CONTACT

Ohio State University Department of Astronomy
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EMPLOYMENT

2022 -	Professor, Department of Astronomy, Ohio State University
2018 - 2022	Associate Professor, Department of Astronomy, Ohio State University
2015 - 2018	Assistant Professor, Department of Astronomy, Ohio State University
2014	Associate Astronomer, National Radio Astronomy Observatory
2011 - 2014	Assistant Astronomer, National Radio Astronomy Observatory
2009 - 2011	Hubble Fellow, National Radio Astronomy Observatory
2006 - 2009	Postdoctoral scholar, Max Planck Institute for Astronomy with Dr. Fabian Walter

EDUCATION

2006	Ph. D. in Astrophysics, University of California at Berkeley *"Molecular Gas in Dwarf Galaxies"* Advisors: Leo Blitz & Alberto Bolatto
2002	M.A. in Astrophysics, University of California at Berkeley
1999	B.A. in Astronomy and Astrophysics and Physics (Magna Cum Laude), Harvard University

RESEARCH INTERESTS

I aim to understand the physics of the interstellar medium, star formation, and stellar feedback and to relate these to the evolution of galaxies. My work combines cutting-edge observations from across the electromagnetic spectrum, and often involves developing new analysis techniques aimed at combining cross-wavelength data to gain astrophysical insight. I also lead new radio, millimeter, and infrared surveys, and have been a leader in producing high quality, high impact, and broadly useful public data sets for nearby galaxies.

RESEARCH PUBLICATIONS

(see also attached selected bibliography and abstracts)

I am an author of 276 refereed articles, including 25 first-author publications, 44 second-author publications, and 42 third-author publications. My articles have been cited a total of 23,394 times, the h-index describing my full work is 75. Works where I am first, second, or third author have 14,497 citations and an h-index of 56. This link connects to a NASA ADS library containing the full list of my publications.

TEACHING

Interstellar and Intergalactic Medium (2017,2019,2021,2023)	Graduate, Ohio State
Radio Astronomy (2014, co-taught)	Graduate, U. Virginia
From Planets to the Cosmos (2018,2019,2020,2021)	Undergraduate, Ohio State
Life in the Universe (2015,2016,2017)	Undergraduate, Ohio State
Cosmology: The History of the Universe (2018)	Undergraduate, Ohio State

MENTORSHIP AND ADVISING

This section lists my local mentees. I also extensively support the training, work, and professional development of junior scientists within my research collaborations.

Ph.D. students	Debosmita Pathak (current student), Rebecca McClain (current student), Ness Mayker Chen (current student), Jiayi Sun (advisor, 2021), Sarah Kessler (advisor, 2021), Molly Gallagher (advisor, 2019), Loreto Barcos Munoz (co-advisor, 2017), Andreas Schruba (mentor, 2010), Frank Bigiel (mentor, 2008)
Undergraduate and Masters students	Joshua Machado (M.A.), Cheoljong Lee (M.A.), John Allan (M.A.), and research supervision or co-supervision for 12 undergraduate researchers
Postdoctoral scholars	Sumit Sarbadhicary (CCAPP Fellow, 2021-), Amy Sardone (NSF Fellow, 2019-2023), Samantha Benincasa (CCAPP Fellow, NSERC Fellow, Presidential Fellow, 2020-2022), Dyas Utomo (2017-2020), Alexia Lewis (CCAPP Fellow, 2016-2017)

AWARDS

2021 - 2024	Humboldt Research Award
2017	National Science Foundation CAREER Award
2009 - 2011	NASA Hubble Fellowship

SELECTED DEPARTMENT AND PROFESSIONAL SERVICE

2019 - present	Graduate studies chair for Ohio State Department of Astronomy
2014 - 2016	Next Generation Very Large Array working group co-lead
2018 - present	Next Generation Very Large Array Science Advisory Committee
2021 - present	CASA User's Committee (chair 2022)
2021, 2023	AUI Visiting Committee to review NRAO (chair 2023)

SELECTED RESEARCH COLLABORATIONS :

PHANGS (2015 – present) www.phangs.org	The 100+ person PHANGS team aims to combine the best telescopes in the world to produce breakthroughs in our understanding of baryonic physics in galaxies. I am a co-founder, the project scientist, a member of the steering committee, PI of our Cycle 2 JWST Treasury, co-PI of our ALMA Large Program and Cycle 1 JWST Treasury, and have served as working group lead and led development of our ALMA pipeline. PHANGS has produced key breakthroughs and 100+ publications since 2015.
The Local Group L-Band Survey (2019 – present) www.lglbs.org	I am PI of the Local Group L-Band survey, the first "Extra Large" VLA program. We are currently using the VLA to make transformational observations of the atomic gas and continuum emission from Local Group galaxies. Observations began in 2021 and are expected to conclude in 2023.
HERACLES (2007-2015)	I was co-PI (with Fabian Walter) of HERACLES, an IRAM Large Program that produced molecular gas maps that our team paired with *Spitzer*, *Herschel*, GALEX, and VLA maps to make key breakthroughs in understanding the phase structure and star formation processes in galaxy disks.