PHD CANDIDATE IN CLINICAL SCIENCE · UC BERKELEY

Education

University of California Berkeley

Berkeley, CA

PHD CANDIDATE IN CLINICAL SCIENCE. Advisor: Sheri Johnson.

DISSERTATION: Does Incompleteness in OCD Mirror Action-Outcome Mapping Deficits?

Aug. 2016 - Present

Toward a Revision of the Habit Hypothesis.

University of California San Francisco

San Francisco, CA

PREDOCTORAL CLINICAL PSYCHOLOGY INTERN

Sept. 2022 - Present

Child and Adolescent Services Multicultural Clinical Training Program

St. Petersburg, FL

B.S. IN PSYCHOLOGY, MINOR IN SPANISH, PHI BETA KAPPA, HIGH HONORS

May 2013

Awards & Fellowships

HONORS & AWARDS

Eckerd College

2022	Awardee , Teaching Effectiveness Award (\$500), UC Berkeley Graduate Student Instructor Teaching &
	Resource Center
2022	Awardee, Leiman Prize (\$300) for outstanding teaching and mentorship to graduate student instructors in
	the UC Berkeley Psychology Department
2022	Awardee, Outstanding Graduate Student Instructor Award, UC Berkeley Graduate Division
2021	Awardee, Sheldon J. Korchin Prize in Clinical Psychology (\$500)
2020	Awardee, Graduate Student Instructor Excellence Award, UC Berkeley Psychology Department
2020	Awardee, Graduate Remote Instruction Innovation Fellowship (\$5,000), UC Berkeley Graduate Division
2017	Honorable Mention, NSF Graduate Research Fellowship Program

RESEARCH FUNDING

Awarded Research Funding, Johnson, S.L., Ironside, M.L. & Michalak, E. *Do ambitious and exploratory* 2017-18 behaviors drive creativity in bipolar disorder? The quest for a mechanism. Funding awarded by the Sean Costello Foundating for Bipolar Research Scholarship for Hope (\$10,000)

Publications & Presentations

JOURNAL ARTICLES

NOVEMBER 6, 2022

Whitton AE, Kumar P, MT Treadway, Rutherford AV, **Ironside ML**, Foti D, Fitzmaurice G, Du F, and Pizzagalli DA (2021). Mapping disease course across the mood disorder spectrum through a Research Domain Criteria framework. *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging*.

Ironside ML, Johnson SL, and Carver CS (2020). Identity in bipolar disorder: Self-worth and achievement. *Journal of Personality* 88.1, pp. 45–58.

Murphy M, AE Whitton, Deccy S, **Ironside ML**, Rutherford A, Beltzer M, Sacchet M, and Pizzagalli DA (2020). Abnormalities in electroencephalographic microstates are state and trait markers of major depressive disorder. *Neuropsychopharmacology* 45.12, pp. 2030–2037.

Kaiser RH, Snyder HR, Goer F, Clegg R, **Ironside ML**, and Pizzagalli DA (2018). Attention bias in rumination and depression: Cognitive mechanisms and brain networks. *Clinical Psychological Science* 6.6, pp. 765–782.

Whitton AE, Mehta M, **Ironside ML**, Murray G, and Pizzagalli DA (2018). Evidence of a diurnal rhythm in implicit reward learning. *Chronobiology international* 35.8, pp. 1104–1114.

Whitton AE, Deccy S, **Ironside ML**, Kumar P, Beltzer M, and Pizzagalli DA (2018). Electroencephalography source functional connectivity reveals abnormal high-frequency communication among large-scale functional networks in depression. *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging* 3.1, pp. 50–58.

Whitton AE, Van't Veer A, Kakani P, Dillon DG, **Ironside ML**, Haile A, Crowley DJ, and Pizzagalli DA (2017). Acute stress impairs frontocingulate activation during error monitoring in remitted depression. *Psychoneuroendocrinology* 75, pp. 164–172.

