

FORM D - IV A INSTRUCTION

The faculty member is encouraged to use a range of evidence demonstrating instructional accomplishment, which can be included in portfolios or compendia of relevant materials.

1. Undergraduate and Graduate Credit Instruction:

Record of instructional activities for at least the past six semesters. Include only actual participation in credit courses (on- or off-campus instruction) or virtual university on-line courses. In determining the “past six semesters,” the faculty member may elect to exclude any semesters during which s/he was on leave; additional semesters may be included on an additional page. Fill in or, as appropriate, attach relevant print screens from CLIFMS*.

Semester and Year	Course Number	Credits (Number or Var)	Number of Sections Taught Lec Rec Lab	Number of Students	Number Of Assistants**	Notes
SS13						
	ISP205	3	1	220	1	
FS13						
	ISP205	3	2	500	1	
FS14						
	AST825	3	1	5	0	
FS15						
	ISP205	3	2	335	1	
FS15						
	AST825	3	1	8	0	

*Consult departmental staff who are authorized to enter data on the web-based CLIFMS (Course Load, Instruction, Funding and Modeling System) system and can search for course sections and enrollments by faculty name, per semester.

**May include graduate and undergraduate assistants, graders, and other support personnel.

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2. Non-Credit Instruction:

List other instructional activities including non-credit courses/certificate programs, licensure programs, conferences, seminars, workshops, etc. Include non-credit instruction that involves international, comparative, or global content delivered either to domestic or international groups, either here or abroad.

None

*Consult departmental staff who are authorized to enter data on the web-based CLIFMS (Course Load, Instruction, Funding and Modeling System) system and can search for course sections and enrollments by faculty name, per semester.

**May include graduate and undergraduate assistants, graders, and other support personnel.

3. Academic Advising:

a. Faculty member's activity in the area of academic advising. The statement may include commentary on supplementary materials such as recruitment activities, international student advising, evidence of peer recognition, and evidence of student recognition.

Undergraduate: 11

Graduate: 6

Graduate/Professional:

Other:

b. Candidate's undergraduate advisees (if applicable to individual under review):

	Freshman	Sophomore	Junior	Senior
Number of current undergraduate advisees				3

c. Candidate's graduate/graduate-professional advisees (limit to principal advisor or committee chairpersonship status):

	Masters	Doctoral	Professional
Number of students currently enrolled or active		2	
Number of graduate committees during the reporting period		4	
Degrees awarded during the reporting period		1	
Degrees awarded during career		4	

COLLEGE OF NATURAL SCIENCE

CNS RPT Numerical Student Evaluation Summaries

ISP courses do not have the same categories for SIRS so the numbers here are averages over the ISP SIRS scores

Semester and Year	Course Number	Number of student responses	Instructor Involvement (average of SIRS items 1-4)	Student Interest (average of SIRS items 5-8)	Student-Instructor Interaction (average of SIRS items 9-12)	Course Demands (average of SIRS items 13-16)	Course Organization (average of SIRS items 17-20)
SS13	ISP 205	138	1.74*	1.74*	1.74*	1.74*	1.74*
FS12	Donahue	214	1.95	2.05	1.95	1.67	1.71
FS13	ISP 205	152	1.8*	1.8*	1.8*	1.8*	1.8*
	As above						
FS14	AST 825	4	2	1.68	2.31	1.5	2
	New course						
FS15	ISP 205	146	1.79*	1.79*	1.79*	1.79*	1.79*
	As above						
FS16	AST 825	8	1.53	1.62	1.5	1.5	1.68
	New course						
	COMP						
	COMP						
	COMP						
*is the average of questions 1-24 on the ISP SIRS.	COMP						

From the *CNS P&T Guidelines* adopted March 16, 2011:

