## Cristina Pinheiro

# Research interests

* The role of biological and lifestyle factors on cognitive aging
* Improving quality of life and extending health span
* Memory and executive functioning in the context of aging
* Brain imaging techniques
* Health disparities
* Psychoneuroimmunology
* Longitudinal data analysis

# Education

2021-Present University of Kentucky

**Graduate Student**

**Clinical Psychology Graduate School**

2019-2020 University of Kentucky

**Post-Baccalaureate Student**

**Clinical Psychology Graduate School**

2013-2017 University of Kentucky

**Bachelor of Science in Psychology**

**Minor in Neuroscience**

# relevant coursework

Undergraduate: Experimental Psychology, Application of Statistics in Psychology, Gerontology: Aging in Today’s World, Cultural Diversity in the Modern World, Social Psychology and Cultural Processes, Personality and Individual Differences, Brain and Behavior, Introduction to Neuroscience Techniques, Health Care Ethics, Neuropharmacology: Drugs and Behavior, Cognitive Processes, Learning and Cognition, Advanced Topics in Clinical Psychology: Neuropsychology, Neurobiology of Brain Disorders.

Graduate: Psychometrics (ANOVA), Psychological Research (Regression)

# Research presentationS

**Pinheiro, C.,** Gloger, E., Crofford, L., Segerstrom, S. (2020, March 11-14) *Eudaimonic well-being and heart rate variability among midlife and older women*. [Poster Session] American Psychosomatic Society Annual Meeting, Long Beach, CA, United States. (Conference Cancelled)

**Pinheiro, C.** (2019, July 12) *Thoughts, Stress, and Immunity Study: Methods and sample characteristics.* Presentation given to Principal Investigator Dr. Suzanne Segerstrom, Co-Principle Investigators Dr. Brian Gold, and Dr. Jonathan Hakun, and study consultant Dr. Peter Gianaros, Lexington, KY, United States.

**Pinheiro, C.,** Scott, A., Segerstrom, S., & Hakun, J.(2018, April 5-7) *Socioeconomic context predicts white matter integrity in healthy older adults.* [Poster Session] National Conference on Undergraduate Research, Edmond, OK, United States.

# Projects in Preparation

Meta-analysis:

* Conducting extensive literature reviews for an impending meta-analysis centered on identifying the relationship among personality traits and repetitive thought practices.

Manuscripts**:**

* Composing a manuscript on whether eudaimonic well-being is sufficient to predict 3 distinct physiological biomarkers (Heart Rate Variability, C-reactive Protein, and Salivary Cortisol).
* Composing a manuscript on whether adulthood or childhood socioeconomic context is sufficient to predict white matter fractional anisotropy in our 3 regions of interest (superior longitudinal fasciculus, fornix, and genu of the corpus callosum).

# Clinical Experience

2018 — 2020 **Stroke and Spinal Cord Injury Rehabilitation Volunteer**, advised by Dr. Lumy Sawaki Adams, M.D., Ph.D., Cardinal Hill Endowed Research Chair in Stroke and Spinal Cord Injury Rehabilitation and Associate Professor in the Department of Neurology, University of Kentucky.

# Research Experience

2018 — 2021  **Study Coordinator** (full-time)

***Healthy Brain Aging Study (Thoughts, Stress, and Immunity Sub-Study)***

Psychoneuroimmunology Research Lab

University of Kentucky, Lexington, KY

Responsibilities: Recruiting individuals for sub-study, screening individuals for MRI eligibility, screening individuals for Thoughts, Stress, and Immunity Study eligibility, coordinating meetings with participants, scheduling MRI scans, communicating with Co-PIs on study organization, training participants on fMRI tasks, obtaining informed consent, safety screening for MRI scan, assuring a safe environment near MR safety zones 1–4, assisting radiologic technicians with participant positioning, ensuring safe practices during MRI, communicating with and instructing participants on MRI sequences through intercom, organizing resulting MRI data, coordinating with graduate student interviewers, consulting with study phlebotomists, monitoring lab email account, attending weekly meetings with lab members and principal investigator, attending job talks and guest speaker presentations.

