katherine emily whitaker

Contact Information

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Research Interests

Observational galaxy formation and evolution: quenching, galaxy morphology, star formation rate — stellar mass relation, spatially resolved stellar populations, spectroscopic ages, dust content, star formation efficiency.

Education

Ph.D. in Astronomy, Yale University (Awarded December 2012)
Thesis: *A Cosmic Metamorphosis: The Quenching of Star-formation in Massive Galaxies Over the Last Eleven Billion Years*
Advisor: Pieter G. van Dokkum

M.S., M.Phil. in Astronomy, Yale University (May 2007, 2008)

B.S. in Physics & Astronomy, Univ. of Massachusetts Amherst (May 2005)
Summa cum Laude, with highest honors in the Commonwealth College

Positions

Associate Professor, University of Massachusetts Amherst	2023 —
Assistant Professor, University of Massachusetts Amherst	2019-2023
Associate Faculty, Cosmic Dawn Center, Copenhagen, Denmark	2017 —
Assistant Professor, University of Connecticut (research leave AY16/17)	2016-2019
Career Break: Maternity Leave	4/2017-8/2017
NASA Hubble Fellow, University of Massachusetts Amherst	2015-2017
Career Break: Maternity Leave	3/2013-5/2013
NASA Postdoctoral Program Fellow, Goddard Space Flight Center	2012-2015
Career Break: Maternity Leave	12/2010-2/2011
Graduate Research Assistant, Yale University	2006-2012
Graduate Research Assistant, Boston University	2005-2006
Undergraduate Research Assistant, UMass Amherst	2004-2005
REU Intern, Harvard Smithsonian Center for Astrophysics	2003

Honors & Awards

Kavli Fellow, NAS nomination to Frontiers of Science Symposium	2023
ADVANCE Faculty Fellow, UMass Amherst	2023
1% Highest-Cited Scientist, Clarivate Analytics	2021
Lilly Fellowship in Teaching Excellence, UMass Amherst	2021
Alfred P. Sloan Foundation Fellowship	2019
Dirk Brouwer Memorial Prize, Yale University	2015
Mary Dailey Irvine Prize, Five College Astronomy Department	2005
Outstanding Undergraduate Award, UMass Amherst	2005
William F. Field Alumni Scholar, UMass Amherst	2004
Hasbrouck Scholarship Award, UMass Amherst	2004

Colloquia & Invited Talks

- ** Invited Review Talk, Sexton, Italy (6/2025; declined/schedule conflict)
- ** Invited Review Talk, IAU Massive Galaxies, Naples, Italy (ant. 6/2025)

- Invited Talk, *"Big Galaxies, Big Problems"*, Leiden, Netherlands (4/2025)
- Colloquium, University of Chicago, Chicago IL (3/2025)
- Invited Talk, *"Picture an Astronomer",* Chicago, IL (3/2025)
- Invited Talk, "*Growth of Galaxies in the Early Universe X"*, Sesto, Italy (1/2025)
- Beus Seminar, Arizona State University, Phoenix, Arizona (12/2024)
- ** Invited Review Talk, *"DEEP24"*, Sintra, Portugal (10/2024)
- ** Invited Review Talk, *"AGN Feedback and Star Formation"*, Sirolo, Italy (9/2024)
- Colloquium, University of Geneva, Switzerland (7/2024)
- Colloquium, UCLA, Los Angelos, CA (4/2024)
- Invited Talk, "*Growth of Galaxies in the Early Universe IX"*, Sesto, Italy (1/2024)
- Invited Talk, 4th Japanese-American-German Frontiers of Science Symposium, Dresden, Germany (10/2023)
- Invited Talk, Habitable Worlds & Beyond, STScI, Baltimore, MD (7/2023)
- Invited Talk, DAWN Summit, Copenhagen Denmark (6/2023)
- Invited Talk, SIMBA Collaboration Meeting, CCA/Flatiron, NYC (5/2023)
- Invited Talk, *"Growth of Galaxies in the Early Universe VIII"*, Sesto, Italy (3/2023)
- Colloquium, University of Arizona, Tucson AZ (3/2023)
- Colloquium, Texas A&M, College Station TX (1/2023)
- Invited Talk, JWST ISSI Workshop, Bern, Switzerland (1/2023)
- Colloquium, University of Toledo, Toledo OH (10/2022)
- Colloquium, University of Florida, Gainesville FL (10/2022)
- Invited Talk, DAWN Research Conference, Copenhagen, Denmark (June 2022)
- Colloquium, MIT, Cambridge MA (virtual, 2/2022)
- ** Invited Review Talk, "*The Main of Star-forming Galaxies",* EAS (virtual, 7/21)
- Colloquium, Space Telescope Science Institute (virtual, 5/2021)
- Colloquium, Queens University, Kingston Canada (virtual, 10/2020)
- Invited Talk, Subaru 20th Symposium, Waikaloa Beach, HI (11/2019)

