# Catharine E. Fairbairn University of Illinois at Urbana-Champaign 603 East Daniel Street Champaign, IL 61820 Email: cfairbai@illinois.edu

# EMPLOYMENT

ASSISTANT PROFESSOR, Fall 2015 – present Lincoln Excellence Assistant Professor Scholar, Spring 2017 – present Department of Psychology, Clinical/Community Division UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

**EDUCATION** 

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### **CLINICAL INTERNSHIP:**

2014-2015 VA ANN ARBOR HEALTHCARE SYSTEM/UNIVERSITY OF MICHIGAN

**GRADUATE:** 2009 - 2015 UNIVERSITY OF PITTSBURGH Joint Clinical/Biological & Health Psychology Ph.D. program

DISSERTATION (2014): Personality differences in subjective effects of alcohol: A dynamic examination of the pathways explaining alcohol-related reward. Adviser: Michael A. Sayette, Ph.D. Committee: Jeffrey F. Cohn, Ph.D., John M. Levine, Ph.D., Michael F. Pogue-Geile, Ph.D., & Michael D. Levine, Ph.D.

- SPECIALTY PAPER (2012): An examination of subjective response to alcohol in a social context. Adviser: Michael A. Sayette, Ph.D.
- MASTER'S OF SCIENCE (2012): The impact of alcohol consumption on the displayed affect of white individuals engaging in interracial interactions. Adviser: Michael A. Sayette, Ph.D.

### **UNDERGRADUATE:**

2002-2006 BARNARD COLLEGE, COLUMBIA UNIVERSITY B.A., Psychology and Music (double major) *Summa cum laude* 

# HONORS

2019	<b>APS Rising Star Award</b> , Association for Psychological Science, recognizing outstanding new investigators in psychological science
2017-2019	<b>Lincoln Excellence for Assistant Professor Scholar</b> , University of Illinois—Urbana-Champaign.
2015-2017	List of Teachers Ranked as Excellent by Their Students, University of Illinois—Urbana-Champaign.
2014	Outstanding Student Researcher Award, Society for the Science of Clinical Psychology
	Bassell Student Award, outstanding student award, Psychology Department University of Pittsburgh
2012-2014	Graduate Student Merit Award, Research Society on Alcoholism
2013	University of Pittsburgh Nationality Program International Research Award, \$4000 supporting international
	collaboration in the Biostatistics Department at the University of Oslo
2012	E. B. Huey Research Award, \$1,000 research grant, Psychology Department University of Pittsburgh
	Diversity Travel Award, \$1,000 diversity travel grant, Psychology Department University of Pittsburgh
2009-2010	School of Arts and Sciences Graduate Fellowship, University of Pittsburgh
2006	Phi Beta Kappa, Barnard College
	Barnard College Commencement Speaker
2005-2006	Barnard College Writing Fellowship
2004	National Geographic/Glimpse Magazine—2004 2nd place "Forgone Conclusions" essay competition
	Abroad View Magazine—published fall 2004 "Personal Journeys" essay competition

CHAMPAIGN, IL

ANN ARBOR, MI

PITTSBURGH, PA

NEW YORK, NY

# FUNDING ACTIVITY

#### National Institute of Alcohol Abuse and Alcoholism (R01 AA025969)

*Title*: "Examining the impact of stress on the emotionally reinforcing properties of alcohol in heavy social drinkers: A multimodal investigation integrating laboratory and ambulatory methods" *Role*: Principal Investigator *Project Period*: 9/01/2017-5/31/2022 *Total costs*: \$1,522,204 (total costs)

#### National Science Foundation Graduate Research Fellowship (0753293-006)

*Funding:* \$126,000 (total costs), 9/2011 – 9/2014, University of Pittsburgh *Sponsor:* Michael A. Sayette and John M. Levine, Department of Psychology *Description:* Supporting cross-disciplinary graduate research in social and clinical psychology

### National Science Foundation Graduate Research Opportunities Worldwide (230165/F11)

*Funding*: \$24,147 (total costs), 8/2013 – 12/2013, University of Oslo *Sponsor*: Arnoldo Frigessi and Odd O. Aalen, Department of Biostatistics *Description*: Supporting international collaboration in frailty survival modeling for high-dimensional data