Relevant Training: CITI Course for Clinical Research Coordinator, CITI Course for Social/Behavioral Investigators and Key Personnel, CITI Course for Clinical Trials Involving Investigational Drugs, and University of Kentucky’s Clinical Research Coordinator Course

Supervisor: Suzanne Segerstrom, Ph.D., M.P.H.

2018 — 2021 **Laboratory Technician** (full-time)

***Thoughts, Stress, and Immunity Study,***

***Healthy Brain Aging Sub-Study, &***

***Daily Activity and Health in the Lives of Adults Women***

Psychoneuroimmunology Research Lab

University of Kentucky, Lexington, KY

Responsibilities: Training incoming research assistants and graduate students on lab tasks, troubleshooting oversight in ECG data using Peltola (2012) protocol in MindWare Software, analyzing ECGs and heart rate variability for irregular R-R intervals, consulting with Dr. Segerstrom and study nurse on unusual ECGs, writing and sending letters notifying participants of irregular ECGs, utilizing the relevant pipeline to analyze white matter hyperintensities from T2-weighted FLAIR images, consulting with Dr. Segerstrom, Dr. Hakun and radiologists on unusual MRIs, writing and sending letters notifying participants of unusual MRIs, utilizing social explorer to determine SEC data on participant’s self-reported lifetime addresses, entering participant’s medications and their corresponding drug class in SPSS, entering lifetime addresses of participant’s in Excel, updating old spreadsheets in SPSS, Excel, and REDCap, attending weekly meetings with lab members and principal investigator, organizing study materials, consulting with project manager on study materials, scoring and entering a wide battery of cognitive tests using SPSS and REDCap including Trail Making Tests A and B, North American Adult Reading Test, Controlled Oral Word Association Task, Letter Number Sequencing, Digit Span, and Rey Auditory Verbal Learning Test. As well as self-report measures such as Behavior Rating Inventory of Executive Function, Geriatric Depression Scale, Physical Activity Scale for the Elderly, Pittsburgh Sleep Quality Index, Louisville Older Person Events Scale, Emotion Regulation Questionnaire, Perceived Stress Scale, Revised Dyadic Adjustment Scale, and NEO Personality Inventory.

Relevant Training: CITI Course for Social/Behavioral Investigators and Key Personnel

Supervisor: Suzanne Segerstrom, Ph.D., M.P.H.

2019 — 2021 **Project Manager** (full-time)

***Thoughts, Stress, and Immunity Study***

Psychoneuroimmunology Research Lab

University of Kentucky, Lexington, KY

Responsibilities: Purchased study gift cards for participant compensation, stored and logged budget information, audited study budget, collecting and depositing custodial account checks, consulted with study interviewers about budget and gift card tracking, updated tracking protocol for future project manager, organized weekly blood draws with phlebotomists, communicated with phlebotomists about blood draw scheduling, reconciled quarterly budget with University Treasury Services, trained incoming project manager, provided IRB continuation information to Dr. Segerstrom, monitored lab email address, backed up lab documents weekly onto external hard drive.

Supervisor: Suzanne Segerstrom, Ph.D., M.P.H.

2015 — 2017 **Research Assistant**

***Thoughts, Stress, and Immunity Study &***

***Daily Activity and Health in the Lives of Adult Women Study***

Psychoneuroimmunology Research Lab

University of Kentucky, Lexington, KY

Responsibilities: Trained incoming research assistants on lab tasks, stored and transported biological samples, adjusted oversight in ECG data using Peltola (2012) protocol in MindWare Software, attended weekly lab meetings, scored and entered a wide battery of cognitive tests using SPSS and REDCap including Trail Making Test, Controlled Oral Word Association Task, Letter Number Sequencing, Digit Span, and Rey Auditory Verbal Learning Test. As well as self-report measures such as Behavior Rating Inventory of Executive Function, Geriatric Depression Scale, Physical Activity Scale for the Elderly, Pittsburgh Sleep Quality Index, Louisville Older Person Events Scale, Emotion Regulation Questionnaire, Perceived Stress Scale, Revised Dyadic Adjustment Scale.

Relevant Training: CITI Course for Social/Behavioral Investigators and Key Personnel

Faculty Advisor: Suzanne Segerstrom, Ph.D., M.P.H.

