

Lauren Fink

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Curriculum Vitae

June 2019

EDUCATION

- 2019 Ph.D., Neuroscience, University of California, Davis (UCD), CA, USA
- 2017 M.Sc., Neuroscience, University of California, Davis, CA, USA
- 2014 M.Phil., Music Studies, University of Cambridge, UK
- 2013 B.M., Percussion Performance, University of Cincinnati College Conservatory of Music, OH, USA, *summa cum laude*

RESEARCH EXPERIENCE

- 2014 – 19 Graduate Student Researcher. Janata Lab, Center for Mind & Brain, UCD
Dissertation topic: Predicting sensorimotor synchronization and attention to music using a linear oscillator model, eye-tracking, and electroencephalography.
- 2017 (Aug.) Visiting Fellow. Max-Planck-Institute for Empirical Aesthetics, Frankfurt, Germany
Project: Comparing Pupil Labs and SMI mobile eye-tracking glasses in the concert hall.
- 2016 (Aug.) Graduate Research Exchange Student. Swartz Center for Computational Neuroscience, University of California, San Diego
Project: Simultaneous eye-tracking and electroencephalography during an auditory deviance detection task.
- 2016 (Jul.) Visiting Fellow. Center for Computer Research in Music and Acoustics, Stanford University
National Academies Keck Futures Initiative: Fostering Empathy and Improving Focus Through the Groove Enhancement Machine: Facilitating Sensorimotor Coordination and Cooperation Among Groups of Individuals.
- 2015 Graduate Rotation Student. Geng Lab, Center for Mind & Brain, UCD
Project: Characterization of eyeblinks and pupil diameter during an auditory deviance detection task.
- 2015 Graduate Rotation Student. Ranganath Lab, Center for Neuroscience, UCD
Project: Goal relevance in temporal contexts: the role of the fronto-striatal-hippocampal circuit.
- 2013 – 14 Graduate Student Researcher. Centre for Music & Science, U. Cambridge
Masters Thesis: Music modulates eyeblinks: An examination of temporal coordination.
- 2012 Undergraduate Research Fellow. College of Medicine, U. Cincinnati
Project: The emotional reactivity of mice over-expressing human wild-type alphasynuclein: An ultrasonic vocalization pilot study.
- 2011 Undergraduate Research Fellow. Dept. of Philosophy, U. Cincinnati
Project: False Belief Attribution: An investigation of the Neural Pattern Account.

TEACHING EXPERIENCE

Teaching Assistant at University of California, Davis for:

- Psychology of Music • Neurobiology of Speech • Neurobiology • Human Brain & Disease
- Research Methods • Cultural History of the Blues • Popular Science and Technology Writing
- Visual Rhetoric

WORK EXPERIENCE

- 2018-19 Graduate Student Researcher. UC-LEADS (Leadership Excellence through Advanced Degrees), *University of California, Office of the President*.
Assist under-represented undergraduates in preparing for graduate school, by offering one-on-one mentorship, teaching a research methods course, providing application assistance, and helping secure summer mentored research experiences.
- 2015-19 Graduate Writing Fellow, University Writing Program, *U. of California, Davis*.
Manage a team of 6 other fellows and liaise between fellows, faculty, IT, and funding agencies. • Hold one-on-one consultations, group writing retreats, and writing workshops. • Conduct research on graduate student writing and present at international conferences.
- 2012-13 Percussion Accompanist, Dance Division, *U. of Cincinnati College-Conservatory of Music*.
Compose and play percussion music for modern dance classes.
- 2011-13 Intern. Archives & Rare Books Library, *U. of Cincinnati*.
Catalog and create finding aids for new collections. • Assist researchers with archival research. • Develop web content to advertise collections.

