**Michaela Leung**

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**EDUCATION**

**Doctor of Philosophy in Earth and Planetary Sciences, University of California,** Riverside, CA

September 2020 – PRESENT (expected graduation Spring 2025)

**Bachelor of Science in Earth and Space Sciences, University of Washington,** Seattle, WA

Graduated: June 2020

Cum Laude with Departmental and Interdisciplinary Honors. Early entrance at age 15 through UW Academy for Young Scholars program for high school sophomores. Included courses in geobiology, geochemistry, astrobiology and physics.

**RESEARCH EXPERIENCE**

***Research Assistant,* Planetary Astrobiology Laboratory, University of California, Riverside**

July 2020 – PRESENT

Advisor: Dr. Edward Schwieterman

Modified 1-dimensional coupled climate photochemistry model to include additional gaseous species.

***Research Assistant,* Virtual Planetary Laboratory, University of Washington, Seattle**

October 2017 – September 2020

Advisor: Dr. Victoria Meadows

Used radiative transfer and 1-dimensional coupled climate photochemistry models to analyze biosignatures. Developed python scripts and modified existing FORTRAN code. Wrote two first-author papers and gave two poster presentations.

**PUBLICATIONS**

* **Leung, M.,** Zuckerman, A., Lincowski, A., & Meadows V. *Effects of Atmospheric Photochemistry on Circumbinary Planets.* In Preparation
* **Leung, M.,** Meadows, V., & Lustig-Yaeger, J. (2020). High-resolution Spectral Discriminants of Ocean Loss for M-Dwarf Terrestrial Exoplanets, *160*(1). https://doi.org/10.3847/1538-3881/ab9012

**PRESENTATIONS**

* **Leung, M.**, Meadows V., & Lincowski, A. (2020) Effects of Atmospheric Photochemistry in Circumbinary Planets: presented at Exoplanets in Southern California, Virtual Meeting, September 15.
* **Leung, M.** & Meadows V. (2020) Effects of Atmospheric Photochemistry in Circumbinary Planets: poster presented at the Undergraduate Research Symposium
* **Leung, M.,** Meadows V. & Lustig-Yeager, J. (2019), How to Discriminate Signs of Life from Ocean Loss on Earth-like Exoplanets Using High Resolution Ground Based Spectroscopy: poster presented at the Undergraduate Research Symposium

**OUTREACH ACTIVITIES**

***Southern California Organizer,* Astrobiology for the Incarcerated, NASA**

August 2020 – PRESENT

Developing relationships with local incarceration facilities and creating presentation materials.

***STEM Professional Correspondent,* Letters to a Pre Scientist**

July 2020 – PRESENT

Trained to develop corresponding relationships with underserved elementary school children to influence science perspective.

***Undergraduate Research Leader,* Undergraduate Research Program, University of Washington, Seattle**

September 2019 – June 2020

Communicated about research opportunities at outreach events to first year and transfer students.

**RELEVENT WORK EXPERIENCE**

***Technical Editor,* Math for Programmers**

May-July 2020

Edited manuscript for technical accuracy and clarity. Created high quality figures and confirmed code functionality.

***Undergraduate Peer Tutor and Mentor,* Odegaard Writing and Research Center, University of Washington, Seattle**

Peer Tutor: September 2018 – June 2020

Peer Mentor: August 2019 – June 2020

Worked with graduate and undergraduate student writers on various writing projects through question based, non-directive strategies. Supported and trained new staff, organized events and programming. Supported transition to remote April 2020.

**HONORS AND AWARDS**

**Provost’s Research Fellowship, University of California, Riverside**

**Undergraduate Student Speaker, Earth and Space Sciences Graduation, 2020**

**Husky 100, 2020**

**Mary Gates Research Scholarship, Spring 2020**

**University of Washington Dean’s List: 9 quarters**

**Husky Leadership Certificate*,* University of Washington**