For each course taught, list semester and year, course number, number of student responses, and average SIRS (or equivalent) scores (1.0-5.0, with lower numbers better) in each of the categories listed, along with corresponding average scores in comparable (“COMP”, either same course taught by other instructors, or courses at same level and with a comparable audience) courses immediately below. **If department-specific evaluations are used, provide appropriate average scores corresponding to categories listed above and rescale to SIRS 1.0-5.0 scale.**

FORM D - IV B RESEARCH AND CREATIVE ACTIVITIES

1. List of Research/Creative Works:

Attach a separate list of publications, presentations, papers, and other works that are primarily in support of or emanating from Research and Creative Activities. Indicate how the primary or lead author of a multi-authored work can be identified. The list should provide dates and, in particular, accurately indicate activity from the reporting period. Items to be identified:

- 1) Books
- 2) Book chapters
- 3) Bulletins or monographs
- 4) Articles
- 5) Reviews
- 6) Papers and presentations for learned professional organizations and societies
- 7) Artistic and creative endeavors (exhibits, showings, scores, performances, recordings, etc.)
- 8) Reports or studies

Indicate peer-reviewed or refereed items with a “*”.

Indicate items with a significant outreach component with a “**” (determined by the faculty member)

See following page

Refereed Publications

[REDACTED]

Bibliometric summary: 171 refereed papers total (5012 citations); 25 first-author refereed papers (866 citations). h -index = 41.

In accordance with MSU College of Natural Science formatting guidelines, all refereed publications are asterisked, the lead author is underlined, publications since reappointment are bolded, and those with the PhD or postdoctoral advisor are in italics. Further, [REDACTED] is italicized in each author list.

2016

*171. **A new γ -ray loud, eclipsing low-mass X-ray binary.**

[REDACTED]
[REDACTED] The Astrophysical Journal, in press

*170. **Giant rapid X-ray flares in external galaxies.**

[REDACTED]
[REDACTED] J. 2016, Nature, in press

*169. **Infrared high-resolution integrated light spectral analyses of M31 globular clusters from APOGEE.**

[REDACTED]
[REDACTED]
[REDACTED]. 2016, The Astrophysical Journal, in press

*168. **A luminous gamma-ray binary in the Large Magellanic Cloud.**

[REDACTED]
[REDACTED] 2016,
The Astrophysical Journal, 829, 105

*167. **ASASSN-16ae: A powerful white-light flare on an early-L dwarf.**

[REDACTED]
[REDACTED] The Astrophysical Journal
Letters, 828, 22

*166. ***First results from the MADCASH survey: A faint dwarf galaxy companion to the low mass spiral galaxy NGC 2403 at 3.2 Mpc.***

[REDACTED]
[REDACTED]
[REDACTED] The Astrophysical Journal Letters, 828, 5

*165. **An AO-assisted variability study of four globular clusters.**

[REDACTED]

[REDACTED] 2016, The Astronomical Journal, 152, 55

*164. **Discovery of a long-lived, high amplitude dusty infrared transient.**

[REDACTED]
[REDACTED]
[REDACTED] 2016, Monthly Notices of the Royal Astronomical Society, 460, 2822

*163. *The SLUGGS Survey: The mass distribution in early-type galaxies within five effective radii and beyond.*

[REDACTED]
[REDACTED]
[REDACTED]. 2016, Monthly Notices of the Royal Astronomical Society, 460, 3838

*162. **The first low-mass black hole X-ray binary identified in quiescence outside of a globular cluster.**

[REDACTED]
[REDACTED]
2016, The Astrophysical Journal, 825, 10

*161. **Disc-jet coupling in the Terzan 5 neutron star X-ray binary EXO 1745-248.**

[REDACTED]
[REDACTED]
[REDACTED] 2016, Monthly Notices of the Royal Astronomical Society, 460, 345

*160. **Highest redshift image of neutral hydrogen in emission: A CHILES detection of a starbursting galaxy at $z = 0.376$.**

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED] 2016, The Astrophysical Journal Letters, 824, 1

*159. **Identifying IGR J14091-6108 as a magnetic CV with a massive white dwarf using X-ray and optical observations.**

[REDACTED] 2016, Monthly Notices of the Royal Astronomical Society, 460, 513

*158. **The extended halo of Centaurus A: Uncovering satellites, streams and substructures.**

[REDACTED]
[REDACTED] 2016, The Astrophysical Journal, 823, 19

*157. Evidence that Hydra I is a tidally disrupting Milky Way dwarf galaxy.

