

**Edward W. Schwieterman****CURRICULUM VITAE**

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**Mailing Address**

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Department of Earth Sciences  
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**Contact Information**

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**Current Position:** Assistant Professor of Astrobiology  
UNIVERSITY OF CALIFORNIA, RIVERSIDE (UCR)  
Department of Earth and Planetary Sciences

**Education:** UNIVERSITY OF WASHINGTON (UW)  
Ph.D., Astronomy & Astrobiology, Aug. 2016  
Thesis Advisor: Dr. Victoria Meadows  
M.Sc., Astronomy, Aug. 2011  
  
FLORIDA INSTITUTE OF TECHNOLOGY (FIT)  
B.Sc., Astronomy & Astrophysics, *Magna Cum Laude*, May 2010  
B.Sc., Physics, *Magna Cum Laude*, May 2010

**Other Professional Experience**

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2019-2020. Postdoctoral Fellow, Georgia Institute of Technology (GT)  
2015-present. Research Scientist, Blue Marble Space Institute of Science (BMSIS)  
2016-2019. NASA Postdoctoral Fellow, University of California, Riverside  
2010-2016. Graduate Research & Teaching Assistant, University of Washington

**Grants and Awards**

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2019. NASA Exobiology, Atmospheric Seasonality as a Biosignature (Inst. Co-PI; **\$450K**)  
2018. NASA Exobiology, Assessing Earth's Biosignatures (Co-I; **\$467K**)  
2018. NASA NExSS Virtual Planetary Laboratory (Co-I; **~\$11M**)  
2016-2019. NASA Postdoctoral Program Fellowship (**~\$210K**)  
2018. NAI Scholarship for the Astrobiology Grand Tour, Western Australia (**\$1K**)  
2016. NASA Astrobiology Institute Director's Discretionary Fund (PI; **\$46K**)  
2015. Kenilworth Foundation Grant for the UW Pre-Major in Astronomy Program (**\$16.5K**)  
2015. Wildcard Award, NASA Famelab Contest, Chicago/AbSciCon Regional Heat  
2015. UW Student Technology Fee (STF) Grant, Planetarium Upgrade (Co-I; **\$47K**)  
2015. UW STF Grant, Manastash Ridge Observatory Imaging Camera (Co-I; **\$37K**)  
2011-2015. UW GPSS grants for graduate student improvements (**\$1.5K** total)  
2013. American Philosophical Society Lewis and Clark Fund for Research (PI; **\$4K**)  
2013. NAI Scholar, International Summer School in Astrobiology  
2012. NAI Scholar, Nordic-NASA Summer School, 2012

### **Selected Academic Service and Synergistic Activities**

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2019. Session convener and chair, Astrobiology Science Conference 2019 (Bellevue, WA)
- 2019, 2018. NASA Grant Review Panelist (multiple programs)
2018. Session convener and chair, Goldschmidt geochemistry conference (Boston, MA)
- 2016 - 2020. Referee for the peer-reviewed journals including: *Astrobiology*, *The Astronomical Journal* (AJ), *The Astrophysical Journal* (ApJ), *Monthly Notices of the Royal Astronomical Society* (MNRAS), the *International Journal of Astrobiology* (IJA), and the *Journal of Astronomical Telescopes, Instruments, and Systems* (JATIS)
2017. Session convener, Astrobiology Science Conference, Mesa, AZ
- 2016-2018. NExSS Workshop on Exoplanet Biosignatures, Review Paper Lead
2017. Reviewer, Lewis & Clark Fund for Field Research in Astrobiology
- 2015-2016. Student Technology Fee Committee (UW; \$5 million/year fund)
2015. Executive Secretary, NASA Solar System Workings Panel
- 2010-2015. Senator, Graduate and Professional Student Senate (GPSS)  
*GPSS Committees:* Executive (2014-2015), Finance & Budget (2012-2014; Chair: 2012-2013), Elections (2014, 2015), STF Oversight (2015), Judiciary (2010-2011)
2015. Student Representative, Academic Grievance Hearing Panel