Plus 16 additional invited colloquium presentations (from 2013 to 2019), 1 additional invited review talk at an international conference (in 2017), and 42 additional contributed talks at professional conferences and workshops (since 2008), 18 seminars (since 2011) and 6 poster presentations (since 2004). *** Asterisks indicate an invitation to give a review talk at an international conference as a world-expert on the subject matter.*

Research Mentorship

Postdoctoral Researchers:

- **Samantha Berek**, NSF Astron & Astrophys Prize Fellow (starting 10/25)
- **Massissilia Hamadouche**, DeepDive JWST Project (2024 - present)
- **John Weaver**, UNCOVER JWST Project (2022 - 2025)
- **Sinclaire Manning**, NASA Hubble Prize Fellow (2021 - 2025)
- **Mimi Song**, 3D-Herschel NASA/ADAP Project (2019 - 2024)

Graduate Students:

- **Aidan Cloonan**, "*UV-optical Morphologies of "Little Red Dots" with JWST"*, (1st/2nd year graduate project, co-supervised with Dr. Manning, 2023–)
- **Aubrey Medrano**, "*Spatially Resolving Galaxies in JWST/PRIMER*", (1st/2nd year graduate project, co-supervised with Prof. Giavalisco, 2022–)

- **Yanzhe (Jenny) Zhang**, "*Star formation histories and spectral synthesis models",* (1st/2nd yr grad project, co-supervised with Prof. Mo, 2022–2024).
- **Sarah Bodansky**, *"Dust mass and obscuration in high redshift galaxies"* (1st/2nd year grad project, co-supervised w/Prof. Pope, 2021-2023; PhD thesis, 2023–)
- **Joyce Caliendo**, *"Are the early quenched galaxies 'running on empty'?"* (1st/2nd year graduate project, co-supervised with Prof. Pope; 2021–2022)
- **Maike Clausen**, *"Size-Mass Relation and Number Density Evolution of Recently Quenched Galaxies in 3D-DASH"* (Visiting grad student, 2021–2022)
- **Roxana Popescu**, *"Source Plane Reconstructions of Strong Lensed Distant Quiescent Galaxies"* (2nd year graduate project, 2020–2022)
- **Sam Cutler**, *"Diagnosing DASH: Analyzing Morphologies in the COSMOS-DASH Survey"* (1st year graduate project, 2019–2020; PhD Thesis 2021–)
- **Mohammad Akhshik**, *"The Lensed Perspective: Searching for signatures of inside-out quenching"* (UConn; PhD Thesis, 2016–2022)
- **Jonathan Mercedes Feliz**, *"Testing the level of obscured star formation in quiescent galaxies"* (UConn; PhD 1st year project, 2018–2019)
- **Claire Dickey**, *"The Relation between [OIII]/Hβ and Specific Star Formation Rate in Galaxies at z=2"* (Yale University; secondary supervisor 2015–2016)

Undergraduate Students:

- **Hope Roundcount**, "*Mining the DJA for Quiescent Spectra*", (2024–)
- **Ayesha Abdullah**, "*Modeling Intrinsic Axis Ratio Distributions of Low-Mass Quiescent Galaxies with JWST*", member of AstroTROUP (2023–)
- **David Marroquin**, "*Testing the Role of Dust Attenuation on the Star Formation Sequence with JWST*", member of AstroTROUP (2023–)
- **Ananya Sreelehka**, "*Searching for Merger Signatures with Gini-M20 for Early Quiescent Galaxies in JWST/CEERS*", (2022–2023)
- **Leonardo Drake**, *"Revisiting the Galaxy Stellar-Mass Size Relation",* awarded NASA/MA Space Grant funds for Summer 2022 (Spring 2022–Summer 2022)
- **Seth Martin**, *"Exploring the Role of AGN with 3D-Herschel"*, (2022–2023)
- **Seamus McNulty**, *"The Impact of adding Herschel Photometry to the 3D-HST Prospector Modeling Analysis",* Honors Thesis (2022–; currently post-bac)
- **Zachary Webb**, *"Globular Clusters in Abell 2744",* awarded NASA/MA Space Grant Spring 2022 Fellowship, Honors Thesis (2021–; currently post-bac)
- **Lillian Wright**, *"JWST Sizes of First Quenched Galaxies"* awarded NASA/MA Space Grant funds and David J. Van Blerkom Research Scholarship (2020–2023)
- **Joyce Caliendo**, *"A Closer Look into the Quenching of a Distant Compact Galaxy"* awarded SURF for Summer 2019 (UConn; Spring 2019–2021)
- **Tyler Metivier**, *"Simulating the Detectability of Tidal Features in the Distant Universe"*, awarded NASA CT Space Grant Undergraduate Research Fellowship in Spring 2018, (UConn; Fall 2016–2021)
- **Alexandra Cain**, *"Resolving a Distant Dusty Galaxy with Hubble Data"* (UConn; Spring 2018–Spring 2019)
- **Sam Cutler**, *"Examining High Redshift Rotation Curve Outside the Local Universe",* awarded NASA CT Space Grant Undergraduate Research Fellowship in Summer 2018, (UConn; Spring 2017–Spring 2019)

- **Rochelle Horanzy**, *"The Ultimate LEGA-C: Does age really drive the spread in quiescent galaxy colors?"* (UConn; Fall 2016–Spring 2018)
- **Mohammad Ashas**, "*Calibrating the Hubble Space Telescope Legacy Field Data"* (UConn; Fall 2016–Spring 2018)
- **Warren Sharpp** (FCAD Intern/UMass Amherst; Summer 2016–Fall 2016)
- **Daniel Lange-Vagle** (Tufts University; Fall 2014–Summer 2015)
- **Michael Alburger** (NASA Intern/Bucknell University; Summer 2014)

High School Students:

- **Alexandra Daniel** (Eureka! Extern/UMass, Summer 2024)
- **Matthew Bzowyckyj** (Kingwood Oxford/UConn, Summer 2018)

Teaching

ASTRO301: Writing About Astronomy, UMass Amherst (*3 credits*) *Includes astrophysics paper analysis, writing press releases, mock panel review, individual Python-based coding projects resulting in original professional style letters.*

- Fall 2024 (23 students, 1/2 graduate TA and undergrad TA)
- Fall 2023 (14 students, 1/2 graduate TA)
- Fall 2022 (19 students, 1/2 graduate TA)
- Fall 2021 (11 students, 1/2 graduate TA; redesigned via Lilly Fellowship)

ASTRO452H: Astrophysics II: Galaxies, UMass Amherst (*4 credits*) *Includes in-class group problem solving, data-driven group projects, Python notebook activities, research term paper/poster presentation, and a blind panel review.*

- *Spring 2023 (25 students, 1/2 graduate TA)
- Spring 2021 (16 students, 1/2 graduate TA)

ASTRO191A: First Year Seminar in Astrophysics, UMass Amherst (*1 credit*)

- Fall 2020 (46 students; co-taught with Prof. Alexandra Pope)

ASTRO792A: Review of Current Literature, UMass Amherst (*1 credit*)

- Fall 2020 (20 students; co-taught with Prof. Alexandra Pope)

ASTRO100H: Exploring the Universe, UMass Amherst (*4 credits*) *Includes active learning techniques, in-class demos, open educational resources, creative group project writing observing proposals and a blind panel review.*