MANUSCRIPTS IN PREPARATION

- Darrow S*, **Ironside ML***, Kasubhai A, Armstrong C, Haack L, and Aguilera A (submitted). Feasibility and Acceptability of Augmenting Therapy for Youth with Automated Text Messaging During COVID-19.
- **Ironside ML**, Baribault B, Collins AG, Michalak E, Clark L, and Johnson SL (in preparation). Computational modeling of decision approaches to the explore-exploit dilemma in bipolar disorder.
- Johnson SL*, **Ironside ML***, Modavi K, and Timpano K (in preparation). Emotion-related impulsivity moderates model-based control in the 2-step reinforcement learning task: a multisite study of a broad treatment-seeking sample.
- Johnson SL*, **Ironside ML***, Clark L, Michalak E, Hsu M, and Poh C (submitted). Behavioral indices of effort discounting are related to creative accomplishment and problem-solving and to bipolar disorder.
- Whitton AE, Kumar P, Treadway MT, Rutherford AV, **Ironside ML**, Foti D, Fitzmaurice G, Du F, and Pizzagalli DA (submitted). Distinct profiles of anhedonia and reward processing and their prospective associations with quality of life among individuals with mood disorders.

BOOK CHAPTERS

- Johnson SL, Swerdlow BA, Pearlstein JG, **Ironside ML**, and Carver CS (2021). The approach system as a component of personality. In: *Handbook of Personality: Theory and Research*. Ed. by John OP and Robins RW. Vol. 4th ed. New York, New York: The Guilford Press.
- Whitton AE, Treadway MT, **Ironside ML**, and Pizzagalli DA (2019). Neurobiological reward-related abnormalities across mood disorders. In: *The Oxford Handbook of Positive Emotion and Psychopathology*. Ed. by June Gruber. New York, NY: Oxford University Press, pp. 223–238.

CONFERENCE PROCEEDINGS

- **Ironside ML**, Timpano K, Modavi K, Dev AS, and Johnson SL (May 2022). Emotion-related impulsivity moderates model-based control in the 2-step reinforcement learning task: A multisite study with a transdiagnostic sample. In Allen, KJD (Chair), *Emerging evidence for neurocognitive mechanisms of emotion-related impulsivity*. Symposium to be presented at the 2022 Annual Meeting of the Association for Psychological Science.
- Baribault B, **Ironside ML**, Johnson SL, and Collins A (2021). Evidence accumulation or reinforcement learning? Modeling sequential decision-making in the "observe or bet" task. Spoken presentation at the virtual 62nd Annual Meeting of the Psychonomic Society.
- **Ironside ML**, Timpano K, and Johnson SL (2021). OCD symptom severity relates to deficits in action-outcome representations during learning: an alternative to the habitual control theory. Flash Talk at the 2021 Association for Psychological Science Virtual Convention.
- Johnson SL and **Ironside ML** (2018). Understanding value in psychopathology: progress and future goals. Opening panel at the 5th Annual Conference of the Society for Affective Science, Los Angeles CA.
- Whitton AE, Deccy S, **Ironside ML**, and Pizzagalli DA (2016). Resting-state EEG source functional connectivity in depressive disorders. Oral presentation given at the Annual Meeting of the Society for Research in Psychopathology, Baltimore MD.
- Whitton AE, Treadway MT, **Ironside ML**, Jensen JE, Farabaugh A, Deckersbach T, and Pizzagalli DA (2015). A multimodal assessment of positive valence systems across mood disorders. Oral presentation given at the Anxiety & Depression Association of America Conference, Miami FL.

POSTER PRESENTATIONS

- **Ironside ML**, Baribault B, Collins AGE, Clark L, Michalak E, Poh C, and Johnson SL (2022). Distinct approaches to the explore-exploit dilemma in euthymic bipolar disorder. Poster presented at the 9th Annual Computational Psychiatry Course (CPC++), New York, NY.
- **Ironside ML**, Whitton AE, Treadway MT, Jensen JE, Farabaugh A, Deckersbach T, Nierenberg A, Alpert JE, Ongur D, and Pizzagalli DA (2016). Anhedonia is associated with blunted neural response to reward across mood disorders. Poster presented at the 36th Annual Conference of the Anxiety & Depression Association of America, Philadelphia PA.

