

# Linnea Sepe-Forrest

510.725.0450 • [lisepe@iu.edu](mailto:lisepe@iu.edu) • [LinkedIn](#)

## **EDUCATION:**

### **Dual Ph.D. in Clinical Psychology and Neuroscience**

Indiana University Bloomington, IN

**August 2020 - Present**

**GPA: 4.0 / 4.0**

### **B.S. in Neuroscience**

University of California Los Angeles, CA

**September 2014 - June 2018**

**GPA: 3.6 / 4.0**

## **RESEARCH EXPERIENCE:**

### **Johnson & Johnson, External Innovation in Neuroscience, San Francisco, CA**

**May 2023 - August 2023**

#### **Predoctoral Intern**

- Conducted a global landscape search of new molecular entities acting on two high priority targets for the treatment of severe psychiatric conditions.
- Utilized advanced databases to systematically identify and evaluate new molecular entities and companies for potential collaboration.
- Met with external companies to gain further insight on early safety and efficacy data supporting molecular candidates.
- Developed and presented comprehensive landscape slide deck and searchable database of molecular entities and companies of interest within the two campaigns.

### **Indiana University, Department of Psychology, Bloomington, IN**

**August 2020 - Present**

#### **Graduate Fellow**

- Leveraged pharmacoepidemiologic methods to study predictors and effects of antipsychotic use.
- Designed and secured funding to study the impact of recreational drug use on risk of psychosis spectrum disorders, after accounting for genetic and measured environmental confounding.
- Executed linear mixed models in SAS to measure familial influences on the relationship between resting-state functional connectivity and cannabis or alcohol use.
- Performed data processing and manipulation in Python on large datasets, including the Optum Clinformatics Data Mart Dataset and the Population Assessment of Tobacco and Health Study.
- Provided cognitive behavioral therapy, parent behavioral therapy, and motivational enhancement therapy to individuals and families in the Indiana Bloomington community.

### **National Institutes of Health, Bethesda, MD**

**August 2018 - August 2020**

#### **Intramural Research Fellow**

- Developed user interactive games in Python, including Go-No-Go and novel reward tasks.
- Conducted neuroimaging and behavioral analyses using Bash scripting in Linux, Analysis of Functional Neuroimages (AFNI), Python, SPSS, and Synthetic Aperture Magnetometry (SAM).
- Measured differences in cortico-striatal response during reward processing.
- Analyzed differential effects of ketamine in patients with depression, versus healthy volunteers.

**UCLA Department of Psychology, Los Angeles, CA**  
**Student Researcher**

**March 2016 - June 2018**

- Conducted an independent project on neural circuitry underlying addiction-related behaviors.
- Implemented chemogenetics and immediate early gene expression analysis to examine amygdalacortical projection involvement in cue-guided decision making.
- Performed data analysis and visualization in Prism to generate intuitive figures and graphs.

**UCLA Depression Grand Challenge, Los Angeles, CA**  
**Resilience Peer**

**September 2016 - January 2018**

- Facilitated Cognitive Behavioral Therapy (CBT) groups as a peer counselor in the Resilience Peer Network, a clinical trial aimed at providing students with internet delivered CBT alongside concurrent peer support.
- Collaborated with clients to develop treatment plans for depression and anxiety under the close supervision of licensed professionals.
- Collected survey-based measures on clinical improvement across time.

**UC Berkeley Department of Psychology, Berkeley, CA**  
**Student Researcher**

**June 2017 - September 2017**

- Contributed to a project examining pubertal hormone's influence on decision-making.
- Analyzed changes in bouton density in cortex and amygdala to study brain development during adolescence using MATLAB.
- Ran behavioral tests in rodents, including four choice tasks, elevated plus mazes, and open field tasks to assess changes in anxiety.

**HONORS AND AWARDS:**

2022 Program in Neuroscience Outstanding Contribution Award

2021 Indiana University Neuroscience Travel Award

2021 Indiana University Provost's Travel Award for Women in Science

2021 Sharon Stephens Brehm Excellence in Research Award

2020 National Science Foundation Graduate Research Fellowship Program - Honorable Mention

2019 Outstanding Poster - Postbaccalaureate Poster Day, National Institutes of Health

2018 Outstanding Poster - Neuroscience Poster Day, UCLA

**PUBLICATIONS:**

**Sepe-Forrest, L.,** Bailey, A. J., Quinn, P. D., Carver, F. W., Hetrick, W. P., & O'Donnell, B. F. (2023). Alcohol consumption's effects on working memory: Examining familial confounding. *Psychology of Addictive Behaviors*, Advance online publication.

**Sepe-Forrest, L.,** Kim, D.-J., Quinn, P. D., Bolbecker, A. R., Wisner, K. M., Hetrick, W. P., & O'Donnell, B. F. (2022). Evidence of familial confounding of the association between cannabis use and cerebellar-cortical functional connectivity using a twin study. *NeuroImage: Clinical*, 36, 103237.

**Sepe-Forrest, L.,** Carver, F. W., Quentin, R., Holroyd, T., & Nugent, A. C. (2021). Basal ganglia activation localized in MEG using a reward task. *Neuroimage: Reports*, 1(3), 100034.

