# Curriculum Vitae (Shardha Jogee)

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**Education**

- Yale University, U.S.A – Astronomy – Ph.D. (1999), M. Phil. (1994), M. S. (1994).
- Cambridge University, England – Physics – B.A. (1992), M.A. (1995).

**Employment**

- 2015–Present: Astronomy Department Chair, University of Texas at Austin.
- 2014–2015: Astronomy Department Associate Chair, University of Texas at Austin.
- 2014–Present: Professor, Astronomy, University of Texas at Austin.
- 2009–2013: Associate Professor, Astronomy, University of Texas at Austin.
- 2004–2008: Assistant Professor, Astronomy, University of Texas at Austin.
- 2002–2004: Assistant Astronomer, Space Telescope Science Institute.[1]
- 1998–2002: Postdoctoral Scholar, California Institute of Technology (Caltech)

**Summary of Grant Awards:** I have been awarded ∼$3.4 M in external research and education grants over the period 2004 to 2017. Research grants account for ∼$2.8 M, of which ∼$2.2 M are from grants where I am the Principal Investigator. Education and outreach grants account for ∼$0.7 M. For multi-institution grants, the grant amounts listed above include *only* the amount awarded to my institution with me as PI, Co-PI, or Co-I.

**Summary of Publications:** As of September 2018, my publication record includes 188 publications of which 78 are peer-reviewed refereed publications in high impact journals. My publications have received over 7350 citations, my current citation rate is over 490 citations per year, and my h-index is 43. A detailed publication list is provided in Appendix B of the CV.

**Summary of Talks:** I have presented over 60 invited colloquia and talks at universities and conferences (e.g., in USA, England, France, Germany, the Netherlands, Italy, Spain, Chile, South Africa, etc) on research, STEM education, and academic leadership.

**Research Program:** My research addresses central questions on the evolution of galaxies as a function of cosmic epoch, mass, and environment. How do galaxies grow their stars, black holes, and dark matter halos across cosmic time and vastly different environments?

[1]Space Telescope Science Institute (STScI) oversees the scientific operations of NASA's *Hubble Space Telescope* and the future James Webb Space Telescope.

What is the role played by theoretically predicted growth modes, such as violent mergers of galaxies and slower more 'quiescent' modes (e.g., gas accretion along cosmological filaments and secular evolution driven by bars)? How do galaxy clusters – some of the largest bound structures in the Universe – form? I am a member of the following international science collaborations, which have conducted some of the largest or deepest galaxy surveys to date. Within these collaborations, my research group have *led* a dozen papers on the structure, merger, and assembly history of galaxies that have contributed to over 800 citations (among my total citations of $\sim$ 6990).

- Galaxy Evolution from Morphology and SEDs (GEMS).[2]
- Great Observatories Origins Deep Survey (GOODS).[3]
- Hubble ACS Ultra Deep Field (HUDF).
- Space Telescope A901/902 Galaxy Evolution Survey (STAGES).[4]
- HST ACS Treasury Survey of the Coma Cluster.[5]
- GOODS-NICMOS Survey (GNS) of Massive Galaxies at $z \sim 2$.
- The VIRUS-P Exploration of Nearby Galaxies (VENGA).
- Hobby-Eberly Telescope Dark Energy Experiment (HETDEX).[6]

**Leadership and Administrative Experience**

- Member of the University Faculty Gender Equity Council (Oct 2018–Present)
- Selected by the Provosts Office for the University of Texas Executive Management and Leadership Program (UTEMLP; Jan–May 2018).
- Invited member of the Heising-Simons Foundation Physics and Astronomy Leadership Council (PALCl; 2017-Present).
- Chair of the Astronomy Department at the University of Texas at Austin with ∼200 members. My activities have included promoting an inclusive culture of excellence and innovation; development of a strategic vision plan for research and educational growth; faculty development (hiring, mentorship, evaluation, promotion, retention, and retirement); development of our educational mission and advancement of students and postdocs; improvement of space facilities (including the launch of a new state-of-the-art UG computer research and teaching lab); external relations and high-level philanthropy; staff development; governance, operations, and budget management.
- Associate Chair of the Astronomy Department at the University of Texas at Austin (2014–2015).
- Invited member of the UT College of Natural Sciences Strategic Planning Task, which worked collaboratively with the new Dean, Linda Hicke, to set up a five-year strategic vision plan for the college's future. Led the white paper on "Graduate Student Support" and co-authored the white paper on"Faculty Hiring Practices" (2012–13).