CO-AUTHORED POSTER PRESENTATIONS

- Xu J, **Ironside ML**, Johnson SL, and Timpano KR (2022). Emotion-related impulsivity positively moderates the relationship between intolerance of uncertainty and obsessive-compulsive disorder symptom severity. Poster presented at the 27th annual International OCD Foundation Conference, Denver, CO.
- Whitton AE, Kumar P, Treadway M, Foti D, Rutherford A, **Ironside ML**, Du F, and Pizzagalli DA (2019). Multimodal assessment of frontostriatal circuitry as a tool for parsing motivational impairments. Poster presented at the 74th Annual Meeting of the Society of Biological Psychiatry, Chicago IL.
- Rutherford A, Whitton AE, **Ironside ML**, Jensen JE, Du F, Farabaugh A, Deckersbach T, Ongur D, and Pizzagalli DA (2018). Rostral anterior cingulate glutamate levels are linked to abnormal high-frequency resting-state functional connectivity in bipolar disorder. Poster presented at the 73rd Annual Meeting of the Society of Biological Psychiatry, New York, NY.
- Whitton AE, Deccy S, **Ironside ML**, and Pizzagalli DA (2017). Abnormal high frequency resting-state EEG source functional connectivity in depression. Poster presented at the Organization for Human Brain Mapping (OHBM) Annual Meeting, Vancouver Canada.
- Avery B, **Ironside ML**, Ditcheva M, Whitton AE, Pizzagalli DA, and Vrshek-Schallhorn S (2016). Trait sensitivity to reward moderates effects of negative evaluative stress on reward learning in males. Poster presented at the Annual Meeting of the Society for Research in Psychopathology, Baltimore MD.

WORKSHOPS

Sandel D, **Ironside ML**, and Johnson SL (2019). Emotion-related impulsivity. Half-day workshop for China Institute visiting scholars. University of California Berkeley, Berkeley CA.

Clinical Experience

Child and Adolescent Services, Zuckerberg San Francisco General Hospital and Trauma Center

San Francisco, CA

CLINICAL PSYCHOLOGY INTERN. SUPERVISOR: WILLIAM MARTINEZ PHD

September 2022 - present

• Implement trauma-informed and culturally responsive evidence-based therapy to youth and families. Primary rotations include adolescent mental health and immigrant mental health.

Oakland CBT Center Oakland, CA

CLINICAL PSYCHOLOGY PRACTICUM STUDENT. SUPERVISOR: JACQUELINE B PERSONS PHD

May 2022 - September 2022

• Provided weekly individual therapy to adult clients experiencing depression and anxiety using a cognitive behavioral therapy case formulation approach. Implemented rumination-focused CBT, exposure and response prevention, behavioral activation therapy, mindfulness, and other evidence-based approaches.

UCSF Young Adult and Family Clinic

San Francisco, CA June 2020 - June 2021

CLINICAL PSYCHOLOGY PRACTICUM STUDENT. SUPERVISOR: ASHLEY MALIKEN PHD

• Co-led weekly multi-family dialectical behavioral therapy (DBT) skills groups for young adults and their caregivers alongside a Linehan-certified DBT therapist.

Pear Therapeutics, Inc.

San Francisco, CA

SUMMER CLINICAL RESEARCH INTERN. SUPERVISOR: TIM CAMPELLONE PHD

June - Aug 2019

- Edited therapeutic content included in a digital therapeutic (mobile app) for treatment of schizophrenia.
- Conducted a meta-analysis of randomized clinical trials using digital therapeutics with the aim of formulating the novel concept of a digital placebo.
- Co-conducted usability interviews of the digital therapeutic in development with patients with schizophrenia.

UC Berkeley Psychology Clinic

Berkeley, CA

CLINICAL TRAINEE. SUPERVISORS: JANIE HONG PHD ('17-'18); MICHAEL COLE PHD (2018); GARY SHALLER PHD ('18-'19); SHERI JOHNSON PHD (2019)

Aug 2017 - May 2019

- 2017-2018: Implemented weekly CBT to individual adult clients with mood and anxiety disorders using a case formulation approach. Engaged
 weekly in 1-2 hours of individual supervision and 3 hours of group supervision in a case conference setting.
- 2018: Conducted an adult neuropsychological assessment. Administered and scored tests, and interpreted results. Completed an integrated
 written report and delivered face-to-face feedback to the client. Tests administered and scored included WAIS-IV, Conners CPT-3, WIAT-III, MMPI2-RF, MCMI-III, BDI-II and BAI.
- 2018-2019: Implemented weekly DBT-informed CBT and short-term ACT-based therapy to individual adult clients.