[REDACTED]
[REDACTED] J. 2016, The Astrophysical Journal, 818, 39

*156. Discovery of the candidate off-nuclear ultrasoft hyper-luminous X-ray source 3XMM J141711.1+522541.

[REDACTED]
[REDACTED] 2016, The Astrophysical Journal, 821, 25

*155. A deep search for prompt radio emission from thermonuclear supernovae with the Very Large Array.

[REDACTED]
[REDACTED]
J. 2016, The Astrophysical Journal, 821, 119

*154. *The SLUGGS survey: Exploring the globular cluster systems of the Leo II group and their global relationships.*

[REDACTED]
[REDACTED] 016, Monthly Notices of the Royal Astronomical Society, 458, 105

*153. *The SLUGGS Survey: Globular clusters and the dark matter content of early-type galaxies.*

[REDACTED]
2016, Monthly Notices of the Royal Astronomical Society, 458, 44

152. Optical spectroscopic observations of γ -ray blazar candidates VI. Further observations from TNG, WHT, OAN, SOAR and Magellan telescopes.

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED] G. 2016, The Astronomical Journal, 151, 95

*151. *The SLUGGS Survey: The assembly histories of individual early-type galaxies.*

[REDACTED]
[REDACTED] 2016, Monthly Notices of the Royal Astronomical Society, 457, 1242

*150. *The SLUGGS Survey: stellar kinematics, kinemetry and trends at large radii in 25 early-type galaxies.*

[REDACTED]
[REDACTED] J. 2016, Monthly Notices of the Royal Astronomical Society, 457, 147

*149. *The AIMSS project III: The stellar populations of compact stellar systems.*

[REDACTED]
[REDACTED]

[REDACTED] 2016, Monthly Notices of the Royal Astronomical Society, 456, 617

*148. A tidally disrupting dwarf galaxy in the halo of NGC 253.

[REDACTED]
[REDACTED]

[REDACTED] 2016, The Astrophysical Journal Letters, 816, 5

2015

*147. Optical spectroscopy of the high-mass γ -ray binary 1FGL J1018.6–5856: A probable neutron star primary.

[REDACTED] 2015, The Astrophysical Journal Letters, 813, 26

*146. 1FGL J1417.7–4407: A likely γ -ray bright binary with a massive neutron star and a giant secondary.

[REDACTED]
[REDACTED]

[REDACTED] 2015, The Astrophysical Journal Letters, 804, 12

*145. The 10830 Å He line among evolved stars in the globular cluster M4.

[REDACTED] 808, 124

*144. *Detection of a distinct metal-poor stellar halo in the early-type galaxy NGC 3115.*

[REDACTED] The Astrophysical Journal, 800, 13

*143. No evidence for multiple stellar populations in the low-mass Galactic globular cluster E 3.

[REDACTED] 2015, The Astrophysical Journal, 809, 169

*142. Deep radio imaging of 47 Tuc identifies the peculiar X-ray source X9 as a new black hole candidate.