### PUBLICATIONS

\*Reflects a student author who conducted the research under the mentorship of Dr. Fairbairn

- Fairbairn, C. E., \*Velia, B., Creswell, K. G., & Sayette, M. A. (In Press). An examination of alcohol and the temporal dynamics of smiling during a comedy clip. *Journal of Experimental Social Psychology*.
- \*Kang, D., **Fairbairn, C. E.** & \*Ariss, T. (In Press). A meta-analysis of the effect of interventions for substance use disorders on emotion outcomes. *Journal of Consulting and Clinical Psychology*.
- \*Bresin, K. & Fairbairn, C. E. (In Press). Affective dynamics as an antecedent to alcohol use: An ambulatory study. *Journal of Studies on Alcohol and Drugs*.
- **Fairbairn, C. E.** & \*Kang, D. (In Press) Temporal dynamics of transdermal alcohol concentration measured via new generation wrist-worn biosensor. *Alcoholism: Clinical and Experimental Research*.
- **Fairbairn, C. E.**, Rosen, I. G., Luczak, S. E., & \*Venerable, W. J. (In Press). Estimating the quantity and time course of alcohol consumption from transdermal alcohol sensor data: A combined laboratory-ambulatory study. *Alcohol: A Biomedical Journal*.
- **Fairbairn, C. E.** & \*Velia, B. A. (In Press). Understanding social factors in alcohol reward and risk for problem drinking. In K. Federmeier (Ed.). *The Psychology of Learning and Motivation*. Elsevier.
- Fairbairn, C. E. & \*Kang, D. (In Press). Transdermal alcohol monitors: Research, applications, and future directions. In D. Frings and I. Albery (Eds.). *The Handbook of Alcohol Use and Abuse*. Elsevier.
- **Fairbairn, C. E.** & Sayette, M. A. (In Press). Using FACS to understand underlying processes during social exchange both inside and outside the laboratory. In P. Ekman and E. Rosenberg (eds.), *What the face reveals* (3<sup>rd</sup> ed.). New York: Oxford University Press.
- Sayette, M. A. & **Fairbairn, C. E.** (In Press). Use of FACS in a social context can enhance understanding of addiction. In P. Ekman and E. Rosenberg (eds.), *What the face reveals* (3<sup>rd</sup> ed.). New York: Oxford University Press.
- Sirlanci, M., Luczak, S. E., **Fairbairn, C. E.**, \*Kang, D., Pan, R., Yu, X., & Rosen, I. G. (2019). Estimating the distribution of random parameters in a diffusion equation forward model for a transdermal alcohol biosensor.

Automatica, 106, 101-109.