GRANTS / SCHOLARSHIPS / FELLOWSHIPS

- 2017-19 ARCS Foundation Achievement Research Award for College Scientists (\$22,000)
- 2016-19 Lead Graduate Writing Fellowship, UCD (\$11,000)
- 2016-19 University Writing Program Travel Award, UCD (\$1,900)
- 2018 Graduate Student Association Special Projects Award (\$700)
- 2017-18 Graduate Student Association Travel Award (\$1000)
- 2018 Lesbians Who Tech Summit Scholarship (\$250)
- 2017 UC Davis Diversity Inclusion and Innovation Grant. "SOMA: Seminar Outreach for Minority Advocacy." PI: Lauren Fink (\$5,000)
- 2016-17 UC Davis & Humanities Graduate Research Award (\$3,000)
- 2016 University of California Music Experience Research Community Initiative: Research Exchange Grant – UC San Diego (\$3,500)
- 2016 Ling-Lie Chau Student Award for Brain Research, UCD (\$1,000)
- 2015 University of California Music Experience Research Community Initiative Symposium Travel Award (\$1,200)
- 2015-16 Graduate Writing Fellowship, UCD (\$3,000)
- 2014-15 Neuroscience Graduate Group Fellowship, UCD (\$28,680)
- 2014 William Barclay Squire Fund/Wolfson College Travel Grant, U. Cambridge (£600)
- 2013-14 Cambridge Overseas Trust, Wolfson Cambridge Scholarship, U. Cambridge (£7000)
- 2012-13 U. of Cincinnati Marshall Scholarship Finalist

- 2012-13 Undergraduate Research Council Grant, U. Cincinnati (\$3,000)
 2012 Summer Undergraduate Research Fellowship, U. Cincinnati (\$4,000)
 2011 Summer Undergraduate Mentored Research Grant, U. Cincinnati (\$3,000)
 2009-13 Cincinnati Scholarship, U. Cincinnati (\$32,000)
 2009-13 College-Conservatory of Music Scholarship, U. Cincinnati (\$4,000)
 2009-13 Founces M. Luley Music Scholarship (\$8,000)

PUBLICATIONS

- Fink, L.** & Lange, E., Groner, R. (2018). The application of eye-tracking in music research. *Journal of Eye Movement Research*, 11(2):1. DOI: 10.16910/jemr.11.2.1.
- Fink, L.**, Hurley, B., Geng, J. & Janata, P. (2018). A linear oscillator model predicts dynamic temporal attention and pupillary entrainment to rhythmic musical patterns. *Journal of Eye Movement Research*, 11(2):12. DOI: 10.16910/jemr.11.2.12.
- Hurley, B., **Fink, L.**, & Janata, P. (2018). Mapping the dynamic allocation of attention in musical patterns. *Journal of Experimental Psychology: Human Perception & Performance*, 44(11), 1694-1711. DOI: 10.1037/xhp0000563
- Fink, L.** (2017). Chance operations in neuroscience. In Lane, J. and L. Fink (Eds.), *Allen Otte Folio*, pp. 17-20.
- Fink, L.** (2016). The Greatest. *Pulse Special Issue of Ethnomusicology Review/ Sounding Board*.

EDITED VOLUMES

- Fink, L.** & Lange, E., Eds. (2018). *Special Issue on Music & Eye-Tracking*. Journal of Eye Movement Research. Vol. 11(2).
- Fink, L.**, Ed. (2017). *Explorations: The UC Davis Undergraduate Research Journal* (vol. 19). The Regents of the University of California.
- Lane, J. & **L. Fink**, Eds. (2017). *Allen Otte Folio*.

CONFERENCE PRESENTATIONS

- Fink, L.**, Hurley, B., Geng, J., Lange, E., & Janata, P. (2019, Aug.). A computational model of rhythmic auditory attention predicts the pupillary response to music. *Talk presented at the European Conference on Eye Movements, Alicante, Spain*.
- Fink, L.**, Alexander, P., Janata, J. (2019, March). Bringing groups of people into greater temporal and psychological synchrony using a multi-person adaptive metronome. *Poster presented at the Cognitive Neuroscience Society Meeting, San Francisco, CA*.
- Mikovits, M., Sperber, L., **Fink, L.** & Prebel, J. (2019, March). Writing Fellows as Agents of Transfer: Training in Threshold Concepts to Support Campus-Wide Sites of Writing. *Symposium presented at the College Composition and Communication Convention, Pittsburgh, PA*.
- Fink, L.**, Lange, E., Janata, P. (2018, July). The pupil entrains to prominent periodicities in music. *Talk presented at the International Conference on Music Perception & Cognition, Graz, Austria*.