[REDACTED]
[REDACTED]

[REDACTED] 2015, Monthly Notices of the Royal Astronomical Society, 453, 3918

*141. *Hiding in plain sight: Record-breaking compact stellar systems in the Sloan Digital Sky Survey.*

[REDACTED]

[REDACTED] 2015, The Astrophysical Journal Letters, 808, 32

*140. **Antlia B: A faint dwarf galaxy member of the NGC 3109 association.**

[REDACTED]
C. 2015, The Astrophysical Journal Letters, 812, 13

*139. **Limits on thermal variations in a dozen quiescent neutron stars over a decade.**

[REDACTED]
[REDACTED] 2015, Monthly Notices of the Royal Astronomical Society, 452, 3475

*138. *The SLUGGS survey: Globular cluster kinematics in a “double sigma” galaxy—NGC 4473.*

[REDACTED]
[REDACTED] C. 2015, Monthly Notices of the Royal Astronomical Society, 452, 2208

*137. *The SLUGGS survey: inferring the formation epochs of metal-poor and metal-rich globular clusters.*

[REDACTED] 2015, Monthly Notices of the Royal Astronomical Society, 452, 1045

*136. **Statistical time-resolved spectroscopy: a higher fraction of short-period binaries for metal-rich F-type dwarfs in SDSS.**

[REDACTED] The Astrophysical Journal Letters, 806, 2

*135. *The megasecond Chandra X-ray visionary project observation of NGC 3115 (III): Luminosity functions of LMXBs and dependence on stellar environments.*

[REDACTED]
[REDACTED] The Astrophysical Journal, 808, 20

*134. *The SLUGGS survey: Combining stellar and globular cluster metallicities in the outer regions of early-type galaxies.*

[REDACTED]
[REDACTED] 2015, Monthly Notices of the Royal Astronomical Society 451, 2625

*133. **A comprehensive archival search for counterparts to ultra-compact high velocity clouds: Five local volume dwarf galaxies.**

[REDACTED]
[REDACTED]

2015, The Astrophysical Journal, 806, 95

*132. *The megasecond Chandra X-ray visionary project observation of NGC 3115 (II): Properties of point sources.*

The Astrophysical Journal, 808, 19

*131. *A SLUGGS and Gemini/GMOS combined study of the elliptical galaxy M60: wide-field photometry and kinematics of the globular cluster system.*

2015, Monthly Notices of the Royal Astronomical Society, 450, 1962

*130. *The SLUGGS Survey: Multi-population dynamical modelling of the elliptical galaxy NGC 1407 from stars and globular clusters.*

2015, Monthly Notices of the Royal Astronomical Society, 450, 3345

*129. *Small scatter and nearly-isothermal mass profiles to four half-light radii from two-dimensional stellar dynamics of early-type galaxies.*

The Astrophysical Journal Letters, 804, 21

*128. *Radial distributions of sub-populations in the globular cluster M15: a more centrally concentrated primordial population.*

2015, The Astrophysical Journal, 804, 71

*127. *How elevated is the dynamical-to-stellar mass ratio of the ultra-compact dwarf S999?*

2015, Monthly Notices of the Royal Astronomical Society, 449, 1716

*126. Measuring consistent masses for 25 Milky Way globular clusters.

. 2015, The Astronomical Journal, 149, 53

*125. Optical spectroscopic observations of γ -ray blazar candidates II. The 2013/2014 campaign in the southern hemisphere.

[REDACTED]
[REDACTED] 2015, The Astronomical Journal, 149, 163

*124. *The SLUGGS survey: Globular cluster stellar population trends from weak absorption lines in stacked spectra.*

[REDACTED]
[REDACTED] 2015, Monthly Notices of the Royal Astronomical Society, 446, 369

2014

*123. 1FGL J0523.5–2529: A new probable γ -ray pulsar binary.

[REDACTED]
[REDACTED] 2014, The Astrophysical Journal Letters, 788, 27

*122. *A globular cluster toward M87 with a radial velocity < -1000 km/s: The first hypervelocity cluster.*

[REDACTED]
[REDACTED] 2014, The Astrophysical Journal Letters, 787, 11

*121. Constraining globular cluster formation through studies of young massive clusters - III. A lack of gas and dust in massive stellar clusters in the LMC and SMC.
[REDACTED], Monthly Notices of the Royal Astronomical Society, 443, 3594

*120. *The SLUGGS Survey: HST/ACS mosaic imaging of the NGC 3115 globular cluster system.*

[REDACTED]
[REDACTED] The Astronomical Journal, 148, 32

*119. *A supermassive black hole in an ultracompact dwarf galaxy.*

[REDACTED]
[REDACTED] 513, 398

*118. Discovery of a close pair of faint dwarf galaxies in the halo of Centaurus A.

