

Prizes and Awards to UC Astronomy Faculty

2013 February

We use a subset of 35 institutions with Astronomy and Astrophysics departments ranked in the most recent National Academy Assessment of Research Doctorate Programs from 2010 as a peer group to put UC's records of prizes in context. There are 35 departments in the rankings, which altogether have 691 faculty. One hundred ten, or 14%, are UC faculty. This is the percentage, 14%, to which UC's prize record should be compared.

Major international and national awards for career achievement or significant discovery:

- Kavli Prize in Astrophysics (International)
Jerry Nelson, UC Santa Cruz, 2010
Dave Jewett, UC Los Angeles, 2012
2 out of the 8 Kavli Astrophysics prizes given to date were to UC Astronomers (25%)
- Gruber Prize in Cosmology (International)
Mark Davis, UC Berkley, 2011
Saul Perlmutter UC Berkeley-LBNL, 2007
2 of the 21 Gruber Cosmology prizes given to date honored the work of UC Astronomers (10%)
- The Shaw Prize in Astronomy (International)
Geoff Marcy, UC Berkeley, 2005
Saul Perlmutter, UC Berkeley Physics and Lawrence Berkeley National Laboratory, 2006
Frank Shu, UC San Diego, 2009
Reinhard Genzel, UC Berkeley, 2008
Dave Jewett, UC Los Angeles, 2012
Of the 16 Shaw prizes given to date, 5 were to UC astronomers (31%)
- Crafoord Prize (International)
Reinhard Genzel, UC Berkeley, 2012
Andrea Ghez, UC Los Angeles, 2012
2 out of the 10 Crafoord prizes given in Astronomy were to UC astronomers (20%)
- Additional national and worldwide recognition to UC Astronomy faculty:
Nobel Prize in Physics: Saul Perlmutter, UC Berkeley and Lawrence Berkeley National Laboratory, 2011
Macarthur Fellowship: Andrea Ghez, UC Los Angeles, 2008
National Medal of Science: Sandra Faber, UC Santa Cruz, 2012

Major international and national awards for career achievement or significant discovery:

Of the 109 current members of the National Academy of Sciences who are members of the Astronomy section, 25 are from the University of California, a remarkable 23%.

Prizes awarded by the American Astronomical Society:

The American Astronomical Society (AAS) is the professional society for astronomy in the US. The AAS awards prizes for early career, individual, and lifetime achievement, as well as service to the field and other awards. The nominations are submitted by Society members, and the prize committees are staffed by Society members, so these awards are given by our peers and give an indication of the accomplishments of UC astronomy faculty within our field. Since 1982, the AAS has awarded prizes to 194 individuals. Of these, 28 have gone to UC Astronomy and Astrophysics faculty (14%). A more meaningful statistic is the number of prizes that have gone to the 35 peer departments in the NAS rankings. These peer departments and UC have together won 128 of the 194 AAS prizes since 1982, so UC's share is $22/128 = 22\%$. This is to be compared with our share of faculty in these peer departments, which is only 14%. The Warner and Pierce prizes, which are early career awards, are especially noteworthy. From 2004 to 2013 the AAS awarded 19 such prizes. Six have gone to UC faculty, or 32%.

Early Career Awards:

The David and Lucile Packard Foundation has awarded Science and Engineering Fellowships since 1988. Sixteen fellowships each year are awarded to faculty in the first three years of their appointment to a broad range of disciplines: physics, chemistry, mathematics, biology, astronomy, computer science, earth science, ocean science, and all branches of engineering. Fifty institutions, including eight UC campuses with Astronomy faculty, compete for these Fellowships. Of the current UC astronomy faculty who are users of the shared optical/IR facilities, seven were awarded a Packard Fellowship. Seven of those were awarded since 2002, and in that time the Packard Foundation gave 22 Fellowships in Astronomy, Astrophysics and Cosmology.

- Steven Furlanetto, UC Los Angeles, 2008
- Enrico Ramirez-Ruiz, UC Santa Cruz, 2008
- Tomasso Treu, UC Santa Barbara, 2007
- Alice Shapley, UC Los Angeles, 2006
- Constance Rockosi, UC Santa Cruz, 2006
- Eliot Quataert, UC Berkeley, 2003
- Crystal Martin, UC Santa Barbara, 2002
- Andrea Ghez, UC Los Angeles, 1996
- James Graham, UC Berkeley, 1993

Thirteen current UC observational faculty were awarded Fellowships from the Alfred P. Sloan Foundation. These are awarded in the first six years of a faculty position in the fields of chemistry, computational or evolutionary molecular biology, computer science, economics, mathematics, neuroscience, ocean sciences (including marine biology), physics, or a related field.

Six UC observational faculty were awarded CAREER grants by the NSF, including three in the last seven years. These are early-career awards for young faculty given to proposals that demonstrate excellence in research and education.