### **Selected Scientific Talks**

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2019. "Alternative Earths Through Time and Space" University of Bern, Switzerland. Center for Space and Habitability colloquium. Bern, Switzerland. Nov. 20, 2019. [Invited]
2019. Schwieterman, E. "Exoplanet Biosignatures". Frontiers in Biosignatures Plenary Session. Astrobiology Science Conference. June 24, 2019. Bellevue, WA [Invited].
2019. Schwieterman, E. "Detecting and Confirming Biosignatures with HabEx." American Astronomical Society Meeting #234. HabEx Splinter Session. June 10, 2019. [Invited]
2019. "A Limited Habitable Zone for Complex Life" Florida Institute of Technology. Physics & Space Science colloquium. Melbourne, FL. March 22, 2019. [Invited]
2019. "Exoplanet Biosignatures Overview." Biosignatures in the 2030s Splinter Session. American Astronomical Society 233<sup>rd</sup> meeting in Seattle, WA [Invited]
2018. "Earth as a Laboratory for Exoplanet Biosignatures" California State Polytechnic University, Pomona. Physics seminar. Pomona, CA. October 25, 2018. [Invited]
2018. "Characterizing Ozone Detectability on Weakly Oxygenated Terrestrial Exoplanets" LUVOIR Seminar Series, NASA Goddard SFC. April 4, 2018. [Invited, Remote]
2017. "An Introduction to Planetary Habitability and the Search for Life Beyond Earth." The Early History of Planetary Systems. Tartu, Estonia, Aug 8-10, 2017. [Invited]
2017. "Characterizing N<sub>2</sub>O as an Exoplanet Biosignature: Early Earth as a Template" Goldschmidt conference, Paris, France, Aug 12-18, 2017.
2017. "A Phase-dependent Spectral Earth Database with Applications for Directly Imaged Earth-like Exoplanets." The Astrobiology Science Conference 2017, held April 24-28, 2017 in Mesa, Arizona. No. 1965, id. 3515.

### **Selected Education and Outreach Talks and Events**

2020. "Ask an Astrobiologist with Dr. Eddie Schwieterman" streamed by SAGANet and NASA Astrobiology on June 16, 2020 and archived online.
2020. "Seeking Extraterrestrial Life Like Us: Biosignatures, Technosignatures, and Habitable Zone for Complexity" UCR Palm Desert Campus on January 21, 2020. Approximately 300 members of the public attended.
2019. "Alien Worlds: The Future of Exoplanet Science and the Search for Life Elsewhere." Florida Institute of Technology on March 22, 2019. Approximately 110 attendees.
2017. "Alien Planets: Are Other Earths Lurking in our Galaxy?" UCR Palm Desert Campus on April 6, 2017. Approximately 350 members of the public attended.
2017. Demonstrated cloud chamber to interested audience members during "Sensing the Universe" activity following "Are We Alone?" science lecture on February 1, 2017 at UCR.
2016. "Measuring Exoplanet Atmospheres for Signs of Life." Night Sky Network webinar held on November 16, 2016. 111 audience members attended virtually.
2016. "Life Beyond the Solar System: The hunt for habitable worlds and biosignatures in the 2020s and beyond", public talk to the Seattle Astronomical Society (Seattle, April 20, 2016).
2016. "Biosignatures and Technosignatures: Finding life outside of the solar system", the Pacific Science Center's Science and a Movie Night (Seattle, March 23-24, 2016).
2016. "Promoting Inclusivity in STEM through Active Recruiting and Mentoring: The Pre-Major in Astronomy Program (Pre-MAP) at the University of Washington." AAS 227, #313.04.
2015. "An Astrobiologist in the Land of Eternal Sunsets", NASA Famelab (Chicago, 2015).
2015. "Lifesigns and Biosignatures: How we'll find life outside the solar system", Astronomy on Tap science outreach talk (Seattle, October 28, 2015).
2015. "Bridging the Skill Gap from High School to Student Researcher: The Pre-Major in Astronomy Program (Pre-MAP) at the University of Washington." Northwest Astronomy Teaching Exchange (NATE), Center for Astronomy Education (CAE).