[REDACTED]
[REDACTED] 2014, The Astrophysical Journal Letters, 795, 35

*117. *The SAGES Legacy Unifying Globulars and GalaxieS Survey (SLUGGS): Sample definition, methods, and initial results.*

[REDACTED]
[REDACTED] 2014, The Astrophysical Journal,

796, 52

*116. A study of the 10830 He I line among red giants in Messier 13.

2014, Publications of the Astronomical Society of the Pacific, 126, 901

*115. *Nitrogen abundances and multiple stellar populations in the globular clusters of the Fornax dSph.*

2014, The Astrophysical Journal, 797, 15

*114. *The AIMSS project II: Dynamical-to-stellar mass ratios across the star cluster–galaxy divide.*

2014, Monthly Notices of the Royal Astronomical Society, 444, 2993

*113. Discovery of a new faint dwarf galaxy associated with NGC 253.

2014, The Astrophysical Journal Letters, 793, 7

*112. *The SLUGGS Survey: Wide-field Stellar Kinematics of Early-type Galaxies.*

2014, The Astrophysical Journal, 791, 80

*111. The most distant stars in the Milky Way.

2014, The Astrophysical Journal Letters, 790, 5

*110. *The AIMSS project I: Bridging the star cluster–galaxy divide.*

2014, Monthly Notices of the Royal Astronomical Society, 443, 1151

*109. *Kinematics and simulations of the stellar stream in the halo of the Umbrella Galaxy.*

2014, Monthly Notices of the Royal Astronomical Society, 442, 3544

*108. Structure and dynamics of the accretion process and wind in TW Hya.

2014, The Astrophysical Journal, 789, 27

*107. *The SLUGGS Survey: Exploring the metallicity gradients of nearby early-type galaxies to large radii.*

2014, Monthly Notices of the Royal Astronomical Society, 442, 1003

*106. AGN feedback in the hot halo of NGC 4649.

The Astrophysical Journal, 787, 134

*105. *Chemical composition and constraints on mass loss for globular clusters in dwarf galaxies: WLM and IKN.*

, Astronomy & Astrophysics, 565, 98

*104. *Ultracompact dwarfs in the Perseus Cluster: UCD formation via tidal stripping.*

Monthly Notices of the Royal Astronomical Society, 439, 3808

*103. The two-dimensional spatial distributions of the globular clusters and low-mass X-ray binaries of NGC 4649.

Astrophysical Journal, 783, 18

*102. Hunting the most distant stars in the Milky Way: Methods and initial results.

The Astronomical Journal, 147, 76

*101. *The radial distribution of X-ray binaries and globular clusters in NGC 4649 and their relation with the local stellar mass density.*

The Astrophysical Journal, 780, 132

*100. A panchromatic view of the restless SN 2009ip reveals the explosive ejection of a massive star envelope.

2013

*99. *The densest galaxy.*

2013, The Astrophysical Journal Letters, 775, 6

*98. A radio-selected black hole X-ray binary candidate in the Milky Way globular cluster M62.

The Astrophysical Journal, 777, 69

*97. *The SLUGGS survey: Wide field imaging of the globular cluster system of NGC 4278.*

, Monthly Notices of the Royal Astronomical Society, 436, 1172

*96. Star clusters in M31. V. Evidence for self-enrichment in old M31 clusters from integrated spectroscopy.

The Astrophysical Journal Letters, 776, 7

*95. *The SLUGGS survey: Outer triaxiality of the fast rotator elliptical NGC 4473.*

2013, Monthly Notices of the Royal Astronomical Society, 435, 3587

*94. A search for RR Lyrae stars in Segue 2 and Segue 3.