- Fink, L.,** Hurley, B., Geng, J., & Janata, P. (2018, May). Predicting attention and motor responses to musical patterns. *Poster presented at the Stanford Music & Brain Symposium, Palo Alto, CA.*
- Fink, L.,** Ribeiro, J., & White, V. (2018, March). Transforming graduate writing experiences: A new Writing Across the Curriculum (WAC) certificate program. *Symposium presented at the College Composition and Communication Convention, Kansas City, MO.*
- Lange, E. & **Fink, L.** (2017, August). Symposium: Using eye-tracking and pupillometry to study rhythmic processing in music and dance. *European Conference on Eye Movements, Wuppertal, Germany.*
- Fink, L.,** Hurley, B., Geng, J., & Janata, P. (2017, August). Predicting attention to auditory rhythms using a linear oscillator model and pupillometry. *Talk presented at the Conference on Music & Eye-Tracking, Frankfurt, Germany.*
- Fink, L.,** & Alexander, P., & Janata, P. (2017, July). Fostering Empathy and Improving Focus Through the Groove Enhancement Machine: Facilitating Sensorimotor Coordination and Cooperation Among Groups of Individuals. *Demonstration presented at the National Academies Keck Futures Initiative Art, Science, Engineering, and Medicine Mid-Cycle Grant Meeting, Boston, MA.*
- Hurley, B., **Fink, L.,** & Janata, P. (2017, March). A resonator model predicts temporal orienting in rhythmic music. *Proceedings of the Cognitive Neuroscience Society Annual Meeting.*
- Bright, A., Singleton, J., **Fink, L.,** & Rodger, K. (2017, March). Cultivating a Rhetorical Consciousness: Supporting Graduate Student Writers Across the Curriculum. *Symposium presented at the College Composition and Communication Convention, Portland, OR.*
- Fink, L.,** Hurley, B., Geng, J. & Janata, P. (2016, July). Pupillary and eyeblink responses to auditory stimuli index attention and sensorimotor coupling. *Proceedings of the 14th International Conference for Music Perception & Cognition*, pg. 788.
- Hurley, B., **Fink, L.,** & Janata, P. (2016, July). Predicting temporal attention in music with a damped oscillator model. *Proceedings of the 14th International Conference for Music Perception & Cognition*, pg. 782
- Fink, L.** & Rodger, K. (2016, June). Mapping neuroscience through professional writing. *Talk presented at the International Writing Across the Curriculum Conference, Ann Arbor, MI.*
- Fink, L.** (2015, July). Eyeblinks as biomarkers of temporal coordination during music cognition. *Poster presented at the Rhythm Perception & Production Workshop, Amsterdam, Netherlands.*
- Fink, L.,** Niemeyer, T., Jones, S., Larabee, Z., & Schuette, P. (2014, November). Oscillator Etudes. *Performance premiere at the Percussive Arts Society International Convention, Indianapolis, IN.*
- Fink, L.** & Mazman, A. (2013, July). False belief attribution: An investigation of the neural pattern account. *Poster presented at the Society for Philosophy and Psychology Conference, Providence, RI.*

SERVICE

- 2016 – Ad-hoc Reviewer for: *Cortex; Journal of Vision; Vision Research; Quarterly Journal of Experimental Psychology; Society for Music Perception and Cognition; Journal of Eye Movement Research*
- 2018-20 Peer-review panelist. California Arts Council
- 2017-19 Guest Editor of Special Issue. *Journal of Eye Movement Research*

2017-18	Founder and coordinator. Seminar Outreach for Minority Advocacy, UCD
2017	Selection Committee. Neuroscience Initiative to Enhance Diversity, UCD
2017	Graduate Student Coordinator. Neuroscience Initiative to Enhance Diversity, UCD
2016-17	Scientific Chair. Conference on Music & Eye-Tracking, Frankfurt, Germany
2016-17	Editor-in-Chief. <i>Explorations: The UC Davis Undergraduate Research Journal</i>
2015-16	Editor. <i>Explorations: The UC Davis Undergraduate Research Journal</i>
2014-16	Neuroscience Retreat Organizing Committee, UCD

PROFESSIONAL DEVELOPMENT

2019	Telluride Neuromorphic Cognition Engineering Workshop, <i>Telluride, CO</i>
2018	Mini Event-Related Potential Bootcamp, <i>Steve Luck, UCD Center for Mind & Brain</i>
2018	Women in Music Information Retrieval Mentoring Program
2017	Certificate: AAAS Science Communication Program
2017	Certificate: Thoughtful Pedagogy for Diverse Learning Environments, <i>UCD Center for Educational Effectiveness</i>
2016	Certificate: Foundations in Teaching, <i>UCD Center for Educational Effectiveness</i>
2014	Interdisciplinary Kollege: Social Cognition. <i>Günne, Germany</i>
2010	Symphony Orchestra Academy of the Pacific. <i>British Columbia, Canada</i>
2009-10	Racial Awareness Pilot Program. <i>U. of Cincinnati</i>