[2]http://www.mpia.de/GEMS/gems.htm
[3]http://www.stsci.edu/science/goods/
[4]www.nottingham.ac.uk/ ppzmeg/stages
[5]astronomy.swin.edu.au/coma/
[6]http://hetdex.org/hetdex/

- UT representative in the Leadership Texas program for women leaders in industry, business, government, and academia (2014).
- Member of the Advisory Council for the Texas Institute for Discovery Education in Science (TIDES) (2014–2015).
- Astronomy Undergraduate Advisor, Astronomy Graduate Studies Committee (GSC) Chair, Member of Astronomy Faculty Search Committees, and lead of federally-funded STEM outreach programs (2005–Present).
- Awarded ∼$3.4 M in external research and education grants. Research grants account for ∼$2.8 M, of which ∼$2.2 M are from grants where I am the Principal Investigator (2004–2017).
- Served on scientific advisory panels for federal funding agencies (e.g., NASA, NSF) and time allocation panels for international research facilities. Referee for top-tier journals, including the Astrophysical Journal (ApJ), Astrophysical Journal Letters (ApJL), Astronomy & Astrophysics (A&A), and Monthly Notices of the Royal Astronomical Society (MNRAS) (2005–Present)
- Lead for core scientific investiagtions in five large international science collaborations, which conducted some of the largest or deepest galaxy surveys at the time (e.g., GEMS, STAGES, ACS Teasury survey of Coma, GOODS NICMOS Survey, SHELA/HETDEX) (2002–Present).
- Instrument scientist at the Space Telescope Science (STScI) Institute for NASA's Advanced Camera for Surveys (ACS), which was the most advanced instrument on the Hubble Space Telescope in 2002. As team leader for the Phase II proposal process for ACS, I led a team of 12 tenured and tenure-track scientists to design and optimize the scientific programs for ACS on Hubble (2002–2004).
- Core member of the STScI home team that designed the Hubble Ultra Deep Field (HUDF), the deepest optical image ever made of the Universe, and presented it to the media through scientific panels (2002–2004).
- Member of the International Astronomical Union (IAU) Commission 28 on Galaxies (2009–2013).
- Member of the Nominating Committee, American Astronomical Society (AAS), Division of Dynamical Astronomy (2010–2011).
- Member of the ALMA North American Science Advisory Committee (2007–2010).
- Member of the Giant Magellan Telescope (GMT) science working group (2008–2009).

**Academic and Teaching Awards**

- College of Natural Science Teaching Excellence Award, UT Austin (2012)
- Board of Visitors Teaching Excellence Award, UT Austin (2011)
- American Association of University Women Educational Fellowship (1996)
- Amelia Earhart Fellowship, Zonta International (1996)
- Yale University J. F. Enders Research Fellowship, Yale University (1995)

- Sigma Xi Grants-in-Aid of Research, Sigma Xi Society (1995)
- Yale University J. F. Enders Research Fellowship, Yale University (1995)
- Garfinkel Prize, Yale University (1992)
- Elected to status of Fellow, Cambridge University, England (1990-1992)
- Full academic scholarship in Physics, Cambridge University, England (1989-1992)

**Selected Outreach Activities:** A detailed list of courses taught and outreach activities is provided in Appendix D of the CV. Below are a few selected activities:

- Co-authored textbook aimed at Ph.D. students (*'Physics of Active Galactic Nuclei at all Scales'*), Lecture Notes in Physics, Vol. 693, Eds. D. Alloin, R. Johnson, & P. Lira (Springer: Berlin Heidelberg)
- Voice America one hour radio interview[7] highlighting UT Astronomy, academic leadership, and my journey as a female astronomer (2016)
- Invited to lead a feature video for "The Universe" exhibit hall in the new Perot Museum of Science in Dallas, Texas, to encourage students to pursue STEM careers (2012–Present)
- Presentation of the education and research mission of the Astronomy program to the State of Texas Legislative Staff, including staff from Governor Abbott's office, the Senate Higher Education Committee, the Senate Finance Committee, and the House Appropriations Committee (2016)
- Used a UT Award for Instructional Innovation Techniques along with funding from NASA and NSF, to develop the *Galaxies and Cosmos Explorer Tool (GCET)*[8], an online tool to to actively engage undergraduate students, high school students, and the general public in 'surfing' through large galaxy surveys conducted with NASA's *Hubble Space Telescope* and exploring galaxies through cosmic time.
- Invited talk on "Cosmic Explorations, Interdisciplinary Partnerships, and STEM Education", National Association of Women Business Owners (2017)
- Presentation of Astronomy program milestones and research highlights to the Astronomy program Board of Visitors (with 240 members) twice a year (Feb. 2016, July 2016, Feb. 2017, July 2017).

[7] www.voiceamerica.com/episode/93888
[8] http://www.as.utexas.edu/gcet/