

EDUCATION

University of Virginia	December 2022
– B.S. Astronomy-Physics (with high distinction) & Statistics	
– <i>Thesis</i> : Star Formation and Feedback in Low-metallicity Environments: From Molecular Clouds to Protostars	

EXPERIENCE

Research Assistant, Harvard-Smithsonian Center for Astrophysics <i>Advisor: Prof. Alyssa Goodman</i>	2023 –
Undergraduate Researcher, UVA <i>Advisor: Prof. Rémy Indebetouw</i>	2019 – 2022
NSF REU, Smithsonian Astrophysical Observatory <i>Advisor: Prof. Alyssa Goodman</i>	2022
Undergraduate Research Fellow, Chalmers Initiative on Cosmic Origins <i>Advisors: Prof. Jonathan Tan & Dr. Giuliana Cosentino</i>	2020 – 2021
Student Head of Observatory, Thacher Observatory <i>Advisor: Dr. Jonathan Swift</i>	2015 – 2018

AWARDS

Goldwater Scholarship	2022
Astronaut Scholarship	2022
Universities Space Research Association Distinguished Undergraduate Award	2022
Best Talk, UVA Sigma Pi Sigma Research Symposium	2022
Vyssotsky Prize, UVA Dept. of Astronomy (<i>Outstanding 3rd year undergraduate</i>)	2022
McCullough Scholarship, UVA Dept. of Astronomy (<i>Outstanding 2nd year undergraduate</i>)	2021
Echols Scholar, UVA	2018
College Science Scholar, UVA	2018

PUBLICATIONS

- O'Neill, T. J.; Goodman, A. A.; Soler, J. D.; Han, J. J.; Zucker, C. *Mapping the Local Bubble's Magnetic Field in 3D*. 2023, available on Authorea preprint server.
- 5. O'Neill, T. J.; Indebetouw, R.; Sandstrom, K. M.; Bolatto, A. D.; Jameson, K. E.; Carlson, L. R.; Finn, M. K.; Meixner, M.; Sabbi, E.; Sewilo, M. *Sequential Star Formation in the Young SMC Region NGC 602: Insights from ALMA*. 2022, ApJ, 938, 82.
- 4. O'Neill, T. J.; Indebetouw, R.; Bolatto, A. D.; Madden, S. C.; Wong, T. *Effects of CO-dark Gas on Measurements of Molecular Cloud Stability and the Size-Linewidth Relationship*. 2022, ApJ, 933, 179.
- 3. Swift, J. J.; and forty other authors including O'Neill, T. J. *The Renovated Thacher Observatory and First Science Results*. 2022, PASP, 134, 1033.
- 2. O'Neill, T. J.; Cosentino, G.; Tan, J. C.; Cheng, Y.; Liu, M. *The Core Mass Function across Galactic Environments. III. Massive Protoclusters*. 2021, ApJ, 916, 45.

1. Strauss, B. E.; Borges, S. R.; Faridani, T.; Grier, J. A.; Kiihne, A.; Maier, E. R.; Olsen, C.; O'Neill, T.;
Rivera-Valentín, E. G.; Sneed, E. L.; Waller, D.; Zamloot, V. *Nonbinary Systems: Looking Towards the Future
of Gender Equity in Planetary Science*. 2020, State of the Profession White Paper for the Planetary Science and
Astrobiology Decadal Survey 2023–2032.

PRESENTATIONS

Talks:

Press Conference at 241 st Meeting of the AAS; Seattle, WA. <i>A 3D Map of the Local Bubble's Magnetic Field</i>	2023
241 st Meeting of the AAS; Seattle, WA. <i>A 3D Map of the Local Bubble's Magnetic Field</i>	2023
Max Planck Institute for Extraterrestrial Physics CAS Star & Planet Formation Journal Club. <i>Sequential Star Formation in the Young SMC Region NGC 602</i>	2022
UVA Sigma Pi Sigma Research Symposium; Charlottesville, VA. <i>Mapping the Local Bubble's Magnetic Field in 3D</i>	2022
Smithsonian Astrophysical Observatory REU Symposium; Cambridge, MA. <i>Mapping the Local Bubble's Magnetic Field in 3D</i>	2022
Astronaut Scholarship Foundation Technical Conference; Orlando, FL. <i>Mapping the Local Bubble's Magnetic Field in 3D</i>	2022
Michigan State University Astro Coffee. <i>The Core Mass Function Across Galactic Environments</i>	2021
237 th Meeting of the AAS. <i>The Core Mass Function in Massive, Dense Protoclusters</i>	2021
VICO-CICO Fall Science Workshop. <i>The Core Mass Function in Massive Protoclusters</i>	2020
VICO-CICO Summer Symposium. <i>Searching for the Peak of the Core Mass Function with ALMA</i>	2020

Posters:

241 st Meeting of the AAS; Seattle, WA. (Costa et al.) <i>Complete Confusion: Photometry of Extended Sources in Interferometric Radio Data</i>	2023
52 nd Lunar and Planetary Science Conference. (Strauss et al.) <i>Nonbinary Systems: Gender-inclusive Study Methods in Planetary Science</i>	2021
American Geophysical Union Fall Meeting. (Strauss et al.) <i>Nonbinary Systems: Looking Toward the Future of Gender Equity in Planetary Science</i>	2020
232 nd meeting of the AAS; Denver, CO. (Swift et al.) <i>Nearby Type Ia Supernova Follow-up at the Thacher Observatory</i>	2018
229 th meeting of the AAS; Grapevine, TX. <i>First Light of the Renovated Thacher Observatory</i>	2017
229 th meeting of the AAS; Grapevine, TX. (Swift et al.) <i>Does the Eclipsing Binary KIC 10935310 Contain a Massively Inflated M Dwarf?</i>	2017
229 th meeting of the AAS; Grapevine, TX. (Edwards et al.) <i>A Search for Planet 9 at the Thacher Observatory</i>	2017
227 th meeting of the AAS; Kissimmee, FL. <i>The Renovation and Future Capabilities of the Thacher Observatory</i>	2016

OBSERVING TIME

PI: ALMA Cycle 9 “CO-dark gas in the Low-metallicity Star-forming region NGC 602.” 11 hrs
Co-I: Las Cumbres Observatory Education Program, FLOYDS spectrograph (PI: J. Swift). 2 hrs
100+ nights using 0.7m telescope at the Thacher Observatory, Ojai, CA

SERVICE & OUTREACH

Diversity, Equity, and Inclusion Committee, UVA Dept. of Astronomy	2021 – 2022
Graduate-Undergraduate Astronomy Committee, UVA Dept. of Astronomy	2020 – 2022
Undergraduate Peer Mentoring Program, UVA Dept. of Astronomy	2020 – 2022
UVA Astronomy Club	
• Vice President	2022
• Outreach Chair & Event Manager	2020 – 2022
Astronomy Undergraduate Council (Chair), UVA Dept. of Astronomy	2020 – 2021

SKILLS

Programming	Python, R, SAS, SQL
Applications	CASA, glue, DS9, MESA, CARTA

January 2023