- Spring 2022 (25 students, 1/2 graduate TA)
- Spring 2020 (16 students, 1/2 graduate TA)

PHYS1025Q: Introductory Astronomy, UConn (*4 credit lab course*)

- Fall 2018 (89 students, 1 graduate TA)
- Fall 2017 (84 students, 2 graduate TAs, 1 undergrad TA)

PHYS4720/6720: Galaxies and Interstellar Medium, UConn (*3 credits*)

- Spring 2019 (12 undergraduates, 2 graduate students)

Teaching Awards:

- Lilly Fellowship in Teaching Excellence, 2021-2022
- UConn Provost's Letter of Teaching Excellence, Spring 2019

Education Training: *Workshops on evidence-based teaching best practices.*

- Workshop for New Physics and Astronomy Faculty (October 2020)
- Teaching Excellence Workshop, Center for Astronomy Education (2016)
- University Teaching 101, Johns Hopkins University (Spring 2014)
- Evidence-Based Undergraduate STEM Teaching, Vanderbilt (Fall 2014)

Outreach (select)

- AstroTROUP *supports Black, Indigenous, and LatinX Astronomy majors at UMass Amherst through paid astronomy research experiences, tutoring, mentorship, and community* (supported by NSF CAREER grant; 2023–)
- Director of Eureka! 2-day Workshop, *"A Cosmic Photoshoot to ImPress", cohorts of 15 middle school scholars from local underserved communities* (supported by NSF CAREER grant; summers of 2022, 2023, and 2024–)
- Public Lecture, Aspen Center for Physics, Aspen CO (2/2024)
- Public Lecture, Ecotarium, Worcester MA (11/2023)
- Professional Development 'Academic Mama' Seminars: Inaugural Yale WiP+ Alumni Colloquium (Virtual; 2/2022); *Yale Astronomy Professional Seminar (10/2022), and the *Cosmic Dawn Center Cake Talk Series (Virtual; 2/2023)
- NSF-IRES DAWN Scholars Program, *Program Director, international summer research experience at the Cosmic Dawn Center in Copenhagen Denmark* (2019, 2021 and 2022; dawnires.com)
- Panelist, UConn Science Salon, Talcott Mountain Science Center (11/2018)
- Advised students in organizing Solar Viewing Event and Night Sky Tours for the UConn SPARK summer camp (Summer 2018)
- Public Lecture, Westport Astronomical Society (July 2017)
- Co-organizer, Solar Eclipse Viewing Party, UConn (*attendance estimated at 2000 people; local TV and news media coverage;* August 2017)
- AAS Ambassador (*mentoring/training, access to resources and contacts in the Education & Public Outreach astronomy community,* 2014 - present)
- Outreach presentations (*including visits to 5 secondary schools and 6 universities*, 2011 - present)
- Ask an Astrophysicist, NASA Goddard Space Flight Center (2014)

Professional Service (select)

Service to the Scientific Community:

- *NASA Committees:* Member of the Hubble Space Telescope User Committee (STUC; 2025–), Member of the JWST Financial Review Committee (2022–2024), LUVOIR Cosmic Origins and High Definition Imager Working Groups (2016–2018), WFIRST study group (2014–2015)
- *Federal Review Panelist:* NASA Roman (2025), NASA ADAP (Chair/2024), James Webb Space Telescope (2021, Chair/2025); ALMA (2021–2024); Keck Observatory (2019, 2020, 2022); Hubble Space Telescope (2016, 2018); Large Millimeter Telescope (Chair/2021, Chair/2022); NSF (2014, 2015); NASA Earth & Space Science Fellowship (2014)
- *External Reviews*: Princeton University Press, Canada Time Allocation Committee, Poland National Science Center, Chinese Telescope Access Program, NASA Postdoctoral Fellowship, Sapling Learning (2017–)
- *External PhD Committee Member*: Minjung Park (Harvard, 4/2025), Bryanne McDonnough (BU, 8/2024), Tim Miller (Yale, 6/2023), plus current PhD students Isa Cox (RPI) and Yunchong Zhang (Pitt)
- *Science Organizing Committees*: Extreme Galaxies, Reykjavik, Iceland (4/2024); EAS Special Session, Kraków, Poland (7/2023); Subaru 20th Anniversary Conference (11/2019); CANDELS@UMass (10/2018); Conferences at Kruger Park, South Africa (7/2016, 8/2024)
- *Ad-hoc Referee*: ApJ, ApJ Letters, MNRAS, Nature, Nature Astronomy, A&A, JATIS, and PASA (2009–)