- Alison Coil, UC San Diego, 2011
- Tomasso Treu, UC Santa Barbara, 2007
- Aaron Barth, UC Irvine, 2006

In addition to the awards tabulated above, UC Astronomy faculty have been recognized with many other awards for career and individual achievement in research and science education:

Greg Aldering, UC Berkeley-LBNL	Dudley Award	1991	
	Carnegie Fellowship	1990	
Rebecca Bernstein, UC Santa Cruz	Hubble Fellowship	1998	
Michael Bolte, UC Santa Cruz	Hubble Fellowship	1990	
Marusa Bradac, UC Davis	Maryland Academy of Sciences, Distinguished Young Scientist	1970	
	Maryland Academy of Sciences, Outstanding Young Scientist	1971	
	Bart J. Bok Prize from Harvard University	1974	
	1st Prize, Essay Awards competition of the Griffith Observatory (with Neal Evans)	1974	
	Helen B. Warner Prize of the American Astronomical Society (with Patrick Palmer)	1975	
	John S. Guggenheim Foundation Fellow	1977	
	Muhlmann Prize of the Astronomical Society of the Pacific (with H. M. Dyck)	1986	
	AAAS Newcomb Cleveland Prize (jointly with others)	2009	
	Jean Brodie, UC Santa Cruz	Guggenheim Fellowship	
		Harkness Fellowship	
Chambers Research Fellowship (Girton College Cambridge)			
Adam Burgasser, UC San Diego	Hubble Postdoctoral Fellowship	2001-2003	
	Spitzer Postdoctoral Fellowship	2004	
	Hellman Faculty Fellowship	2010-2011	

Alison Coil, UC San Diego	Hubble Postdoctoral Fellowship	2005-2008
	Hellman Fellowship UCSD	2009-2010, 2011-2012
	Kavli Frontier Fellow (designated by National Academy of Sciences)	2010
	UCSD Diversity Award	2010
Marc Davis, UC Berkeley	Honorary PhD, University of Chicago	2008
Harland Epps, UC Santa Cruz	Muhlmann Award (shared)	2003
	Member, Scientific Advisory Board of the United States Air Force (SAB)	1989-1993
Sandra Faber, UC Santa Cruz	Bruce Medal	2012
	Karl Schwarzschild Medal of the German Astronomical Society	2012
	Bower Prize of the Franklin Institute	2010
	Centennial Medal of the Harvard Graduate School of Arts and Sciences	2006
	Medaille de l'Institute d'Astrophysique de Paris	2005
	Honorary degrees:	
	Univ. Michigan	2011
	Univ. Pennsylvania	2010
	Univ. Chicago	2006
	Williams College	1997
Swarthmore College	1986	
Alex Filippenko, UC Berkeley	Richard H. Emmons Award, Astron. Soc. Pacific	2010
	Richard & Rhoda Goldman Distinguished Professor in the Physical Sciences, UC Berkeley	2009
	Gruber Cosmology Prize (shared)	2007
	Richtmyer Memorial Award, Amer. Assoc. Physics Teachers	2007
	Carnegie/CASE National Professor of the Year	2006
	Carl Sagan Prize for Science Popularization	2004
	Guggenheim Foundation Fellowship	2001
	Robert M. Petrie Prize, Canadian Astronomical Society	1997
	NSF Presidential Young Investigator Award	1989-1994
	Miller Fellow for Basic Research in Science, UC Berkeley	1984-1986

	Fannie and John Hertz Foundation Fellowship	1979-1984
	Nordsieck Award (The Outstanding Graduate in Physics), UCSB	1979
Michael Fitzgerald, UC Los Angeles	Michelson Postdoctoral Fellowship	2007
	AAAS Newcomb Cleveland Prize	2009
Andrea Ghez, UC Los Angeles	Caltech Distinguished Alumni Award	2012
	Helen Hogg Distinguished Visitorship	2008
	UCLA Acad. Adv. Program Faculty Recognition Award	2007
	Aaronson Award, University of Arizona	2006
	Sackler Prize, University of Tel Aviv	2004
	UCLA Gold Shield Prize	2004
	Maria Goeppert-Mayer Award, American Physical Society	1999
	Outstanding Teaching Award, UCLA Physics Department	1997, 1998, 2005, 2010
	Fullam/Dudley Award	1995
	NSF Young Investigator Award	1994
Raja GuhaThakurta, UC Santa Cruz	Herzberg Memorial Prize and Fellowship of the National Research Council of Canada	2001
Garth Illingworth, UC Santa Cruz	Honorary Degree University of Western Australia	
Daniel Kasen, UC Berkeley	DOE Early Career Award	2012
David Koo, UC Santa Cruz	Presidential Young Investigator Award	1989-1994
Dan Lubin, UC San Diego	NASA Goddard Earth Science and Technology Fellow	2002
	National Science Foundation Arctic Service Award	1999
	US Coast Guard Arctic Service Medal	1994
	US Navy Antarctic Service Medal	1989
Bruce Macintosh, LLNL	Newcomb Cleveland prize of the AAAS	2010
Geoff Marcy, UC Berkeley	Celsius Lecturer (Feb 2011)	
	Elected Member: American Academy of Arts and Sciences	2010
	Carl Sagan Prize for Science Popularization	2009
	John Bahcall Lecturer	2007
	Discover Magazine Space Scientist of the Year	2003
	NASA Medal for Exceptional Scientific Achievement	2003
	Henry Draper Medal from Nat. Acad. of Sci.	2001
	State of California Scientist of the Year	2000