### **Teaching and Advising Experience and Relevant Professional Development**

- 2017-2019. Lead Organizer. Astrobiology Seminar (weekly), UC Riverside
2018. Guest Lecture. "Exoplanet Biosignatures" Geo 280, UC Riverside (12/4)
2018. How to Teach Students Problem Solving Skills (CAE/AAS) (participant, 06/05)
2018. Using Anchored Inquiry to Teach Astronomy /Physics (BSCS/AAS) (participant, 06/03)
2018. Guest Lecture. "Spectral Signs of Habitability" Astro 630, University of Hawaii (04/25)
- 2016-2018. Science co-advisor to Stephanie Olson, PhD student at UCR, now a Postdoctoral Fellow at the University of Chicago (6 papers)
- 2016-2019. Postdoc collaborator to Jacob Lustig-Yaeger, PhD Student at UW (1 paper, 1 in prep.)
2017. Co-advisor to Spandan Dash, student in BMSIS Young Scientist Summer Program
2016. Guest Lecturer, Astronomy 150 "The Planets" (UW)
2015. Facilitator, "Being an RA in the Physical Sciences" workshop, TA/RA Conference (UW)
2014. Instructor of Record, ASTR 192 "Pre-Major in Astronomy seminar" (UW)
2013. Teaching Assistant, ASTBIO 115 "Introduction to Astrobiology" (UW)

2012-2013. Physics/Astronomy Tutor, Student Athlete Academic Services (UW)

2011. Teaching Assistant, ASTR 101 “Introduction to Astronomy” (UW)

2010-2011. Teaching Assistant, ASTR 150 “The Planets” (UW)

2011, 2014. Astronomy Tutor, CLUE program (UW)

### Education and Outreach Service

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2010-2016. UW Planetarium and Mobile Planetarium Show Presenter (min 1/qrt)

2010-2016. Staff Member & Events Organizer, Pre-Major in Astronomy Program (UW)

2009. NASA International Year of Astronomy Student Ambassador, Florida

2006-2008. Coach, Brevard County (FL) Collaborative High School Science Bowl Team

### Peer-Reviewed Papers and Book Chapters

([Google Scholar](#) h-index=20; N<sub>cite</sub>=1403; \*includes a (co-)advised student (co-)author)

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Ranjan, S., **Schwieterman, E. W.**, et al. 2020. Photochemistry of Anoxic Abiotic Habitable Planet Atmospheres: Impact of New H<sub>2</sub>O Cross Sections. *The Astrophysical Journal*, 896(2), 148.

Haqq-Misra, J., Kopparapu, R. K., & **Schwieterman, E.** 2020. Observational Constraints on the Great Filter. *Astrobiology*, 20(5), 572–579.

\*Fauchez, T. J., Villanueva, G. L., **Schwieterman, E. W.**, et al. 2020. Sensitive probing of exoplanetary oxygen via mid-infrared collisional absorption. *Nature Astronomy*, 4(4), 372–376.

DasSarma, S., DasSarma, P., Laye, V. J., & **Schwieterman, E. W.** (2020). Extremophilic models for astrobiology: haloarchaeal survival strategies and pigments for remote sensing. *Extremophiles*, 24(1), 31–41.

\***Schwieterman, E. W.**, Reinhard, C. T., Olson, S. L., Harman, C.E., Lyons, T.W. 2019b. A limited habitable zone for complex life. *The Astrophysical Journal*, 878, 19.

\***Schwieterman, E.W.**, Reinhard, C.T., Olson, S., et al. 2019a. Rethinking CO antibioticsignatures in the search for life beyond the solar system. *The Astrophysical Journal*, 874, 9.

Glenar, D.A., Stubbs, T.J., **Schwieterman, E.W.**, Robinson, T.D., Livengood, T.A., 2019. Earthshine as an illumination source at the Moon. *Icarus* 321, 841–856.

\*Lustig-Yaeger, J., Meadows, V., Tovar, G., **Schwieterman, E.**, et al. 2018. Detecting Ocean Glint on Exoplanets by Phase-Dependent Mapping. *The Astronomical Journal*, 156, 301.

DasSarma, S.D. & **Schwieterman, E. W.** 2018. Early Evolution of Purple Retinal Pigments on Earth and Implications for Exoplanet Biosignatures. *International Journal of Astrobiology*, 1-10, doi: [10.1017/S1473550418000423](https://doi.org/10.1017/S1473550418000423)

\***Schwieterman, E.W.** et al. 2018. Exoplanet Biosignatures: A Review of Remotely Detectable Signs of Life. *Astrobiology*, 18(6), 663-708. doi: [10.1089/ast.2017.1729](https://doi.org/10.1089/ast.2017.1729)

\*Olson, S.L., **Schwieterman, E.W.**, Reinhard, C.T., Ridgwell, A., Kane, S.R., Meadows, V.S., and Lyons, T.W., 2018, Atmospheric seasonality as an exoplanet biosignature: *The Astrophysical Journal Letters*, 858, L14. doi.org/[10.3847/2041-8213/aac171](https://doi.org/10.3847/2041-8213/aac171).