***Service to the UMass Community* (2019 — present):**

- FCAD Summer Internship Program Director (2022, 2023, 2024), including organizing the Summer Undergraduate Research Symposium (2020, 2022)
- Coordinator for Physics and Astronomy Peer Mentor Program (2023, 2024)
- *Department Committees*: Graduate Admissions (2019, 2021, 2022), Graduate Recruitment (2019–2024), Department Personnel (2019, 2021, 2023), Department Colloquium (2019, 2021), Graduate Examination (2020, 2022), New Qualification Exam (2023), Department Head Search (2023), and the Faculty Search (2023)
- *PhD Committee Member*: Zhiyuan Ji (11/2024), Dooseok Jung (ant. 8/2025)
- Class of 2024 Astronomy Majors Advisor (17 advisees incoming; 2020–*2024)
- Developed department-wide workshop on effective plotting and presentations "Data Challenge" (9/2020)

***Service to the UConn Community* (2016 — 2019):**

- Developed Astrophysics Minor, including 4 new astrophysics courses.
- PI of initiative to adopt an open educational resource textbook in Introductory Astronomy (PHYS1025Q; Fall 2017)
- PI of course redesign of Introductory Astronomy through Provost's Large Course Redesign Grant Initiative (Fall 2017)

Successful Grants & Proposals (select)

Total Funding (2019-2025) = $4.8M/external, $46k/internal

- Hubble Space Telescope Cycle 31 Medium Program GO-17730 *"Fulfilling the UV Legacy of the Hubble and Webb Deep Public Frontier Field"* (72 orbits; PI; $180k/ total with $110k/UMass; 4/2025 – 3/2028)
- James Webb Space Telescope Cycle 3 Small Program GO-6405 *"Clumpy Relics: The First Spectroscopic Confirmation of Globular Clusters at z=3"* (20 hrs; Co-PI; $377k/ total with $224k/UMass; 11/2024 – 10/2027)
- James Webb Space Telescope Cycle 3 Archival Program AR-5213 *"ScubaDIVE: A JWST Archival Analysis of the Most Dust-Obscured Galaxies Across Cosmic Time"* ($117k/ UMass, admin-PI; 9/24 – 8/25)
- ALMA Cycle 11 Observing Program 2024.1.01086.S *"Spatially Resolved Dust in a Spectacular Lensed Quiescent Galaxy at z=2"* (9.3 hrs; PI, announced 7/24)
- James Webb Space Telescope Cycle 2 Small Program GO-4318 *"Is there Evidence of alpha-enhancement in Massive Quiescent Galaxies at z>3?"* (11 hrs; Co-I; $40k/UMass; 11/2023 – 10/2025)
- James Webb Space Telescope Cycle 2 Program GO-4111 *"Medium bands, Mega Science: spatially-resolved R˜15 spectrophotometry of 50,000 sources at z=0.3-12"* (50 hrs; Co-I; $80k/UMass; 11/23 – 10/25)
- James Webb Space Telescope Cycle 2 Medium Program GO-3657 *"A deep dive into the physics of the first massive quiescent galaxies in the Universe"* (48 hrs; admin-PI; $325k/ UMass; 11/23 – 10/25)
- NSF/CAREER Grant *"CAREER: Establishing Coherent Frameworks for Massive Galaxy Formation and Inclusive Astronomy"* (PI; $799k/UMass; 9/1/23-8/31/28)
- ALMA Cycle 10 Observing Proposal 2023.1.00430.S, *"Detecting Dust in a Sample of Lensed Quiescent Galaxies at Cosmic Noon"* (14.4 hrs; PI, announced 8/23)
- James Webb Space Telescope Cycle 1 Large Treasury Program GO-1837 *"PRIMER: Public Release IMaging for Extragalactic Research"* (187 hrs; Co-I; $240k/UMass; 9/22 – 8/25)