AFFILIATIONS / MEMBERSHIPS

2018 –	Cognitive Neuroscience Society
2017 –	Women in Music Information Retrieval
2016 –	Society for Music Perception & Cognition
2015 –	Association of Women in Science
2007 –	Percussive Arts Society
2013-14	Society for Philosophy & Psychology

WORKSHOPS, PUBLIC TALKS, & SELECT PERFORMANCES

Feb. 2019	Invited Talk. “Modeling pupillary entrainment to music and absorptive music listening experiences.” Center for Computer Research in Music and Acoustics, Stanford University.
Sept. 2018	Speaker. “Pupillometry as an auditory research tool.” UC Davis Neuroscience Retreat, Bodega Bay Marine Laboratory, Bodega Bay, CA.
Apr. 2018	Invited Talk. “The Groove Enhancement Machine.” Center for Computer Research in Music and Acoustics, Stanford University.
Mar. 2018	Invited Talk. “Seeing in time: Rhythmic music systematically alters pupil dynamics.” Max Planck Institute for Empirical Aesthetics, Frankfurt, Germany.
Nov. 2017	Invited Lecturer. “Music & science research methods for undergraduates.” Musicology Department, UC Davis.
Oct. 2017	Invited Speaker. “Stage presence.” Ladies Rock Sacramento.
July 2017	Invited Lecturer. “Introduction to literature reviews.” Pre-College Program: Mind & Brain, UC Davis.

- Apr. 2017 Invited Speaker. “Writing a personal statement.” Neuroscience Initiative to Enhance Diversity, UC Davis.
- Nov. 2016 Invited Speaker. “Predicting audiovisual attention over time.” Davis Entrepreneurs Meet-Up, Davis Roots, Davis, CA.
- Oct. 2016 Invited Panelist. “How to publish as an undergraduate.” Undergraduate Research Center, UC Davis.
- July 2016 Invited Lecturer. “Assessing attention to music using eye-tracking.” Stanford Summer Arts Institute, Stanford University.
- May 2016 Invited Lecturer. “Music & visual motor behavior.” Musicology Department, UC Davis.
- Apr. 2016 Workshop Leader. “Forming & maintaining writing groups.” Writing Across the Curriculum Program, UC Davis.
- Apr. 2016 Invited Panelist. “The first abstract: Teaching undergraduates to summarize their research.” Professors for the Future, UC Davis.
- Apr. 2016 Invited Speaker. “The importance of synchronization and the power of music.” Sunday Assembly, Sacramento, CA.
- Apr. 2016 Invited Panelist. “Mentoring scientific writing: How to give effective, time-efficient feedback.” Professors for the Future, UC Davis.
- Apr. 2015 Invited Speaker. “Preparing your graduate school application: Student’s perspective.” Neuroscience Initiative to Enhance Diversity, UC Davis.
- Dec. 2014 Speaker. “Attention mapping via amplitude modulated sounds.” UC Davis Center for Neuroscience.
- Feb. 2013 Drum set player. “Science! The Musical.” World Premiere. Corpus Playroom, Cambridge, UK.
- Oct. 2013 Guest Lecturer. “It’s all in the mind.” Cambridge Festival of Ideas, Cambridge, UK.
- Apr. 2013 Senior Recitalist. “Matriculaphony: A Percussive Circus on Van Meter Ames’ *A Book of Changes*.” U. of Cincinnati College-Conservatory of Music.

REFERENCES

- Dr. Petr Janata:** Professor of Psychology, Center for Mind & Brain, UC Davis
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- Dr. Elke Lange:** Scientific Researcher, Max Planck Institute for Empirical Aesthetics
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- Dr. Joy Geng:** Associate Professor of Psychology, Center for Mind & Brain, UC Davis
Phone: +1 (530) 297-4486 E-Mail: jgeng@ucdavis.edu
- Dr. Ian Cross:** Professor of Music and Science, Faculty of Music, U. of Cambridge, UK
Phone: +44 (0)1223 335185 E-Mail: ic108@cam.ac.uk
- Prof. Allen Otte:** Professor of Percussion, U. of Cincinnati College-Conservatory of Music
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