# Lucrezia Lucchi

**CONTACT** 

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# **EDUCATION**

Psychology, PhD student

Aug 2024 - present

Arizona State University (Tempe, AZ)

Human Movement Sciences, MSc - Rehabilitation specialization

Sep 2021 - present

Rijksuniversiteit Groningen (Groningen, The Netherlands)

Exercise Physiology, BSc - Chemistry minor; Pre-medicine

Aug 2017 - Dec 2020

University of Miami (Coral Gables, FL)

## **RESEARCH ACTIVITY**

Graduate Research Associate - Department of Psychology

Aug 2024 - present

Arizona State University (Tempe, Arizona)

Advisors: Dr. Polemnia Amazeen, Dr. Jamie Gorman

- Developing and implementing protocols for ECG and GSR data collection using Biopac systems, including setup and calibration for accurate measurement of team physiological synchrony
- Designing a team-interaction study to assess the influence of emotion in AI feedback on collaborative performance, communicative influence, and shared physiological dynamics

Graduate Researcher - Faculty of Behavioral & Social Sciences

Aug 2023 - June 2024

Rijksuniversiteit Groningen (Groningen, The Netherlands)

Advisors: Dr. Ralf Cox, Dr. Harjo de Poel

- Performed my Master's thesis on how fractal and multifractal scaling of upper-body motions of students during silent text-reading relates to comprehension and subjective experiences of texts of varying difficulties; gained experience in processing and nonlinear time series analysis of upper-body movement and gaze step data
- Designed and carried out an experiment involving the collection, processing, and analysis of
  motion data in order to explore associations between the embodied experiences of film-viewers,
  the temporal structure of cinematic visual activity, aesthetic emotions, and personality traits

**Undergraduate Research Assistant - Max Orovitz Laboratory** 

July 2018 - May 2020

University of Miami (Coral Gables, FL)

Advisor: Dr. Joseph Signorile

- Independently designed and carried out a study using kinematic & electromyographic data to assess the reliability and validity of two linear position transducers for the five-times sit-to-stand test, with the aim of evaluating their possible implementation as a clinical tools for the accurate and accessible assessment of lower body power in older adults
- Collaborated with graduate students to design and execute a wide variety of research protocols related to functional performance, strength, power, balance, proprioception, gait, and cognitive functioning for healthy older adults and Parkinson's disease patients

#### **AWARDS**

Willian Mace Travel Award (€500, ICPA 2024)

Presidential Merit Scholarship (\$16,000/year, 2017-2020)

#### **PUBLICATIONS**

Cherup, N. P., Strand, K. L., Lucchi, L., Wooten, S. V., Luca, C., & Signorile, J. F. (2020). *Yoga Meditation Enhances Proprioception and Balance in Individuals Diagnosed With Parkinson's Disease*. Perceptual and motor skills, 128(1), 304-323.

Strand, K. L., **Lucchi, L**., Copo, T. G., Cherup, N. P., & Signorile, J. F. (2019). *Optimal loads for power in older men and women using plate-loaded resistance machines*. Experimental Gerontology, 124, 110638.

## **PRESENTATIONS**

**Lucchi,** L., van Klaveren, L., Blau, J., Cox, R. F. A. (2024). *Fractal scaling of low-level perceptual variables in films and subjective aesthetic appraisals of viewers*. [Poster Presentation]. The XXII International Conference on Perception and Action (ICPA); June 25-28, 2024; Trondheim, Norway.

#### RELEVANT TRAINING

#### Nonlinear Methods (NLM) for Psychological & Social Sciences Workshop

July 2023

Leuphana University (Lüneburg, Germany)

- Gained expertise in fractal analysis, phase-space reconstruction, (C)RQA, MdRQA, and convergent cross mapping by engaging in practical exercises with simulated datasets
- Learned best practices for parameter exploration, evaluation, and selection

## Howard Hughes Medical Institute (HHMI) Laboratory courses

Sep 2017 - May 2018

University of Miami (Coral Gables, FL)

Supervisors: Dr. Leslie Knecht, Dr. James Van Dyken

- Developed genetically modified yeast; analyzed culture growth and density of Sir2 knockout yeast strains in varying media environments
- Designed and implemented 3D printed microfluidic platforms to quantify the deleterious impact of silencing the Sir2 gene on the growth rate and chronological lifespan of *S. cerevisiae*

Supervisors: Dr. Francisco Raymo, Dr. Catalina Vasquez

- Optimized bodipy-loaded L64-polymer nanoparticles for biological imaging purposes
- Traced nanoparticles in sea urchin embryos through microscope imaging to evaluate the impact of environmentally significant temperature fluctuations on the development of *L. variegatus*

#### **CERTIFICATIONS**

#### **CITI Program**

IRB - Social & Behavioral Research (Group 2)

Sep 2024

Graduate Student & Postdoctoral Researcher - Responsible Conduct of Research

Aug 2024

#### PROFESSIONAL AFFILIATIONS

**International Society of Motor Control** (ISMC) **International Society for Ecological Psychology** (ISEP)

Nov 2023 - present

Nov 2023 - present

## **SKILLS**

**General Research:** effective & efficient communication in multidisciplinary teams, participant recruitment & scheduling, supervising & training research assistants, experimental design, preparation of ethical request documentation, writing research proposals and literature reviews, manuscript preparation, inferential statistics, nonlinear time series analyses

**Laboratory:** Proprio5000 (reactive balance platform), Biodex System 4 (dynamometer), Biopac ECG and EDA, Noraxon EMG, Keiser pneumatic exercise machines (Keiser Air 420), Vyaire Oxycon Mobile, Vyaire Vyntus CPX Metabolic Cart, Kinect V2 (motion sensor), Kinovea, Vicon Nexus 2.7 (motion analysis), Anybody Modeling System (musculoskeletal modeling), motion energy analysis (MEA tool), Vernier Logger Pro (data acquisition), Tinkercad (3D printing), LabView (EMG & blood pressure bio-telemetry), Eye Tribe Eye Tracker, Lab Streaming Layer, Qualtrics, SONA, Zotero (file management)

**Programming:** RStudio, Matlab

Software: Microsoft Office, Google Suite, SPSS Statistics, Obsidian

### PROFESSIONAL EXPERIENCE

Guest Advocate

July 2020 - Jan 2021

Target Corporation (Miami, FL)

- Improved team dynamics to minimize wait time for order pick-up and return-exchange services
- Maintained accuracy and quality of guest service during high-volume pandemic traffic
- Effectively coordinated set up, upkeep, and closing of front end and guest services
- Trained 15+ seasonal employees in the guest advocate position

#### **Evaluator & Health Counselor**

Jan 2020 - Apr 2020

Guardrails Prevention Initiative (Miami, FL)

- Used Healthsnap analytics software to generate health and lifestyle recommendations for University of Miami employees and encourage compliance to healthy standards of behavior
- Developed exercise and nutrition programs based off body composition measures, blood pressure screenings, dietary recalls, and physical activity histories obtained one-on-one with clients

Student Assistant Jan 2018 - Aug 2018

University of Miami Law Library (Coral Gables, FL)

- Filed, registered, and archived library files and materials; sorted out books for repair
- Helped patrons in locating reference materials in person and on the phone
- Maintained digital account records within circulation database

## ADDITIONAL INFORMATION

#### Languages:

- Italian (native, fluent)
- English (fully fluent)
- Spanish (proficiently spoken & written)
- Dutch (basic reading & verbal comprehension)

#### Other:

- U.S and Italian citizenship (U.S and EU passport holder)
- RYT®200 Yoga Teacher (issued Nov 2022)