UC Berkeley Psychology Clinic

Berkeley, CA

CLINICAL PEER SUPERVISOR

Jan - May '18; Sept - Dec '21

 Mentored 3 first-year students in the Clinical Science doctoral program. Performed mock clinical interviews and delivered feedback about clinical interviewing techniques. Practiced role plays to build clinical skills for delivering individual therapy. RESIDENTIAL COUNSELOR AND MOUNTAIN BIKING ACTIVITY ASSISTANT. SUPERVISOR: ANNA HEINZERLING MSW

• Implemented CBT and DBT-informed therapeutic techniques through 24-hour care during a 45-day intensive residential treatment program for children and adolescents from diverse socio-economic backgrounds with a range of emotional and behavioral difficulties, including mood disorders, autism, ODD, and PTSD.

- Led mountain biking excursions for groups of 10-12 children/adolescents. Co-facilitated daily group therapy with ten 13-year-old boys. Communicated and solved problems with a diverse clinical team.
- Reinforced a Positive Behavioral Interventions and Supports initiative which included tri-daily behavioral checklists designed to measure individual progress over time, and allow frequent opportunities for one-on-one reflection and the creation of tangible plans for behavioral adjustment.

Clinical Research Experience

UC Berkeley CALM Program

Berkeley, CA

June - Aug 2013

DOCTORAL STUDENT RESEARCHER. DIRECTOR: SHERI JOHNSON PHD

Aug. 2016 - present

- Co-wrote a successful grant proposal and designed an experimental paradigm for an international multi-site study of creativity and decision making in bipolar disorder. Programmed behavioral tasks using JavaScript, and created an online app using Heroku.
- Built computational models using Python programming language; conducted computational modeling analyses of a decision making paradigm.
- Designed two studies involving original data collection from clinical populations; Managed study coordination between sites for two multi-site studies (2016-2018: University of British Columbia and UC Berkeley; 2020-2022: University of Miami and UC Berkeley).
- Recruited participants with bipolar disorder, other mood/anxiety disorders, and OCD-spectrum disorders for experiment sessions involving diagnostic interviewing, computer tasks, and self-report surveys.
- Administered in-person diagnostic and clinical interviews for multiple research projects including: SCID-5, MINI, Young Mania Rating Scale, Overt Aggression Scale, Beck Lethality Scale, Hamilton Depression Rating Scale.
- Supervised and trained research assistants in research design, data management and analysis, and professionalism in working with human subjects and clinical populations.

UC San Francisco Darrow Lab

San Francisco, CA

RESEARCH TEAM MEMBER, DIRECTOR: SABRINA DARROW PHD

- June 2020 Aug. 2021
- Cleaned, re-structured, and analyzed quantitative data for a pilot study involving text message coaching to young people with depression and anxiety symptoms during the COVID-19 shelter-in-place.
- Conducted outcome assessment interviews with parents of adolescents participating in the UCSF Wavefront DBT program in a text-messaging intervention pilot study.

UC San Francisco Darrow Lab

San Francisco, CA

STATISTICAL CONSULTANT. SUPERVISOR: SABRINA DARROW PHD

Aug. 2021 - September 2021

• Created a replicable procedure for producing graphical representations and descriptive statistics using R Markdown for a large database of text-messaging data from a study testing the effectiveness of automated text-messaging as an adjunct treatment to DBT for adolescents.

McLean Hospital, Laboratory for Affective and Translational Neuroscience

Belmont, MA

CLINICAL RESEARCH ASSISTANT II. DIRECTOR: DIEGO PIZZAGALLI PHD

June 2014 - June 2016

- Coordinated a multimodal, multi-site R01 study (1R01MH101521) to identify potential biomarkers for reward learning across the mood disorder spectrum using self-report, behavioral and neuroimaging methods.
- Recruited and screened treatment-seeking participants with depressive and/or hypomanic symptoms.
- Collected, processed, and analyzed event-related potential data.
- · Arranged 3- and 6-month clinical follow-ups with participants; managed data for all research sessions; maintained IRB compliance.

