

CHRISTIAN L. EBBESEN, PhD

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POSTDOCTORAL EXPERIENCE

- 2017- **Neuroscience Institute, New York University**, New York, USA
Oxytocin and hormonal control of neural circuits for social behavior
Advisor: Robert C. Froemke
- 2017-2017 **Institute of Biology, Humboldt Universität zu Berlin**, Berlin, Germany
Cortical network processing of rat social facial touch
Advisor: Michael Brecht

EDUCATION

- 2013-2017 **Ph.D. in Neurobiology** (Dr.rer.nat., summa cum laude)
Bernstein Center for Computational Neuroscience / Berlin School of Mind and Brain
Humboldt Universität zu Berlin, Berlin, Germany
Cortical circuits underlying social and spatial exploration in rats
Advisor: Michael Brecht
- 2008-2013 **M.Sc. in Physics, B.Sc. in Biophysics** (average grade: 11.4/12, M.Sc. and B.Sc. thesis: 12)
Niels Bohr Institute, University of Copenhagen, Copenhagen, Denmark

EXCHANGES AND SUMMER SCHOOLS

- 2015 **Okinawa Computational Neuroscience Course**, Okinawa Inst. of Science and Tech, Okinawa, Japan
- 2013 **BCF/NWG course Analysis and Models in Neurophysiology**, Bernstein Center, Freiburg, Germany
- 2010-2011 **Humboldt Universität zu Berlin, ERASMUS Exchange** (1 yr.), M.Sc. in Biophysics, Berlin, Germany
- 2010 **University of California, Santa Barbara**, B.Sc. thesis research and experiments (6 mo.), CA, USA

HONORS (accepted)

- 2017 **Lundbeck Foundation Talent Prize** (100.000 DKK research prize for scientists under 30 yrs)
- 2017 **Novo Nordisk Postdoctoral Fellowship** (4 years full postdoctoral funding)
- 2017 **Humboldt Postdoctoral Scholarship** (6 months, transitional funding bridging PhD and PostDoc)
- 2015 **Travel grant**, CSN II (Biomimetics and Neurotechnology)
- 2014 **Best Poster Award**, FENS Brain Prize Conference: Controlling Neurons, Circuits and Behavior
- 2010 **Travel grant**, Danish Acoustics Society

INVITED TALKS (accepted)

- 2019 **ASAB Conference**, Association for the Study of Animal Behaviour, University of Konstanz, Germany
- 2018 **SfN Minisymposium** (chair and speaker), Society for Neuroscience Annual Meeting, San Diego, USA
- 2016 **BARRELS XXIX**, SfN satellite conference, Brain and Creativity Institute, University of Southern California, USA
- 2016 **Barrel Cortex Function**, "Multidisciplinary, international meeting on sensory (sub)cortical circuits", VU University, Amsterdam, The Netherlands
- 2016 **Young Brain Research. Conference**, Gonda Multidisciplinary Brain Research Center, Bar-Ilan University, Israel
- 2015 **Dept. of Neuroscience and Pharmacology Journal Club** University of Copenhagen Cph, Denmark
- 2014 **Neural Circuits Controlling Sexual Behavior** (selected "poster blitz" talk), HHMI Janelia, USA
- 2014 **Barrel Cortex Function** "Developmental, cellular and circuit mechanisms of cortical sensory information processing", Max-Planck-Institute for Experimental Medicine in Göttingen Germany
- 2013 **BARRELS XXVI** SfN satellite conference, University of California, San Diego San Diego, USA

OTHER EXPERIENCE AND SERVICE

- 2019-2020 **NYU SPiNES Selection Committee** (Seminars by Postdocs in Neuroscience: Extramural Series)
- 2019-2020 **NYU Neuroscience Postdoc Leadership Committee** (mentoring and development)
- 2018 **Chair, organizer and speaker**, Minisymposium, SfN Neuroscience Annual Meeting 2018, San Diego
- 2012 **FELASA B certification**, Federation of European Laboratory Animal Science Associations
- 2009-2013 **Teaching/correcting, International Physics Olympiad** in Mexico, Thailand, Estonia & Denmark
- Reviewing:** Journal of Neuroscience Methods, Journal of Motor Behavior
- Memberships:** Society for Neuroscience (2013-), New York Academy of Sciences (2017-), Danish Society for Neuroscience (2019-), Association for the Study of Animal Behaviour (2019-)