2017  **Research Assistant and Neuroscience Research Project**

***Healthy Brain Aging Sub-Study***

Psychoneuroimmunology Research Lab

University of Kentucky, Lexington, KY

Research Project: Investigated the effects of socioeconomic context (SEC) as a predictor of fractional anisotropy in the genu of the corpus callosum, superior longitudinal fasciculus, and fornix of older adults. Socioeconomic disadvantage in childhood has been associated with decreased performance on measures of executive functioning and smaller brain volumes. The study was particularly interested in the three regions of interest because they are associated with executive functioning and tend to decrease with age. Using an SEC latent variable for childhood (0-18) and adulthood (19-60) results from a hierarchical regression model suggest that adulthood SEC was significantly associated with a higher composite fractional anisotropy.

Responsibilities: Utilized Social Explorer to determine SEC data for every participant’s self-reported lifetime address, trained incoming research assistants on lab tasks, attended weekly lab meetings, stored and transported biological samples, adjusted oversight in ECG data using Peltola (2012) protocol in MindWare Software, coded and entered a wide battery of cognitive tests using SPSS including Trail Making Test, Controlled Oral Word Association Task, Letter Number Sequencing, Digit Span, and Rey Auditory Verbal Learning Test. As well as self-report measures such as Behavior Rating Inventory of Executive Function, Geriatric Depression Scale, Physical Activity Scale for the Elderly, Pittsburgh Sleep Quality Index, Louisville Older Person Events Scale, Emotion Regulation Questionnaire, Perceived Stress Scale, Revised Dyadic Adjustment Scale.

Relevant Training: CITI Course for Social/Behavioral Investigators and Key Personnel

Faculty Advisors: Suzanne Segerstrom, Ph.D., M.P.H., and Mark Prendergast Ph.D.

2016 **Summer Research Assistant** (part-time)

***Thoughts, Stress, and Immunity Study &***

***Daily Activity and Health in the Lives of Adult Women Study***

Psychoneuroimmunology Research Lab

University of Kentucky, Lexington, KY

Responsibilities: Stored, labeled and transported biological samples, adjusted oversight in ECG data using Peltola (2012) protocol in MindWare Software, trained other RAs on lab tasks, attended weekly lab meetings, coded and entered a wide battery of cognitive tests using SPSS and REDCap including Trail Making Test, Controlled Oral Word Association Task, Letter Number Sequencing, Digit Span, and Rey Auditory Verbal Learning Test. As well as self-report measures such as Behavior Rating Inventory of Executive Function, Geriatric Depression Scale, Physical Activity Scale for the Elderly, Pittsburgh Sleep Quality Index, Louisville Older Person Events Scale, Emotion Regulation Questionnaire, Perceived Stress Scale, Revised Dyadic Adjustment Scale

Relevant Training: CITI Course for Social/Behavioral Investigators and Key Personnel

Supervisor: Suzanne Segerstrom, Ph.D., M.P.H.

# ACKNOWLEDGMENTS AND INVOLVEMENT

2019 — 2021 **American Psychosomatic Society Member**

2019 — 2021 **Association for Psychological Science Member**

2017 **NeuroCATS Founder**: Undergraduate student organization with outreach opportunities for Neuroscience majors, University of Kentucky

2016 — 2017 **Psychology Student Association**, University of Kentucky

2016 — 2017 **Dean’s List**, College of Arts and Sciences, University of Kentucky

# PROFESSIONAL DEVELOPMENT

2020 *Neuroinflammation and Substance Use Disorders* with Dr. Jill Turner, University of Kentucky, Cognitive Neuroscience Brown Bag Seminar.

2020 *Introduction to Research* with Dr. Lauren Whitehurst, University of Kentucky, Experimental Psychology Brown Bag Seminar.

2020 *African and African American Experiences of Race and Equity: A Dialogue* with Drs. Umesh Bawa, Nikki Brown, Chris Marshburn, and Lee Walters, University of Kentucky Webinar Series.

2020 *The Basics of Peer Review* with Drs. Amy Drew, Robert Goldstone, Erin Tone, and Becca White, American Psychological Science Webinar Series.

