring Harbor Laboratories 2009
- Assistant Professor of Physics, Harvard University 2003-2007
- Postdoctoral Fellow, Harvard University and CSHL 1999-2002
- Student, C. elegans course at Cold Spring Harbor Laboratories 1999
- Student, Neurobiology course at the Marine Biological Laboratories, 1999

## Academic Honors

- NSF BRAIN Initiative EAGER Award 2014
- Harvard/MIT Research Grants Program in Basic Neuroscience 2010
- NIH Directors Pioneer Award 2008
- Dana Foundation Award in Brain and Immuno-Imaging 2007
- Presidential Early Career Award for Scientists and Engineers 2006
- NSF CAREER Award 2005
- Alfred P. Sloan Foundation Research Fellow 2004
- Amgen Fellow of the Life Sciences Research Foundation 2000

## Publications

- [1] G. Budelli, L. Ni, C. Berciu, L. van Giesen, Z. A. Knecht, E. C. Chang, B. Kaminski, A. F. Silbering, A. Samuel, M. Klein, R. Benton, D. Nicastro, and P. A. Garrity, "Ionotropic receptors specify the morphogenesis of phasic sensors controlling rapid thermal preference in drosophila," *Neuron*, vol. 101, pp. 738-747, 2019. [Online]. Available: <http://www.sciencedirect.com/science/article/pii/S089662731831122X>

- [2] G. Si, J. K. Kanwal, Y. Hu, C. J. Tabone, J. Baron, M. Berck, G. Vignoud, and A. D. T. Samuel, "Structured odorant response patterns across a complete olfactory receptor neuron population," *Neuron*, vol. 101, pp. 1–13, 2019. [Online]. Available: <http://www.sciencedirect.com/science/article/pii/S0896627318311504>
- [3] J. A. Calarco and A. D. T. Samuel, "Imaging whole nervous systems: insights into behavior from brains inside bodies," *Nature Methods*, vol. 16, pp. 14–15, 2019. [Online]. Available: [https://www.nature.com/articles/s41592-018-0276-8?WT.feed\\_name=subjects\\_neuroscience](https://www.nature.com/articles/s41592-018-0276-8?WT.feed_name=subjects_neuroscience)
- [4] L. He, G. Si, J. Huang, A. D. T. Samuel, and N. Perrimon, "Mechanical regulation of stem-cell differentiation by the stretch-activated piezo channel," *Nature*, 2018. [Online]. Available: <http://www.nature.com/doifinder/10.1038/nature25744>
- [5] J. D. Hawk, A. C. Calvo, A. Almoril-Porras, A. Aljobeh, M. L. Torruella-Suarez, I. Ren, N. Cook, J. Greenwood, L. Luo, A. D. T. Samuel, and D. Colon-Ramos, "Integration of plasticity mechanisms within a single sensory neuron of *c. elegans* actuates a memory," *Neuron*, vol. 97, no. 2, pp. 356–367, 2018. [Online]. Available: [http://www.cell.com/neuron/fulltext/S0896-6273\(17\)31174-1](http://www.cell.com/neuron/fulltext/S0896-6273(17)31174-1)
- [6] M. Klein, S. V. Krivov, A. Ferrer, L. Luo, A. D. T. Samuel, and M. Karplus, "Exploratory search during directed navigation in *c. elegans* and *drosophila* larva," *eLife*, vol. 6, 2017. [Online]. Available: <https://elifesciences.org/articles/30503>
- [7] M. A. Lim, J. Chitturi, V. Laskova, J. Meng, D. Findeis, A. Wiekenberg, B. Mulcahy, L. Luo, Y. Li, Y. Lu, W. Hung, Y. Qu, C.-Y. Ho, D. Holmyard, N. Ji, R. McWhirter, A. D. T. Samuel, D. M. Miller, R. Schnabel, J. A. Calarco, and M. Zhen, "Neuroendocrine modulation sustains the *c. elegans* forward motor state," *eLIFE*, 18 Nov, 2016 2016. [Online]. Available: <https://elifesciences.org/content/5/e19887>
- [8] Z. A. Knecht, A. F. Silberling, L. Ni, M. Klein, G. Budelli, R. Bell, L. Abuin, A. J. Ferrer, A. D. T. Samuel, R. Benton, and P. A. Garrity, "Distinct combinations of variant ionotropic glutamate receptors mediate thermosensation and hygrosensation in *drosophila*," *eLife*, 2016. [Online]. Available: <http://biorxiv.org/content/early/2016/05/31/056267.full.pdf+html>
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