PUBLICATIONS

Journal articles

- 2019 **Ebbesen CL**, Bobrov E, Rao RP & Brecht M (2019) Highly structured, partner-sex- and subject-sex-dependent cortical responses during social facial touch. **bioRxiv** 545434. doi: 10.1101/545434.
- 2018 **Ebbesen CL**, Insanally MN, Kopec CD, Murakami M, Saiki A & Erlich JC (2018) More Than Just a “Motor”: Recent Surprises From the Frontal Cortex. **Journal of Neuroscience** 38(44):9402-13. doi: 10.1523/JNEUROSCI.1671-18.2018. PMID: 30381432
- 2017 **Ebbesen CL** & Brecht M (2017) Motor cortex – to act or not to act? **Nature Reviews Neuroscience**. 18(11):694-705. doi: 10.1038/nrn.2017.119. PMID: 29042690
- Ebbesen CL**, Doron G, Lenschow C & Brecht M (2017) Vibrissa motor cortex activity suppresses contralateral whisking behavior. **Nature Neuroscience**. 20(1):82-89. doi: 10.1038/nn.4437. PMID: 27798633
- 2016 **Ebbesen CL**, Reifenstein ET, Tang Q, Burgalossi A, Ray S, Schreiber S, Kempter R & Brecht M (2016) Cell Type-Specific Differences in Spike Timing and Spike Shape in the Rat Parasubiculum and Superficial Medial Entorhinal Cortex. **Cell Reports**. 16(4):1005-1015. doi: 10.1016/j.celrep.2016.06.057. PMID: 27425616
- Tang(*) Q, Burgalossi(*) A, **Ebbesen(*) CL**, Sanguinetti-Scheck(*) JI, Schmidt H, Tukker JJ, Naumann R, Ray S, Preston-Ferrer P, Schmitz D & Brecht M (2016) Functional Architecture of the Rat Parasubiculum. **Journal of Neuroscience**. 36(7):2289-301. doi: 10.1523/JNEUROSCI.3749-15.2016. PMID: 26888938 (*) **Co-first author**
- Reifenstein ET, **Ebbesen CL**, Tang Q, Brecht M, Schreiber S & Kempter R (2016) Cell-Type Specific Phase Precession in Layer II of the Medial Entorhinal Cortex. **Journal of Neuroscience**. 36(7):2283-8. doi: 10.1523/JNEUROSCI.2986-15.2016. PMID: 26888937
- 2015 Tang Q, **Ebbesen CL**, Sanguinetti-Scheck JI, Preston-Ferrer P, Gundlfinger A, Winterer J, Beed P, Ray S, Naumann R, Schmitz D, Brecht M & Burgalossi A (2015) Anatomical Organization and Spatiotemporal Firing Patterns of Layer 3 Neurons in the Rat Medial Entorhinal Cortex. **Journal of Neuroscience**. 35(36):12346-54. doi: 10.1523/JNEUROSCI.0696-15.2015. PMID: 26354904
- 2014 Tang(*) Q, Burgalossi(*) A, **Ebbesen(*) CL**, Ray S, Naumann R, Schmidt H, Spicher D & Brecht M (2014) Pyramidal and stellate cell specificity of grid and border representations in layer 2 of medial entorhinal cortex. **Neuron**. 84(6):1191-7. doi: 10.1016/j.neuron.2014.11.009. PMID: 25482025 (*) **Co-first author**
- 2012 **Ebbesen CL** & Bruus H. (2012) Analysis of laser-induced heating in optical neuronal guidance. **Journal of Neuroscience Methods**. 209(1):168-77. doi: 10.1016/j.jneumeth.2012.02.006. PMID: 22387314
- Adams(*) JD, **Ebbesen(*) CL**, Barnkob R, Yang AHJ, Soh HT & Bruus H (2012) High-throughput, temperature-controlled microchannel acoustophoresis device made with rapid prototyping. **Journal of Micromechanics and Microengineering**. 22(7): 075017 (*) **Co-first author**

Peer-reviewed conference proceedings

- 2010 **Ebbesen CL**, Adams JD, Barnkob R, Soh HT & Bruus H (2010) Temperature-controlled highthroughput (1 L/h) acoustophoretic particle separation in microchannels. **Proc 14th MicroTAS**, 3-7

Doctoral thesis

- 2018 **Ebbesen CL** (2018) Cortical circuits underlying social and spatial exploration in rats. **Humboldt-Universität zu Berlin, Lebenswissenschaftliche Fakultät**. doi: 10.18452/19231