2020 *Default Mode Network Biochemistry Underling the Age Course of the Human Connectome* with Dr. Melissa Jo Terpstra*,* University of Kentucky, Sanders-Brown Center on Aging Seminar Series.

2020 *Genomic, Behavioral, and Engineering Approaches Towards an Understanding of Sleep and Its Role in Maintaining Health and Well-Being* with Dr. Bruce O’Hara, University of Kentucky, Department of Biology Seminar Series.

2020 *A Participatory Research Endeavor to Promote African American Research Engagement* with Dr. Shani Bardach, University of Kentucky, Sanders-Brown Center on Aging Seminar Series.

2019 — Present *Multilevel Modeling Journal Club,* Psychoneuroimmunology Lab, University of Kentucky.

2019 *Power, Reliability, and Estimation Errors in Biomarker Research* with Dr. Suzanne Segerstrom, University of Kentucky, Clinical Psychology Brown Bag Seminar.

2019 *Precision and Personalized Population Health Approaches in Solving Health Disparities and Obtaining Health Equity* with Dr. Azizi Seixas, New York University School of Medicine.

2019 *Evidence-Based Assessment Practices and Management of TBI* with Dr. Justin Karr, Harvard Medical School.

2019 *Clinical Research Coordinator Certification*, University of Kentucky, Center for Clinical and Translational Science Workshops.

2019 *The Benefit of Racial Protective Factors* with Dr. Shawn Jones, Virginia Commonwealth University.

2019 *REDCap Workshop* with Brent Seeders, University of Kentucky, Center for Clinical and Translational Science Workshops.

2019 *The Relationship between Arrythmias and Psychological Health* with Dr. Samuel Sears, East Carolina University.

2019 *Hearts and Minds: Lifestyle Interventions for Vascular and Cognitive Health* with Dr. Patrick Smith, Duke University Medical Center.

2018 *The Neurology of Emotion* with Dr. Ronan Murphy, M.D., Kentucky Neuroscience Institute.

2018 *How to Present Your Research in 60 Seconds*, and *Energy Compensation with Exercise* with Dr. Kyle Flack, University of Kentucky, Center for Clinical and Translational Science Workshops.

2018 *Cognitive Processes in Same/Difference Learning* with Dr. Thomas Zentall*, Morality* with Dr. Ain Simpson*,* and *Measurement Issues in Psychological Research* with Dr. Michael Tolland, University of Kentucky, Clinical Psychology Brown Bag Seminars.

2018 *Biostatistics, Epidemiology, and Research Design*

2018 *SPSS*: QIPSR Software Festival Workshop

2018 *From Perception to Process*: Informed Consent Workshop

2017 *Intro to the Health and Retirement Study*:GSA Connect Open Forum

# VOLUNTEER EXPERIENCE

2018 — 2019 **Stroke and Spinal Cord Injury Rehabilitation Volunteer**, advised by Dr. Lumy Sawaki Adams, M.D., Ph.D., Cardinal Hill Endowed Research Chair in Stroke and Spinal Cord Injury Rehabilitation and Associate Professor in the Department of Neurology, University of Kentucky.

2017 — 2019 **Activities Coordinator Volunteer**, Hartland Hills Retirement Home, Lexington, KY.

2015 **God’s Pantry Volunteer**, *Pre-Med Activities Council,* University of Kentucky.

# OTHER WORK EXPERIENCE

2019 — 2020 **Cashier at Habibi’s Sweets & Pastries**

Responsibilities: Obtaining food knowledge of menu items, cleaning dining room and kitchen, baking pastries, taking orders, tendering cash, handling debit and credit cards.

2017 — 2018 **Server at J Alexander’s Restaurant**

Responsibilities: Obtained food knowledge of menu items, suggested healthy, gluten free, and vegetarian alternatives, prioritized tasks, cleaned dining room and kitchen, executed hospitality, acquired professional social skills.

2013 — 2017 **Server and Dietary Aid at Hartland Hills Retirement and Independent Living**

Responsibilities: Suggested foods to residents with specific dietary or physical needs, set tables for following meals, cleaned dining area, prepped meals in kitchen, general housekeeping.