- Sayette, M. A., Creswell, K. G., **Fairbairn, C. E.,** Dimoff, J. D., Bentley, K, & Lazerus, T. (2019). The effects of alcohol on positive emotion during a comedy routine: A facial coding analysis. *Emotion*, *19*, 480-488.
- Sirlanci, M., Rosen, I. G., Luczak, S. E., Fairbairn, C. E., \*Bresin, K., & \*Kang, D. (2018). Deconvolving the input to random abstract parabolic systems: a population model-based approach to estimating blood/breath alcohol concentration from transdermal alcohol biosensor data. *Inverse problems*, 34(12), 125006.
- \*Kang, D., \*Bresin, K., & Fairbairn, C. E., (2018). The impact of alcohol and social context on the startle eyeblink reflex. *Alcoholism: Clinical and Experimental Research*, *42*, 1951-1960.
- Fairbairn, C. E., Briley, D. A., \*Kang, D., Fraley, R. C., Hankin, B. L., & \*Ariss, T. (2018). A meta-analysis of longitudinal associations between substance use and interpersonal attachment security. *Psychological Bulletin*, 144, 532-555.
- Fairbairn, C. E., \*Bresin, K., \*Kang, D., Rosen, I. G., \*Ariss, T., Luczak, S. E., Barnett, N. P., & \*Eckland, N. S. (2018). A multimodal investigation of contextual effects on alcohol's emotional rewards. *Journal of Abnormal Psychology*, 127, 359-373.
- Fairbairn, C. E., & Testa, M. (2017). Relationship quality and alcohol-related social reinforcement during couples interaction. *Clinical Psychological Science*, *5*, 74-84.
- Fairbairn, C. E. (2017). Drinking among strangers: A meta-analysis examining familiarity as a moderator of alcohol's rewarding effects. *Psychology of Addictive Behaviors*, *31*, 255–264.
- Fairbairn, C. E. & \*Bresin, K. (2017). The effects of contextual familiarity on alcohol expectancies. *Experimental and Clinical Psychopharmacology*, 25, 13–23.
- Cranford, J. A., & **Fairbairn, C. E**. (2017). Social psychology of alcohol involvement, marital dissolution, and marital interaction processes across multiple time scales. In H. E. Fitzgerald & L. I. Puttler (Eds). *Alcohol use disorders: A developmental science approach to etiology*. New York: Oxford University Press.
- Fairbairn, C. E., & Cranford, J. A. (2016). A multimethod examination of negative behaviors during couples interactions and problem drinking trajectories. *Journal of Abnormal Psychology*, *125*, 805-810.
- **Fairbairn, C. E**. (2016). A nested frailty survival approach for analyzing small group behavioral observation data. *Small Group Research*, 47, 303-332.
- Fairbairn, C. E., Sayette, M. A., Wright, A. G. C., Levine, J. M., Cohn, J. F., & Creswell, K. G. (2015). Extraversion and the rewarding effects of alcohol in a social context. *Journal of Abnormal Psychology*, 124, 660-673.
- Fairbairn, C. E., Sayette, M. A., Aalen, O. O., & Frigessi, A. (2015). Alcohol and emotional contagion: An examination of the spreading of smiles in male and female drinking groups. *Clinical Psychological Science*, *3*, 686-701.
- Fairbairn, C. E., Sayette, M. A., Amole, M., Dimoff, J. D., Cohn, J. F. & Girard, J. M. (2015). Speech volume indexes sex differences in the social-emotional effects of alcohol. *Experimental and Clinical Psychopharmacology*, 23, 255-64.
- Sayette, M. A., Fairbairn, C. E. & Creswell, K. G. (2015). Alcohol and emotion: The importance of social context. In C.
  E. Kopetz & C. Lejuez (Eds.), *Addiction: A Social Psychological Perspective*. New York, NY: Routledge.
- Fairbairn, C. E., & Sayette, M. A. (2014). A social-attributional analysis of alcohol response. *Psychological Bulletin*, 140, 1361-1382.

- Fairbairn, C. E., & Sayette, M. A. (2013). The effect of alcohol on emotional inertia: A test of alcohol myopia. *Journal* of Abnormal Psychology, 122, 770-781.
- Fairbairn, C. E., Sayette, M. A., Levine, J. M., Cohn, J. F., & Creswell, K. G. (2013). The impact of alcohol on the emotional displays of White members of interracial groups. *Emotion*, 13, 468-477. (article to be reprinted in P. Ekman & E. Rosenberg (eds.). (In Press) *What the face reveals* (3<sup>rd</sup> ed.). New York, NY: Oxford University Press.)
- Yang, Y., Fairbairn, C. E., & Cohn, J. F. (2013). Detecting depression severity from vocal prosody. *IEEE Transactions in Affective Computing*, 4, 142-150.
- Sayette, M. A., Creswell, K. G., Dimoff, J. D., Fairbairn, C. E., Cohn, J. F., Heckman, B. W., Kirchner, T. R., et al. (2012). Alcohol and group formation: A multimodal investigation of the effects of alcohol on emotion and social bonding. *Psychological Science*, 23, 869–878. (article to be reprinted in P. Ekman & E. Rosenberg (eds.). (In Press) *What the face reveals* (3<sup>rd</sup> ed.). New York, NY: Oxford University Press.)
- Fairbairn, C. E., Dundon, W. D., Plebani, J. G., Xie, H., Kampman, K. M., & Lynch, K. G. (2008). Study blinding and correlations between perceived group assignment and outcome in a cocaine pharmacotherapy trial. *The American Journal on Addictions*, *17*, 387-391.