**Schwieterman E.W.** (2018) Surface and Temporal Biosignatures. In: Deeg H., Belmonte J. (eds) Handbook of Exoplanets. Springer, Cham. doi: [10.1007/978-3-319-30648-3\\_69-1](https://doi.org/10.1007/978-3-319-30648-3_69-1)

Meadows, V.S., Arney, G.N., **Schwieterman, E.W.** et al. 2018. The Habitability of Proxima Centauri b: Environmental States and Observational Discriminants *Astrobiology*, 18, 133-189

- \*Olson S.L., **Schwieterman E.W.**, Reinhard C.T., Lyons T.W. (2018) Earth: Atmospheric Evolution of a Habitable Planet. In: Deeg H., Belmonte J. (eds) Handbook of Exoplanets. Springer, Cham. doi: [10.1007/978-3-319-55333-7\\_189](https://doi.org/10.1007/978-3-319-55333-7_189)
- \*Reinhard, C.T., Olson, S.L., **Schwieterman, E.W.**, Lyons, T.W., 2017. False Negatives for Remote Life Detection on Ocean-Bearing Planets: Lessons from the Early Earth. *Astrobiology* 17, 287–297.
- Schwieterman, E.W.**, Meadows, V.S., et al. 2016. Identifying Planetary Biosignature Impostors: Spectral Features of CO and O<sub>4</sub> Resulting from Abiotic O<sub>2</sub>/O<sub>3</sub> Production. *The Astrophysical Journal Letters*, 819: L13
- Krissansen-Totton, J., **Schwieterman, E.W.**, et al., 2016. Is the Pale Blue Dot Unique? Optimized Photometric Bands for Identifying Earth-Like Exoplanets. *The Astrophysical Journal* 817, 31.
- Schwieterman, E.W.**, Robinson, T.D., Meadows, V.S., Misra, A., Domagal-Goldman, S., 2015. Detecting and Constraining N<sub>2</sub> Abundances in Planetary Atmospheres Using Collisional Pairs. *The Astrophysical Journal* 810, 57.
- Harman, C.E., **Schwieterman, E.W.**, Schottelkotte, J.C., Kasting, J.F., 2015. Abiotic O<sub>2</sub> Levels on Planets Around F, G, K, and M Stars: Possible False Positives for Life? *The Astrophysical Journal* 812, 137.
- Schwieterman, E.W.**, Cockell, C.S., Meadows, V.S., 2015. Nonphotosynthetic Pigments as Potential Biosignatures. *Astrobiology* 15, 341–361.
- Schwieterman, E. W.**, et al. 2010. Time-Series Photometry of GW Librae One Year after Outburst. *Journal of the Southeastern Association for Research in Astronomy*, Vol 3.
- Meadows, V.S., Reinhard, C.T., Arney, G.N., Parenteau, M.N., **Schwieterman, E.W.** et al., 2018. Exoplanet Biosignatures: Understanding Oxygen as a Biosignature in the Context of Its Environment. *Astrobiology*, 18(6), 630-662. doi: [10.1089/ast.2017.1727](https://doi.org/10.1089/ast.2017.1727)
- Walker, S.I., et al. (including **Schwieterman, E.W.**) 2018. Exoplanet Biosignatures: Future Directions. *Astrobiology* 18(6), 779-824. doi: [10.1089/ast.2017.1738](https://doi.org/10.1089/ast.2017.1738)
- Kiang, N.Y., Domagal-Goldman, S., Parenteau, M.N., Catling, D.C., Fujii, Y., Meadows, V.S., **Schwieterman, E.W.**, Walker, S.I., 2018. Exoplanet Biosignatures: At the Dawn of a New Era of Planetary Observations. *Astrobiology* 18(6). doi:[10.1089/ast.2018.1862](https://doi.org/10.1089/ast.2018.1862)
- Arney, G.N., et al. (including **Schwieterman, E.**) 2017. Pale Orange Dots: The Impact of Organic Haze on the Habitability and Detectability of Earthlike Exoplanets. *The Astrophysical Journal* 836, 49.
- Gentry, D.M., et al. (including **Schwieterman, E.W.**) 2017. Correlations Between Life-Detection Techniques and Implications for Sampling Site Selection in Planetary Analog Missions. *Astrobiology* 17, 1009–1021.
- Stüeken, E.E., Kipp, M.A., Koehler, M.C., **Schwieterman, E.W.**, Johnson, B., Buick, R. 2016. Modeling pN<sub>2</sub> through Geological Time: Implications for Planetary Climates and Biosignatures. *Astrobiology* 16, 949–963.
- Arney, G., Domagal-Goldman, S., Meadows, S., Wolf, E., **Schwieterman, E.**, et al. 2016. The Pale Orange Dot: The Spectrum and Habitability of Hazy Archean Earth. *Astrobiology* 16, 873–899.
- Amador, E.S., et al. (incl. **Schwieterman, E.**). 2015. Synchronous in-field application of life-detection techniques in planetary analog missions. *Planetary and Space Sciences*, 106: 1-10.
- Robinson, T.D., et al. (incl. **Schwieterman, E.W.**). 2014. Detection of Ocean Glint and Ozone Absorption Using LCROSS Earth Observations. *The Astrophysical Journal* 787, 171.
- Knight, M.M., et al. (incl. **Schwieterman, E.W.**) 2012. A Quarter-Century of Observations of