The Astronomical Journal, 146, 94

*93. The two-dimensional projected spatial distribution of globular clusters: Method and application to NGC 4261.

. 2013, The Astrophysical Journal, 773, 87

*92. *Filling the gap: A new class of old star cluster?*

Monthly Notices of the Royal Astronomical Society, 435, 6

*91. *The SLUGGS survey: Probing the supermassive black hole connection with bulges and haloes using red and blue globular cluster systems.*

. 2013, Monthly Notices of the Royal Astronomical Society, 433, 235

*90. *Deep Chandra monitoring observations of NGC 4649: I. Catalog of source prop-*

erties.

2013, The Astrophysical Journal Supplements, 204, 14

*89. *The SLUGGS survey: Kinematics for over 2500 globular clusters in twelve early-type galaxies.*

2013, Monthly Notices of the Royal Astronomical Society, 428, 389

2012

*88. Two stellar-mass black holes in the globular cluster M22.

2012, Nature, 490, 71

*87. *Deep Chandra monitoring observations of NGC 4649: II. Wide-field Hubble Space Telescope imaging of the globular clusters.*

2012, The Astrophysical Journal, 760, 87

*86. No evidence for intermediate-mass black holes in globular clusters: Strong constraints from the JVL.

2012, The Astrophysical Journal Letters, 750, 27

*85. Old massive globular clusters and the stellar halo of the dwarf starburst galaxy NGC 4449.

2012, The Astronomical Journal, 143, 52

*84. *Constraints on mass loss and self-enrichment scenarios for the globular clusters of the Fornax dSph.*

Astronomy & Astrophysics, 544, 14

*83. Tidal signatures in the faintest Milky Way satellites: The detailed properties of Leo V, Pisces II, and Canes Venatici II.

2012, The Astrophysical Journal, 756, 79

*82. “Galaxy”, defined.

The Astronomical Journal, 144, 76

*81. *The ongoing assembly of a central cluster galaxy: Phase-space substructures in the halo of M87.*

C. 2012, The Astrophysical Journal, 748, 29

*80. The $\lambda 10830$ He I absorption line among metal-poor subdwarfs.

2012, Publications of the Astronomical Society of the Pacific, 124, 1252

*79. *A variable ultraluminous X-ray source in a globular cluster in NGC 4649.*

2012, The Astrophysical Journal, 760, 135

*78. *The SLUGGS survey: NGC 3115, A critical test case for metallicity bimodality in globular cluster systems.*

, The Astrophysical Journal Letters, 759, 33

*77. *Detailed abundance analysis from integrated high-dispersion spectroscopy: Globular clusters in the Fornax dwarf spheroidal.*

Astronomy & Astrophysics, 546, A53

*76. *Radially extended kinematics of the S0 galaxy NGC 2768 from planetary nebulae, globular clusters and starlight.*

2012, Monthly Notices of the Royal Astronomical Society, 426, 975

*75. *The SLUGGS survey: Calcium triplet-based spectroscopic metallicities for over 900 globular clusters.*

, Monthly Notices of the Royal Astronomical Society, 426, 1475

*74. *The SLUGGS survey: Globular cluster system kinematics and substructure in NGC 4365.*

2012, Monthly Notices of the Royal Astronomical Society, 426, 1959

*73. *Evidence for inhomogeneous reionization in the local universe from metal-poor globular cluster systems.*

2012, Monthly Notices of the Royal Astronomical Society, 423, 2177

*72. *An optical/NIR survey of globular clusters in early-type galaxies. III. On the color bimodality of GC systems.*

██████████ Astronomy & Astrophysics, 539, 54

2011

*71. *Wide-field precision kinematics of the M87 globular cluster system.*

██
██ 2011, The Astrophysical Journal Supplements, 197, 33

*70. Star clusters in M31: V. Internal dynamical trends: Some troublesome, some reassuring.

██ The Astronomical Journal, 142, 8

*69. Direct evidence for an enhancement of helium in giant stars in Omega Centauri.