	G.Darwin Lecturer	2000
	Alumnus of the Year at UC Santa Cruz	1997
	Manne Siegbahn Award from the Swedish Academy	1996
	ABC News Hour "Person of the Week"	1996
Jean-Luc Margot, UC Los Angeles	AAS Urey Prize	2004
	OK Earl Prize Fellowship	2001
Claire Max, UC Santa Cruz	James Madison Medal, Princeton University	2009
	Science Award, Chabot Space and Science Center	2006
	President's Partnership of Excellence Award, Hartnell College	2005
	E. O. Lawrence Award (Department of Energy)	2004
	Women's Hall of Fame, Alameda County (CA)	2003
	American Academy of Arts and Sciences	2002
	Edward Teller Fellowship, LLNL	2001
Ben Mazin, UC Santa Barbara	PECASE Award	2011
	NASA Group Achievement Award, MKIDs	
	NASA Group Achievement Award, GALEX	
Jerry Nelson, UC Santa Cruz	Dannie Heineman Prize for Astrophysics	1995
	California Inst. of Technology Distinguished Alumni	1995
	Joseph Franhofer Award & Rbt. M. Burley Prize, OSA	1996
	Grand Prix Lallemand, French Academy of Sciences	1998
	Franklin Medal	2012
Peter Nugent, UC Berkeley-LBNL	Gruber Prize in Cosmology (shared)	2007
Saul Perlmutter, UC Berkeley-LBNL	Einstein Medal, Albert Einstein Society, shared with Adam Riess,	2011
	Annual Faculty Research Lecture, UC Berkeley	2011
	Resnick Lecturer, Rensselaer Polytechnic Institute	2011
	Korolev Medal, Russian Federation of Cosmonautics	2007
	International Antonio Feltrinelli Prize	2006
	California Scientist of the Year	2003
	E.O. Lawrence Award of the U.S. Department of Energy	2002
Jason Prochaska, UC Santa Cruz	Humboldt Fellowship	2011

Naveen Reddy, UC Riverside	Tinsley Visiting Scholar, University of Texas at Austin	2011
	Hubble Fellowship	2008-2011
	AAS International Travel Grant	2003
	Van Mannen Fellowship, Caltech	2001
	National Science Foundation Graduate Research Fellowship	2000-2003
	Outstanding Senior in Astronomy, University of Texas at Austin	1999-2000
	University of Texas Undergraduate Research Fellowship Award	1999
	Melvin J. Reiger Scholarship in Physics	1999
	College of Natural Sciences Award for Academic Excellence	1996-2000
Tammy Smecker-Hane, UC Irvine	Pacesetter Award, Academic and Professional Women of UC Irvine	2006
	School of Physical Sciences Award for Outstanding Contributions to Undergraduate Education	2001
	AAS/AAUW Annie Jump Cannon Special Commendation of Honor	1995
	American Fellowship, American Association of University Women	1991
	Amelia Earhart Fellowship, Zonta International Foundation	1991
Tomasso Treu, UC Santa Barbara	NSF-CAREER Award	2007
	Hubble Fellowship	2003
Steven Vogt, UC Santa Cruz	UCSC Faculty Research Lecturer	2011
	World Technology Network- Finalist for Space Award	2006
	University of Texas at Austin- Alumnus of the Year	2004
	Beatrice M. Tinsley Award- AAS (with Marcy and Butler)	2002
	California Community College League- Distinguished Alumni Award	2001
	Academie des Sciences de France- Prix Andre Lallemard (with Jerry Nelson)	1998
	Muhlmann Award- Astron. Soc. of the Pacific	1995
	U.C. Leningrad State- Exchange Fellow	1990
US-Israel Binational Science Foundation- Bergmann Prize	1985	
Arthur Wolfe, UC San Diego	Jansky Prize Lectureship	2008

Edward Wright, UC Los Angeles

NASA Exceptional Scientific Achievement Medal for COBE 1992
Fellow of the American Association for the Advancement of
Science 2004
Gruber Prize in Cosmology as part of the COBE team 2006
Fellow of the American Academy for Arts and Sciences 2007
NASA Group Achievement Award for WMAP 2007
Elected to the National Academy of Sciences 2011
NASA Exceptional Public Service Medal for WISE 2011
Gruber Prize in Cosmology as part of the WMAP team 2012

Ben Zuckerman, UC Los Angeles

Maryland Academy of Sciences, Distinguished Young Scientist
1970-1971
Bart J. Bok Prize from Harvard University 1974
1st Prize, Essay Awards competition of the Griffith Observatory
(with Neal Evans) 1974
Helen B. Warner Prize of the American Astronomical Society
(with Patrick Palmer) 1975
John S. Guggenheim Foundation Fellow 1977
Muhlmann Prize of the Astronomical Society of the Pacific (with
H. M. Dyck) 1986
AAAS Newcomb Cleveland Prize (jointly with others) 2009