# MANUSCRIPTS UNDER REVIEW

- \*Venerable, W. J., & **Fairbairn, C. E**. (Revise and Resubmit). A multimodal, longitudinal investigation of alcohol's emotional rewards and alcohol consumption over time. *Psychology of Addictive Behaviors*.
- \*Ariss, T., & **Fairbairn, C. E.** (Under Review). The effect of significant-other involvement in treatment for substance use disorders: A meta-analysis.
- Fairbairn, C. E., Hales, A. H., Williams, K. D., Creswell, K. G., & \*Wilkins, K. V. (Under Review). Mixing misery and gin: The effect of alcohol-administration on ostracism response.
- Dawson, D. N., Jones, M. L., **Fairbairn, C. E.**, Laurent, H. K. (Under Review). Mindfulness and acceptance-based interventions with African Americans: A meta-analysis of intervention efficacy for depressive symptoms.
- **Fairbairn, C. E.** \*Kang, D. & Bosch, N. (Under Review). Using machine learning and time series feature extraction for real-time BAC estimation from a new-generation transdermal sensor.

#### PRESENTATIONS

- Fairbairn, C. E. (2019). Understanding Alcohol Reward in Social Context. Annual endowed Daniel J. Elias lecture presented at Bradley College, Peoria, IL.
- **Fairbairn, C. E.** (2019). Understanding Alcohol Reward in Social Context: Close Relationships and the Development of Alcohol Use Disorder. Invited talk presented at the annual meeting of the Midwestern Psychological Association, Chicago, IL.
- **Fairbairn, C. E.** (2018). Using transdermal technology to understand alcohol-related emotional reinforcement among heavy drinkers in everyday drinking contexts. Paper presented at the annual conference of the Research Society on Alcoholism, San Diego, CA.
- **Fairbairn, C. E.** (2018). Drinking with strangers: Examining the effect of social familiarity on alcohol's emotional rewards in everyday life. Paper presented at the annual conference of the Society for Experimental Social Psychology, Seattle, WA.

\*Wilkins, K. V., Fairbairn, C. E., Williams, K. D., Hales, A. H., & Creswell, K. G. (2018). The Effects of Alcohol

*Consumption and Ostracism on Interpersonal Distance Choices among Social Drinkers.* Poster to be presented at the annual conference of the Society for Personality and Social Psychology, Atlanta, GA.

- **Fairbairn, C. E.,** \*Bresin, K., Barnett, N. P., & \*Kang, D. (2017). *Combining laboratory and ambulatory methods to explore alcohol mood-enhancement in social context*. Paper presented at the annual conference of the Research Society on Alcoholism, Denver, CO.
- Fairbairn, C. E., & Cranford, J. A. (2016). A Multi-method examination of negative behaviors during couples interactions and problem drinking trajectories. Poster presented at the annual conference of the Association for Psychological Science, Chicago, IL.
- **Fairbairn, C. E.**, & Cranford, J. A. (2016). A Multi-method examination of negative behaviors during couples *interactions and problem drinking trajectories*. Poster presented at the annual conference of the Research Society on Alcoholism, New Orleans, LA.
- Sayette, M. A., **Fairbairn, C. E.,** Creswell, K. G., & Dimoff, J. D. (2016). *Extraversion and the effects of alcohol on emotion and social bonding during group formation*. Paper presented at the annual conference of the Association for Psychological Science, Chicago, IL.
- Fairbairn, C. E., & Sayette, M. A. (2016). Alcohol and emotional contagion: An examination of the spreading of smiles in male and female drinking groups. Paper presented at the annual conference of the Society for Personality and Social Psychology, San Diego, CA.
- Fairbairn, C. E., & Sayette, M. A. (2015). Alcohol and emotional contagion: An examination of the spreading of smiles in male and female drinking groups. Paper presented at the annual conference of the Association for Psychological Science, New York, NY.
- Sayette, M. A., **Fairbairn, C. E.**, Creswell, K. G., & Dimoff, J. D. (2014). *A dynamic multimodal examination of the effects of alcohol on emotion and social bonding*. Paper presented at the annual conference of the Research Society on Alcoholism, Seattle, Washington.
- Creswell, K. G., Sayette, M. A., **Fairbairn, C. E.**, & Dimoff, J. D. (2014). *Individual differences in sensitivity to the rewarding social effects of alcohol.* Paper presented at the annual conference of the Research Society on Alcoholism, Seattle, Washington.
- Fairbairn, C. E. (2013). *The acute effects of alcohol in a social setting*. Invited paper presented at the University of Oslo, Department of Biostatistics, Oslo, Norway.
- Fairbairn, C. E., Sayette, M. A., Dimoff, J. D., & Creswell, K. G. (2013). *Whiskey river take my mind: A dynamic test of alcohol myopia*. Poster presented at the annual conference of the Research Society on Alcoholism, Orlando, Florida.
- Creswell, K. G., Sayette, M. A. Manuck, S. B., Dimoff, J. D., & **Fairbairn, C. E.** (2013). *Interactive effects of the DRD4 VNTR polymorphism and group alcohol consumption on perceived humor of a Seinfeld comedy clip.* Poster presented at the annual conference of the Research Society on Alcoholism, Orlando, Florida.
- Sayette, M. A., Creswell, K. G., Dimoff, J. D., Fairbairn, C. E., Cohn, J. F., Heckman, B. W, Kirchner, T. R., Levine, J. M, & Moreland, R. L. (2012). *The impact of alcohol on social bonding during group formation*. Paper presented at the annual conference of the Society of Experimental Social Psychology, Austin, Texas.
- Sayette, M. A., Creswell, K. G., Dimoff, J. D., Fairbairn, C. E., Cohn, J. F., Heckman, B. W, Kirchner, T. R., Levine, J. M, & Moreland, R. L. (2012). *Effects of alcohol on emotion and social bonding during group formation*. Paper presented at the annual conference of the Association of Psychological Science, Chicago, Illinois.