██ 2011, The Astrophysical Journal, 728, 155

*68. *The relationships among compact stellar systems: A fresh view of ultra-compact dwarfs.*

██ 2011, The Astronomical Journal, 142, 199

*67. *Hubble Space Telescope photometry of globular clusters in M81.*

██ 2011, The Astronomical Journal, 142, 183

*66. *Spectra of globular clusters in the Sombrero galaxy: Evidence for spectroscopic metallicity bimodality.*

██
2011, Monthly Notices of the Royal Astronomical Society, 417, 1823

*65. Willman 1 - A probable dwarf galaxy with an irregular kinematic distribution.

██
A. 2011, The Astronomical Journal, 142, 128

*64. *The globular cluster population of NGC 7457: Clues to the evolution of field S0 galaxies.*

██ 2011, The Astrophysical Journal, 738, 113

*63. *The fossil record of two-phase galaxy assembly: Kinematics and metallicities in the nearest S0 galaxy.*

██
██ 2011, The Astrophysical Journal Letters, 736, 26

*62. *Global properties of “ordinary” early-type galaxies: Photometry and spectroscopy of stars and globular clusters in NGC 4494.*

[REDACTED]
[REDACTED] 2011, Monthly Notices of the Royal Astronomical Society, 415, 3393

*61. *Evidence for two phases of galaxy formation from radial trends in the globular cluster system of NGC 1407.*

[REDACTED]. 2011, Monthly Notices of the Royal Astronomical Society, 413, 2943

*60. *An optical/NIR survey of globular clusters in early-type galaxies. II. Ages of GC systems and the relation to galaxy morphology.*

[REDACTED]
[REDACTED] Astronomy & Astrophysics, 525, 20

*59. *An optical/NIR survey of globular clusters in early-type galaxies. I. Introduction and data reduction procedures.*

[REDACTED]
2011, Astronomy & Astrophysics, 525, 19

2010

*58. *Deriving metallicities from the integrated spectra of extragalactic globular clusters using the near-infrared calcium triplet.*

[REDACTED]
Astronomical Journal, 139, 1566

*57. *Star cluster candidates in M81.*

[REDACTED] The Astronomical Journal, 139, 1413

*56. *A blue tilt in the globular cluster system of the Milky Way-like galaxy NGC 5170.*

[REDACTED]
Monthly Notices of the Royal Astronomical Society, 403, 429

*55. *An HST/WFPC2 survey of bright young clusters in M31. IV. Ages and mass estimates.*

[REDACTED]
[REDACTED]
[REDACTED] 2010, Astronomy & Astrophysics, 511, 23

2009

*54. *Mass-to-light ratios for M31 globular clusters: Age dating and a surprising metallicity trend.*

[REDACTED] 2009, The Astronomical Journal, 138, 547

*53. *Mapping the dark side with DEIMOS: Globular clusters, X-ray gas, and dark matter in the NGC 1407 group.*

██████████ 009, The Astronomical Journal, 137, 4956

*52. *An HST/WFPC2 survey of bright young clusters in M31. III. Structural parameters.*

██████████ 009, The Astronomical Journal, 138, 1667

*51. Fast winds and mass loss from metal-poor field giants.

██████████ 2009, The Astronomical Journal, 138, 1485

*50. A survey of ultraviolet-bright sources behind the halo of M31.

██████████ 2009, Monthly Notices of the Royal Astronomical Society, 399, 728

*49. *Probing the 2D kinematic structure of early-type galaxies out to three effective radii.*

██████████ Monthly Notices of the Royal Astronomical Society, 398, 91

*48. An HST/WFPC2 survey of bright young clusters in M31. II. Photometry of less luminous clusters in the fields.