Lichtenberg, N. T., **Sepe-Forrest, L.**, Pennington, Z. T., Lamparelli, A. C., Greenfield, V. Y., & Wassum, K. M. (2021). The Medial Orbitofrontal Cortex-Basolateral Amygdala Circuit Regulates the Influence of Reward Cues on Adaptive Behavior and Choice. *Journal of Neuroscience*, 41(34), 7267-7277.

Lundin, N. B. \*, **Sepe-Forrest, L.\***, Gilbert, J. R., Carver, F. W., Furey, M. L., Zarate, C. A., Jr., & Nugent, A. C. (2021). Ketamine Alters Electrophysiological Responses to Emotional Faces in Major Depressive Disorder. *Journal of Affective Disorders*, 279, 239-249. *\*Co-first authorship*

### **POSTER PRESENTATIONS:**

**Sepe-Forrest, L.**, Kim, D., Quinn, P.D., Bolbecker, A.R., Wisner, K.M., Hetrick, W.P., O'Donnell, B.F. "Evidence of familial confounding of the association between cannabis use and cerebellar-cortical functional connectivity using a twin study" (2021) Society for Research in Psychopathology. Virtual Conference

Carver, F.W., **Sepe-Forrest, L.**, Quentin, R., Holroyd, T., Coppola, R., Nugent, A.C. "Cerebellar high gamma activation during performance of a reaching task in MEG" (2019) Society for Neuroscience Annual Meeting. Chicago, IL

**Sepe-Forrest, L.**, Carver, F.W., Quentin, R., Holroyd, T., Nugent, A.C. "Spatiotemporal dynamics of reward processing in basal ganglia and cortex revealed by magnetoencephalography" (2019) Society for Neuroscience Annual Meeting. Chicago, IL

Shrout, K., **Sepe-Forrest, L.**, Carver, F.W., Chung, J.Y., Nugent, A.C. "Visualizing neural characteristics of response inhibition using magnetoencephalography" (2019) NIH Summer Poster Day. Bethesda, MD **Sepe-Forrest, L.**, Lundin, N.B., Gilbert, J.R., Carver, F.W., Zarate, C.A. Jr., Nugent, A.C. "Effects of ketamine on emotional face processing in major depression: a magnetoencephalography study" (2019) Society of Biological Psychiatry Annual Meeting. Chicago, IL

Lundin, N.B., **Sepe-Forrest, L.**, Gilbert, J.R., Carver, F.W., Zarate, C.A. Jr., Nugent, A.C. "Emotional face processing in depressed and healthy individuals: behavior and magnetoencephalography findings" (2019) Society of Biological Psychiatry Annual Meeting. Chicago, IL

**Sepe-Forrest, L.**, Lichtenberg, N.T., Wassum, K.M. "Investigating the role of amygdala-cortical circuitry in associative decision making" (2018) UCLA Neuroscience Poster Day. Los Angeles, CA

Lichtenberg, N.T., **Sepe-Forrest, L.**, Pennington, Z.T., Holley, S.M., Greenfield, V.Y., Cepeda, C., Levine, M.S., Wassum, K.M. "Amygdala-cortical circuitry in reward-expectation guided behavior" (2018) Society for Neuroscience Annual Meeting. San Diego, CA

Lichtenberg, N.T., Pennington, Z.T., Greenfield, V.Y., **Sepe-Forrest, L.**, Cepeda, C., Levine, M.S., Wassum, K.M. "Amygdala-cortical pathways that enable hidden state expectations" (2018) Computational and Systems Neuroscience (Cosyne) Annual Meeting. Denver, CO

Lichtenberg, N.T., Pennington, Z.T., Greenfield, V.Y., **Sepe-Forrest, L.**, Cepeda, C., Levine, M.S., Wassum, K.M. "The role of basolateral amygdala output pathways in expectation-guided behavior" (2017) Society for Neuroscience Annual Meeting. Washington, DC

**GRANTS/FUNDING:**

2022-2024 Indiana Clinical Translational Science Institute TL1 Fellowship  
2021 National Institute of Mental Health (NIMH) Institutional Research Training Grant (T32)  
2020 Rebec Family Neuroscience Fellowship

**PROFESSIONAL MEMBERSHIPS:**

August 2022 - Present: Ombudsperson Committee + Bias Reporting Graduate Representative  
Sept 2021 - Present: PCSAS Student Representative, Social Media Head  
August 2021 - Present: Society for Research in Psychopathology, Associate Member  
April 2021 - Present: Psychological Clinical Science Accreditation System, Student Representative  
August 2020 - Present: Psychological and Brain Sciences Diversity Advancement Committee August 2020 - Present: Program in Neuroscience Diversity Equity and Inclusion Committee

**REFERENCES:**

Patrick Quinn, PhD  
School of Public Health  
Indiana University Bloomington  
809 East Ninth Street,  
Bloomington, IN 47405 812-855-9789  
quinnp@iu.edu

William Hetrick, PhD  
Department Chair and Professor  
Department of Psychological and Brain Sciences  
Indiana University Bloomington  
1101 East Tenth Street  
Bloomington, IN 47405-7007  
(812) 855-2620  
whetrick@indiana.edu

Allison Nugent, PhD  
Director, MEG Core  
National Institute of Mental Health  
10 Center Drive  
Bethesda, MD 20814  
(301) 451-8863  
nugenta@nih.gov