Fairbairn, C. E., Sayette, M. A., Cohn, J. F., Levine, J. M., Antimarino, M. A., & Sayers, W. M. (2012). The effect of

alcohol on White members of interracial groups. Poster presented at the annual conference of the Research Society on Alcoholism, San Francisco, California.

- Creswell, K. G., **Fairbairn, C. E**., Dimoff, J. D., Heckman, B. W, & Sayette, M. A. (2012). *Alcohol and group formation: A multimodal investigation of the effects of alcohol on emotion and social bonding*. Poster presented at the annual conference of the Research Society on Alcoholism, San Francisco, CA.
- Fairbairn, C. E., Kampman, K. M., Alterman, A. I., Dundon, W. D., Plebani, J. G., Lynch, K. G., & Pettinati, H. M. (2008). Antisocial participants report differing amounts of drinking in two outpatient pharmacotherapy trials. Poster presented at the annual conference of the Association for Psychological Science, Chicago, IL.
- Plebani, J. G., Kampman, K. M., Pettinati, H. M., Dackis, C., O'Brien, C. P., Varillo, K., Yama, M., & Fairbairn, C. (2007). *Implications of early in-treatment cocaine abstinence for later abstinence on high CSSA patients*. Paper presented at the annual conference of the College of Problems on Drug Dependence, Quebec City, Quebec.
- Kampman, K. M., Lynch, K., Pettinati, H. M., Dackis, C., Dundon, W., Varillo, K., Fairbairn, C., & O'Brien, C. P. (2007). *The measurement of craving in cocaine pharmacotherapy trials: What do we learn from it?* Poster presented at the annual conference of the College on Problems in Drug Dependence, Quebec City, Quebec.
- Graber, E. C., Hiller, A. D., **Fairbairn, C. E.**, Berenson, K., & Rafaeli, E. (2006). Using daily diary data to measure *affective instability in borderline patients*. Poster presented at the annual conference of the Association for Psychological Science, New York, NY.