- Comet 10P/Tempel 2 at Lowell Observatory: Continued Spin-Down, Coma Morphology, Production Rates, and Numerical Modeling. *The Astronomical Journal*, 144:153.
- Meech, K.J., et al. (incl. **Schwieterman, E.W.**) 2011. EPOXI: Observations from a Worldwide Earth-Based Campaign. *The Astrophysical Journal Letters*, 734:L1.
- Knight, M.M., Farnam, T.L., Schleicher, D., **Schwieterman, E.W.** 2011. The Increasing Rotation Period of Comet 10P/Tempel 2. *The Astronomical Journal*, 141:2.
- Addison, B., Durrance, S.T., **Schwieterman, E.** 2010. Modeling and Observing Extrasolar Planetary Transits. *Journal of the Southeastern Association for Research in Astronomy*, Vol 3.
- Piowar, D., Wood, M.A., **Schwieterman, E.W.**, et al. 2010. Time-Series Photometry of the Cataclysmic Variable Systems VY Aquarii and V2491 Cygni. *Journal of the Southeastern Association for Research in Astronomy*, Vol 3.

### White Papers and Other Non-Refereed Articles (\*includes a student author)

- \*Lisman, D., **Schwieterman, E.**, et al. (2019) Surveying the Solar Neighborhood for Ozone in the UV at Temperature Rocky Exoplanets. Astro2020: Decadal Survey on Astronomy and Astrophysics, science white papers, no. 225; *Bulletin of the American Astronomical Society*, Vol. 51, Issue 3, id. 225.
- \*Reinhard, C.T., **Schwieterman, E.W.**, et al. (2019) The remote detectability of Earth's biosphere through time and the importance of UV capability for characterizing habitable exoplanets. A white paper submitted in response to the 2020 Astronomy & Astrophysics Decadal Survey call. arXiv preprint 1903.05611.
- Line, M., Quanz, S., **Schwieterman, E.W.**, et al. (2019) The Importance of Thermal Emission Spectroscopy for Understanding Terrestrial Exoplanets. Astro2020: Decadal Survey on Astronomy and Astrophysics, science white papers, no. 271; *Bulletin of the American Astronomical Society*, Vol. 51, Issue 3, id. 271.
- \*Checlair, J.H., Abbot, D.S., Webber, R.J., Feng, Y.K., Bean, J.L., **Schwieterman, E.W.** et al. (2019) A Statistical Comparative Planetology Approach to Maximize the Scientific Return of Future Exoplanet Characterization Efforts. A white paper submitted in response to the 2020 Astronomy & Astrophysics Decadal Survey call. arXiv preprint 1903.05211.
- Apai, D., Banzatti, A., et al., (inc. **Schwieterman, E.**) (2019) Planetary Habitability Informed by Planet Formation and Exoplanet Demographics. Astro2020: Decadal Survey on Astronomy and Astrophysics, science white papers, no. 475. *Bulletin of the American Astronomical Society*. Vol. 51, Issue 3, id. 475.
- Fortney, J., Robinson, T., et al. (inc. **Schwieterman, E.**) (2019) The Need for Laboratory Measurements and Ab Initio Studies to Aid Understanding of Exoplanetary Atmospheres. Astro2020 Decadal Survey on Astronomy and Astrophysics, science white papers, no. 146. *Bulletin of the American Astronomical Society*. Vol 51, Issue 3., id. 146.
- Krissansen-Totton, J., Arney, G., et al. (inc. **Schwieterman, E.**). (2019) Atmospheric disequilibrium as an exoplanet biosignature: Opportunities for next generation telescopes. Astro2020 Decadal Survey on Astronomy and Astrophysics, science white papers, no. 158. *Bulletin of the American Astronomical Society*. Vol 51, Issue 3., id. 158.