Teaching

UC Berkeley Dept. of Psychology

Berkeley, CA

GRADUATE STUDENT INSTRUCTOR

Aug 2016 - May 2022

- Worked closely with professors and other graduate instructors to develop class plans and exams. Graded essay responses on exams. Held
 weekly office hours.
- Led 3-4 weekly hour-long discussion sections for approximately 75 students per semester in each of the courses listed below. Time committment included 10-20 hours per week for 10 semesters.

Introduction to Statistics and Research Methods

Fall '21; Spring '22

Cognitive Neuroscience

Fall '16; Fall '19; Fall '20; Spring '21

Introduction to Psychology

rull 17

Clinical Psychology

Spring '18; Spring '20

Human Neuropsychology

Spring '19

Human Emotion

Spring 19

Guest Lecturer March 8th, 2017

 Delivered a 1-hour lecture on bipolar disorder (including symptoms, etiology, and treatment) to an undergraduate course in Clinical Psychology at UC Berkeley. Approximately 200 students were in attendance.

Mentorship & Community Engagement

UC Berkeley Dept. of Psychology

Berkeley, CA

CO-SUPERVISOR OF UNDERGRADUATE HONOR'S THESIS

July 2021-present

Judy Xu (2021-2022). Title: The Role of Emotion-Related Impulsivity on the Relationship Between Intolerance of Uncertainty and Symptom Severity
of Obsessive-Compulsive Disorder.

UC Berkeley Graduate Diversity Office

Berkeley, CA

GRADUATE STUDENT MENTOR FOR GETTING INTO GRADUATE SCHOOL (GIGS) PROGRAM

Sept 2020 - May 2021

Mentored 3 undergraduate women from underrepresented backgrounds through a formal program at UC Berkeley. Advised students on a
weekly to biweekly basis and guided them through making decisions in the grad school application process, forging professional relationships
with researchers and clinicians in their field of interest, drafting personal statements and CVs, applying to graduate programs, and preparing for
interviews.

UC Berkeley Clinical Science Program

Berkeley, CA

GRADUATE STUDENT MEMBER OF THE GRADUATE ADMISSIONS COMMITTEE

2018-2019

- · Reviewed application materials from 150 prospective students applying to the clinical science program.
- Met with faculty and student members to discuss how to improve diversity in admissions and conceptualize diversity in applications.
- Conducted interviews and contributed input regarding selection of finalists for admission offers and diversity fellowships.

Teach in Prison ProgramSan Quentin, CA

GED MATH TUTOR AT SAN QUENTIN STATE PRISON

Aug - Dec 2017

- Tutored high-school level math to incarcerated men preparing for their GED exams for 4 hours per week at San Quentin State Prison.
- · Participated in a weekly student-run course at UC Berkeley to learn more about the US prison system.

Additional Clinical Training

Cognitive Processing Therapy for PTSD

Online webinar

PRESENTER: PATRICIA A RESICK PHD ABPP

July 2022

• Attended a 2-day live and interactive training on cognitive processing therapy for the treatment of posttraumatic stress disorder.

Seeing Autistic People: Practical CBT interventions from a neurodiversity framework

Virtual Workshop

PRESENTER: JANIE HONG PHD

January 2022

 Attended and moderated discussion for a 3-hour webinar on using evidence-based strategies to work with adults on the autism spectrum from a neurodiversity framework.

Clinical Certifications

San Francisco Child and Adolescent Needs and Strengths (CANS) 6-20

CERTIFICATION September 2022

Computational Skills & Spoken Languages

Advanced R for data wrangling and analysis

Intermediate Computational modeling in Python, Python for data wrangling, building web apps with Heroku and node.js, frontend JavaScript,

Jupyter Notebooks, SPSS, E-Prime, LaTeX

Basic Linux, Git, MATLAB, Java, Stan

Languages English (native), Spanish (professional working proficiency)

NOVEMBER 6, 2022