Kristopher Torp Jensen

University of Cambridge
Computational and Biological Learning Lab

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Jesus College, Cambridge UK

Education

2019 - present **PhD Computational Neuroscience**
University of Cambridge
Supervisor: Dr Guillaume Hennequin
Probabilistic modelling of spatial learning and representations Jensen et al. [2020]

2018 - 2019 **MPhil Computational Biology**
University of Cambridge & Harvard Center for Brain Science
Dissertation: "Long-Term Stability of Neural Dynamics Underlying Stereotyped Behavior"
Result: Distinction (89.1/100; 1st of 19 students)

2015 - 2018 **BA Natural Sciences**
University of Cambridge
Specialization: Molecular Biology & Theoretical Chemistry
Result: First Class Honors (82.7/100; 1st of 112 students)

Research

2019 - present **Harvard Center for Brain Science**
Supervisor: Professor Bence Ölveczky
Analysis of extracellular recordings from sterotyped motor tasks
"Long-term stability of neural dynamics underlying learned and innate motor behaviors"
in progress

2018 - 2019 **Janelia Research Campus**
Supervisor: Professor Vivek Jayaraman
Analysis of EM & RNAseq data and biophysical modelling of *Drosophila* neurons
Turner-Evans et al. [2019]

2017 - 2018 **Cambridge Centre for Computational Chemistry**
Supervisor: Dr Alex Thom
Development of a HF-based method for *in silico* modelling of electron transfer reactions
Jensen et al. [2018]

2016 - 2017 **Aarhus University Department of Biomedicine**
Supervisor: Dr Yonglun Luo
Investigation of factors affecting the efficiency of CRISPR/Cas9 for genome editing
Jensen et al. [2017]

Teaching

2018 - present **University of Cambridge**
Supervisor (Teaching Assistant) - Theoretical chemistry (3rd year)

2016 **Brookhouse International School, Nairobi Kenya**
Cambridge Summer Teachers

Awards

2019 - present **Cambridge Gates Scholar**

2018 **Janelia Undergraduate Scholar**

Undergraduate Prizes

2016 - 2019 Scholar of Magdalene College, Cambridge
2018 GWHP Memorial Prize for best performance in undergraduate chemistry
Gill, Bundy & B.C. Saunders prizes for excellence in university examinations
BP Prize for the best performance in practical chemistry
2017 BP Prize for the best performance in theoretical chemistry
Keilin Prize for excellence in university examinations
2016 B.C. Saunders Prize for excellence in university examinations
2015 *British Chamber of Commerce in Denmark* Scholar

Other awards

2015 SIYSS participant
First place - The Danish National Science Fair (life science)
2014 & 2015 Silver medal - The International Chemistry Olympiad
First place - The Scandinavian Chemistry Olympiad

Programming Experience

Python, Julia, R - significant experience from multiple research projects and courses
MATLAB - significant experience from scientific coursework and data analysis
OCaml - basic proficiency
LaTeX, git, cluster computing

Misc

2017 - 2019 President - Magdalene College Science Society
2017 - 2018 Vice-captain - Cambridge University Mixed Lacrosse Club
2014 - 2015 Board member - Højbjerg Drenge boyscouts
2013 - 2015 Scout leader - Højberg Drenge boyscouts

Publications

Kristopher T. Jensen, Lasse Fløe, Trine Skov Petersen, Jinrong Huang, Fengping Xu, Lars Bolund, Yonglun Luo, and Lin Lin. Chromatin accessibility and guide sequence secondary structure affect CRISPR-Cas9 gene editing efficiency. *FEBS Letters*, 591(13):1892–1901, 2017. URL http://doi.wiley.com/10.1002/1873-3468.12707.

Kristopher T. Jensen, Raz L. Benson, Salvatore Cardamone, and Alex J.W. Thom. Modeling Electron Transfers Using Quasidiabatic Hartree-Fock States. *Journal of Chemical Theory and Computation*, 14(9):4629–4639, 2018. URL https://doi.org/10.1021/acs.jctc.8b00379.

Kristopher T. Jensen, Ta-Chu Kao, Marco Tripodi, and Guillaume Hennequin. Manifold GPLVMs for discovering non-Euclidean latent structure in neural data. 2020. URL http://arxiv.org/abs/2006.07429.

Daniel B Turner-Evans, Kristopher T. Jensen, Saba Ali, Tyler Paterson, Arlo Sheridan, Robert P Ray, Scott Lauritzen, Davi Bock, and Vivek Jayaraman. The neuroanatomical ultrastructure and function of a biological ring attractor. *bioRxiv*, 2019. URL https://www.biorxiv.org/content/10.1101/847152v2.