- Arney, G., Batalha, N., et al. (inc. **Schwieterman, E.**) (2020) The Sun-like Stars Opportunity. Astro2020 Decadal Survey on Astronomy and Astrophysics, science white papers, no. 91. *Bulletin of the American Astronomical Society*. Vol 51, Issue 3., id. 91.
- Schwieterman, E.W.**, Lyons, T.W., Reinhard, C.T. (2018) 'Signs of life on a global scale: Earth as a laboratory for exoplanet biosignatures.' *The Biochemist*. Vol. 40. No. 6, pp. 22-27.

- Schwieterman, E. W.** (2018) ‘Distant worlds beckon’ (book review of *One of Ten Billion Earths* by Karel Schrijver), *Nature Astronomy*. Springer US, 2(11), pp. 849–850. doi: [10.1038/s41550-018-0624-8](https://doi.org/10.1038/s41550-018-0624-8).
- \***Schwieterman, E.**, Reinhard, C., Olson, S., Lyons, T., 2018. *The Importance of UV Capabilities for Identifying Inhabited Exoplanets with Next Generation Space Telescopes*. A white paper submitted in response to the National Academies of Sciences Astrobiology Science Strategy and Exoplanet Science Strategy calls. [arXiv preprint 1801.02744](https://arxiv.org/abs/1801.02744).
- Domagal-Goldman, S., et al. (including **Schwieterman, E.W.**) 2018. *Life Beyond the Solar System: Remotely Detectable Biosignatures*. A white paper submitted in response to the National Academies of Sciences Study: Astrobiology Science Strategy and Exoplanet Strategy Calls. [arXiv preprint 1801.06714](https://arxiv.org/abs/1801.06714).
- Trainer, M., et al. (including **Schwieterman, E.W.**) 2018. “*Pale Orange Dot*”: *Titan As An Analog For Early Earth And Hazy Exoplanets*. A white paper submitted in response to the National Academies of Sciences Study: Astrobiology Science Strategy.
- Haqq-Misra, J., Som, S., Mullan, B., Loureiro, R., **Schwieterman, E.**, et al. 2018. *The Astrobiology of the Anthropocene*. A white paper submitted in response to the National Academies of Sciences Study: Astrobiology Science Strategy for the Search for Life in the Universe. [arXiv preprint 1801.00052](https://arxiv.org/abs/1801.00052).
- Henning, W.G., et al. (including **E.W. Schwieterman**). 2018. Exoplanet Science Priorities from the Perspective of Internal and Surface Processes for Silicate and Ice Dominated Worlds. A white paper submitted in response to the National Academies of Sciences Exoplanet Science Strategy call. [arXiv preprint 1804.05094](https://arxiv.org/abs/1804.05094)
- Kopparapu, R., et al. (including **E.W. Schwieterman**). 2018. Exoplanet Diversity in the Era of Space-based Direct Imaging Missions. A white paper submitted in response to the National Academies of Sciences Exoplanet Science Strategy call. [arXiv preprint 1803.03812](https://arxiv.org/abs/1803.03812)
- Fischer et al. (including **E.W. Schwieterman**). 2018. NASA. *The Large Ultraviolet Optical Infrared Surveyor (LUVOIR) Interim Report*. Greenbelt, MD.
- Knight, M., **Schwieterman, E.**, Schleicher, D. 2010. Comet 103P/Hartley. *IAU Circ.* 9163.