- James Webb Space Telescope Cycle 1 Program GO-1895 *"FRESCO: The First Reionization Epoch Spectroscopic COmplete Survey"* (53 hrs; Co-I; $22k/UMass; 9/22 – 8/25)
- James Webb Space Telescope Cycle 1 Program GO-2514 *"PANORAMIC - A Pure Parallel Wide Area Legacy Imaging at 1-5 micron"* (150 hrs; Co-I; $49k/UMass; 9/1/22 – 8/30/25)
- James Webb Space Telescope Cycle 1 Treasury Program GO-2561 *"UNCOVER: Ultra-deep NIRCam and NIRSpec Observations Before the Epoch of Reionization"* (68 hrs; Co-I; $235k/ UMass; 5/1/22 – 4/30/25)
- Faculty Sponsor, NASA Hubble Prize Fellowship, Sinclaire Manning ($359k/UMass, 9/21 – 8/24)
- Lilly Fellowship in Teaching Excellence ($10k internal; 9/1/21 – 5/1/22)
- Hubble Space Telescope Cycle 28 Large Treasury Program GO-16259 *"3D-DASH: A Wide Field WFC3/IR Survey of COSMOS"* (259 orbits; Co-I; $344k/UMass; 5/1/21 – 4/30/24)
- NASA FINESST Award for M. Akhshik (PI/Faculty Sponsor; $135k/UConn, 9/19 – 8/22)
- ALMA Cycle 7 Observing Program, "*Running on Empty: Probing Gas Reservoirs of the REQUIEM Lensed Quiescent Galaxies at z=1.6-3.2"* (PI; 2019)
- Spitzer DDT Proposal "*Resolving QUIEscent Magnified (REQUIEM) Galaxies: The Missing (Spitzer/IRAC) Piece of the Puzzle*" (PI, 0.3h)
- Alfred P. Sloan Fellowship ($70k/UMass; 9/1/19 – 8/31/21)
- Hubble Space Telescope Cycle 26 Program GO-15663 "*REsolving QUIEscent Magnified (REQUIEM) Galaxies: Uncovering Formation Pathways via Spatially Resolved Gradients at z=1.6-2.9"* (Co-PI; $408k transferred to UMass; 6/1/19 – 5/31/22)
- NASA/ADAP Grant *"3D-Herschel: Completing the CANDELS/3D-HST Legacy with a New Bayesian Framework for Deriving Galaxy Properties"* (PI; $418k transferred to UMass; 1/19 – 1/22)
- NSF/IRES Grant *"IRES Track I: Exploring New Horizons in the Observable Universe at the Cosmic Dawn Center of Excellence in Copenhagen"* (PI; $300k transferred to UMass; 2/19 – 1/22)
- ALMA Cycle 6 Observing Program, "*Running on Empty: Probing the Gas Reservoirs of Lensed Quiescent Galaxies at z=1.6-3.2"* (PI; 2018)
- Cosmic Dawn Center of Excellence, Neils Bohr Institute, funded by the Danish National Research Foundation (Associate Faculty; 2018 – 2028)
- NASA Connecticut Space Grant Faculty Seed Research Grant ($10k)
- Hubble Space Telescope Cycle 25 Program AR-15027 "*Completing the Legacy of Hubble's Wide/Deep Fields"* (Co-I; $669k/total, $110k/UMass)
- NASA Probe-class Mission Concept, *"Cosmic Evolution through UV Spectroscopy (CETUS)"*, (Science Co-I; 2017)
- UConn Provost's Open Educational Resource Award, *"Cosmic Dawn at UConn: Astronomy for Everyone"* (PI; $10k internal/UConn; 2017)
- UConn Provost's Large Course Redesign Grant (Co-PI; $26k internal/UConn; 2017)
- Hubble Space Telescope Cycle 24 Program GO-14622, *"A Chance Alignment: Resolving a Massive Compact Galaxy Actively Quenching at z=1.8"* (12 orbits; PI; $138k/UConn; 2/17 – 1/20)
- 2015 Hubble Prize Fellowship HF2-51368.001, *"Spatially-Resolved Stellar Populations and Dust in Distant Galaxies"*
- American Astronomical Society FAMOUS Travel Grant ($1k; 2015)
- Hubble Space Telescope Cycle 18 Treasury Program GO-12177, *"3D-HST: A Spectroscopic Galaxy Evolution Treasury"* (248 orbits; Co-I)
- NOAO Programs 2010A-0015, 2010B-0407, and 2011B-0509 (Co-I)