# TEACHING EXPERIENCE

Fall '15-Present	University of Illinois at Urbana Champaign—Course Instructor Course Title: ALCOHOL AND ALCOHOLISM Format: Undergraduate Lecture/Discussion course (35-50 students)	Champaign, IL
Spr '17 -Present	<i>University of Illinois at Urbana Champaign</i> — <i>Course Instructor</i> <i>Course Title:</i> CLINICAL SCIENCE AND INTERVENTIONS <i>Format:</i> Graduate discussion-based seminar (5-15 students)	Champaign, IL
Fall '15-Present	<b>University of Illinois at Urbana Champaign</b> —Course Coordinator Course Title: Diversity Seminar Format: Graduate discussion-based seminar (10-15 students)	Champaign, IL
Summ '10 – Spr '12	University of Pittsburgh—Research Mentor Course Title: DIRECTED RESEARCH SEMINAR Format: One-on-one and small group supervision (5-8 students)	Pittsburgh, PA
Fall '12 – Summ '13	<b>University of Pittsburgh Hot Metal Bridge Program</b> —Research Mentor Course Title: N/A Format: One-on-one and small group supervision (5-6 students)	Pittsburgh, PA
Spr '11 - Summ '11	<i>University of Pittsburgh</i> — <i>Teaching Fellow</i> <i>Course Title:</i> INTRODUCTION TO SOCIAL PSYCHOLOGY <i>Format:</i> Undergraduate Lecture course (90 students spring semester, 30 stude	Pittsburgh, PA ents summer)
Summ '10	University of Pittsburgh—Teaching Fellow Course Title: Learning and Motivation Laboratory Format: Undergraduate Lecture course (90 students spring semester, 30 students)	Pittsburgh, PA

### PROFESSIONAL SERVICE

2019	National Science Foundation—Reviewer
10/16-Present	<b>Research Society on Alcoholism</b> —Government Affairs and Advocacy Committee
9/16-Present	The Academy of Psychological Clinical Science—Program reviewer
9/15-Present	University of Illinois at Urbana-Champaign—Undergraduate Studies Committee
9/11-9/13	University of Pittsburgh Psychology Department—Diversity Committee President

#### EDITORIAL SERVICE

2019-Present American Journal on Addictions, Ad hoc reviewer	
2019-Present American Journal of Community Psychology, Ad hoc n	reviewer
2019-Present Clinical Psychological Science, Ad hoc reviewer	
2019-Present Addictive Behaviors, Ad hoc reviewer	
2018-Present <b>Development and Psychopathology</b> , Ad hoc reviewer	
2018-Present Psychology of Addictive Behaviors, Ad hoc reviewer	
2018-Present Drug and Alcohol Review, Ad hoc reviewer	
2017-Present <b>Psychological Science</b> , Ad hoc reviewer	
2017-Present Addiction, Ad hoc reviewer	
2017-Present Journal of Experimental Social Psychology, Ad hoc rev	viewer
2017-Present Clinical Psychology Review, Ad hoc reviewer	
2017-Present <b>Psychology of Addictive Behaviors</b> , Ad hoc reviewer	
2017-Present Experimental and Clinical Psychopharmacology, Ad h	oc reviewer
2017-Present Behavior Research Methods, Ad hoc reviewer	
2015-Present Psychopharmacology, Ad hoc reviewer	
2014-Present Alcoholism: Clinical and Experimental Research, Ad h	noc reviewer
2014-Present Journal of Behavioral Medicine, Ad hoc reviewer	
2014-Present Assessment, Ad hoc reviewer	
2013-Present Journal of Studies on Alcohol and Drugs, Ad hoc revie	ewer
2013-Present Social Psychological and Personality Science, Ad hoc n	reviewer

### SPECIALIZED TRAINING

#### Advanced Statistical Analysis and Programing

*Survival Analysis (8/13-12/13):* training fellowship, University of Oslo Department of Biostatistics *Hierarchical Linear Modeling (1/11-5/11):* graduate course, University of Pittsburgh Psychology of Education Department

*Time Series Analysis (9/11-12/11):* statistics course, University of Pittsburgh Statistics Department *Structural Equation Modeling (1/12-5/12):* graduate seminar, University of Pittsburgh Psychology Department *Data Programing in SAS (1/13-5/13):* graduate course, University of Pittsburgh Biostatistics Department

### **Behavioral Analysis**

*ERP Boot Camp* (2016): Attended 11-day workshop offering training in using EEG methods to capture evoked brain responses. University of California, Davis.

*Facial Action Coding System Training (2010):* FACS, developed by Paul Ekman and Wallace Friesen, is the most comprehensive anatomically-based system for coding facial behavior. Completed 100 hours of training to become a certified FACS coder.