## **Press Releases & Selected Media**

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2020. “Ask an Astrobiology with Dr. Eddie Schwieterman” <https://astrobiology.nasa.gov/ask-an-astrobiologist/episodes/40/>
2020. "Scientists develop new method to detect oxygen on exoplanets." Jules Bernstein, UCR. <https://news.ucr.edu/articles/2020/01/06/scientists-develop-new-method-detect-oxygen-exoplanets>
2019. “New study dramatically narrows the search for advanced life in the universe.” Jules Bernstein, UCR. <https://news.ucr.edu/articles/2019/06/10/new-study-dramatically-narrows-search-advanced-life-universe>
2019. “Why this poisonous gas could be a sign of alien life.” Mike Wall, Space.com. <https://www.space.com/carbon-monoxide-indicator-alien-life.html>
2019. “Carbon monoxide detectors could warn of extraterrestrial life.” Sarah Simpson, UCR News. <https://news.ucr.edu/articles/2019/03/18/carbon-monoxide-detectors-could-warn-extraterrestrial-life>
2018. “Purple reign: life on Earth might once have been dominated by purple microorganisms.” CBC “Quirks & Quarks” Article and Radio Interview with Dr. Edward Schwieterman.

2018. “Was Life on the Early Earth Purple?” Keith Cooper, *Astrobiology Magazine*: <https://www.astrobio.net/news-exclusive/was-life-on-the-early-earth-purple/>
2018. “UCR Team Among Scientists Developing Guidebook for Finding Life Beyond Earth” Sarah Nightingale, *UCR Today*: <https://ucrtoday.ucr.edu/54211>
2018. “Atmospheric Seasons Could Signal Alien Life” Sarah Nightingale, *UCR Today*: <https://ucrtoday.ucr.edu/53416>
2018. “False Positives, False Negatives; The World of Distant Biosignatures Attracts and Confounds.” Marc Kauffman, *Many Worlds/ NASA Astrobiology Newsletter*: <https://astrobiology.nasa.gov/news/false-positives-false-negatives-the-world-of-distant-biosignatures-attracts-and-confounds/>
2017. “A new atmosphere in astronomy: UW alumni and Virtual Planetary Laboratory featured for exoplanet modeling.” Alan Brazelton, *The UW Daily*: [http://www.dailyuw.com/features/article\\_fc7ca23e-021f-11e7-9e7e-1f7266f313ac.html](http://www.dailyuw.com/features/article_fc7ca23e-021f-11e7-9e7e-1f7266f313ac.html)
2016. “Planet Hunters Seek New Ways to Detect Alien Life.” Alexandra Witze, *Nature News*. doi:10.1038/535474a
2016. “False Positives in the Search for Extraterrestrial Life.” Paul Glister, *Centauri Dreams*. <https://www.centauri-dreams.org/2016/03/02/false-positives-in-the-search-for-extraterrestrial-life/>
2016. “Life or an illusion? Avoiding ‘false positives’ in the search for living worlds.” Peter Kelley – *UW Today*. <https://www.washington.edu/news/2016/02/29/life-or-illusion-avoiding-false-positives-in-the-search-for-living-worlds/>
2016. “Nitrogen may be a sign of habitability.” Elizabeth Howell, *Astrobiology Magazine*. <https://www.astrobio.net/news-exclusive/nitrogen-may-be-a-sign-of-habitability/>
2015. “Earth observations show how nitrogen may be detected on exoplanets, aiding search for life.” Peter Kelley, *UW Today*. <https://www.washington.edu/news/2015/09/03/earth-observations-show-how-nitrogen-may-be-detected-on-exoplanets-aiding-search-for-life/>
2015. “Spectrum of life: Nonphotosynthetic pigments could be biosignatures of life on other worlds.” Peter Kelley, *UW Today*. <https://www.washington.edu/news/2015/06/22/spectrum-of-life-nonphotosynthetic-pigments-could-be-biosignatures-of-life-on-other-worlds/>

### **Memberships in Professional Societies**

American Astronomical Society, Division of Planetary Sciences, American Physical Society, American Geophysical Union, European Association of Geochemistry