Media & Press Releases (select)

- AAS Press Conference New Findings about Stars Near and Far (1/2025)
- *Press Release:* Hubble finds Early, Massive Galaxies Running on Empty (9/2021)
- *Press Release:* Rerun of Supernova Blast is Expected to Appear in 2037 (9/2021)
- Astronomy Department Feature, The Magazine, UMass Amherst (7/2021)
- UMass College of Natural Sciences "Twitter Takeover" (10/2020)
- Live TV Interview at WGBY's Connecting Point (11/2019)
- *Press Release*: Cosmic Yeti from the Dawn of the Universe Found Lurking in Dust (10/2019)
- *News Article*: UConn Professors Explore Universe with NASA (12/2017)
- *Press Release*: Hubble Pushed Beyond Limits to Spot Clumps of New Stars in Distant Galaxy (7/2017)
- *Press Release*: New Astronomy Center will reveal Cosmic Dawn (4/2017)
- 5 Live TV Interviews and Instagram Video to celebrate Hubble's 25th Anniversary, NASA/Goddard TV Media Studio (March & April 2015)
- *Press Release*: NASA Telescopes Help Uncover Early Construction Phase of Giant Galaxy (8/2014)
- *Press Release*: Hubble Reveals First Scrapbook Pictures of Milky Way's Formative Years (11/2013)
- *Press Release*: Astronomers Discover Galaxies are either Awake or Asleep (6/2010)

Additional Experience

Computing: Experience with IDL, IRAF, and Python

Telescopes:

- *James Webb Space Telescope* (NIRSpec, NIRCam, MIRI, NIRISS)
- *Hubble Space Telescope* (WFC3, ACS, WFPC2)
- *Spitzer Space Telescope* (IRAC, MIPS)
- Atacama Large Millimeter Array
- Large Millimeter Telescope (AzTEC)
- Whipple Observatory 6.5m-MMT (2 nights; MMIRS)
- Kitt Peak 4m-Mayall (26 nights; NEWFIRM)
- Cerro-Tololo 4m-Blanco (5 nights; NEWFIRM)
- *XMM-Newton* and *Chandra* X-ray Observatories.

Senior Leadership in Large Collaborations:

- JWST DeepDive Survey (2024– ; admin PI/US Team Lead)
- UNCOVER (2022–; Photometric Team Lead/PI of HST follow-up program)
- PRIMER (2022– ; NIRCam Photometric Catalog Team Lead)
- REQUIEM Galaxy Survey (Co-Leader; 2018 – present)

Membership in Other Notable Surveys and Large Collaborations:

- Current JWST Surveys: MINERVA, VENUS (2025), RUBIES, GLIMPSE (2024), LEGGOS (2023), COSMOS-Web, FRESCO, PANORAMIC (2022)
- 3D-DASH Survey (2020 – 2025)
- Northeast Participation Group, Prime Focus Spectrograph (2018 – present)
- Hubble Frontier Fields DeepSpace (HFFDeepSpace; 2015 – 2017)
- SDSS Giant Arcs Survey (SGAS; 2012 – 2022)
- FourStar Galaxy Evolution Survey (ZFOURGE; 2012 – 2016)
- 3D-HST: Spectroscopic Galaxy Evolution Survey with HST (2011 – 2016)
- NEWFIRM Medium-Band Survey (NMBS and NMBS-II; 2009 – 2012)

Professional Memberships:

- American Astronomical Society (2003 — present)
- International Astronomical Union (2018 — present)