██████████ 2009, The Astronomical Journal, 138, 770

*47. *Evidence for the disk origin of luminous Virgo dwarf ellipticals from the kinematics of their globular cluster systems.*

██████████, The Astronomical Journal, 137, 5146

*46. *An ultra-compact dwarf around the Sombrero galaxy (M104): the nearest massive UCD.*

██████████ 2009, Monthly Notices of the Royal Astronomical Society, 394, 97

*45. The least-luminous galaxy: Spectroscopy of the Milky Way satellite Segue 1.

██████████. 2009, The Astrophysical Journal, 692, 1464

*44. *An HST/WFPC2 survey of bright young clusters in M31. I. VdB0, a massive star cluster seen at $t \sim 25$ Myr.*

██████████ 2009, *Astronomy & Astrophysics*, 494, 933

2008

*43. A probable new globular cluster in the Galactic disk.

██████████ 2008, *The Astronomical Journal*, 136, 2102

*42. The origin of the blue tilt in extragalactic globular cluster systems.

██████████ 2008, *The Astronomical Journal*, 136, 1828

*41. A glimpse into the past: The recent evolution of globular clusters.

██████████ 2008, *The Astrophysical Journal*, 682, 37

*40. *The peculiar globular cluster system of the S0 galaxy NGC 7457.*

██████████ 2008, *The Astronomical Journal*, 136, 234

*39. *Keck spectroscopy of globular clusters in the spiral galaxy NGC 2683.*

██████████ 2008, *Monthly Notices of the Royal Astronomical Society*, 385, 1709

*38. *The connection between globular cluster systems and their host galaxy and environment: A case study of the isolated elliptical NGC 821.*

██████████ 2008, *Monthly Notices of the Royal Astronomical Society*, 385, 361

2007

*37. *Globular cluster metallicity subpopulations in NGC 4472.*

██████████ *The Astronomical Journal*, 133, 2015

*36. Integrated colors of globular clusters and horizontal branch morphology.

██████████ 2007, *Astronomische Nachrichten*, 328, 107

*35. Carbon isotope ratios on the upper red giant branch of Messier 71.

██████████. 2007, *Publications of the Astronomical Society of the Pacific*, 119, 722

*34. *Stellar populations of globular clusters in the elliptical galaxy NGC 1407.*

██████████ *The Astronomical Journal*, 134, 391

*33. *Spatially resolved spectroscopy of early-type galaxies over a range in mass.*

██████████ *Monthly Notices of the Royal Astronomical Society*, 377, 759

*32. The N2K consortium. VII. Atmospheric parameters of 1907 metal-rich stars: Finding planet-search targets.

██
██ 2007, The Astrophysical Journal Supplements, 169, 430

*31. *Damp mergers: Recent gaseous mergers without significant globular cluster formation?*

██ The Astrophysical Journal, 659, 188

2006

*30. *Globular clusters in Virgo ellipticals: Unexpected results for giants and dwarfs from ACS imaging.*

██ The Astronomical Journal, 132, 2333

*29. *Extragalactic globular clusters and galaxy formation.*

██ Annual Reviews of Astronomy & Astrophysics, 44, 193

*28. The N2K consortium. V. Identifying very metal-rich stars with low-resolution spectra: Finding planet-search targets.

██ The Astrophysical Journal, 637, 1102

*27. *The globular cluster system of the Virgo dwarf elliptical galaxy VCC 1087.*

██ 2006, The Astronomical Journal, 131, 814

*26. *HST/ACS wide-field photometry of the Sombbrero galaxy globular cluster system.*

██ 2006, The Astronomical Journal, 132, 1593

*25. ChaMPlane discovery of candidate symbiotic binaries in Baade's and Stanek's windows.

██
██ The Astrophysical Journal Letters, 647, 135

*24. *An imaging study of the globular cluster systems of NGC 1407 and NGC 1400.*

██
Monthly Notices of the Royal Astronomical Society, 366, 1230

*23. The N2K consortium. IV. New temperatures and metallicities for 100, 000+ FGK dwarfs.

[REDACTED] The Astrophysical Journal Supplements, 638, 1004

*22. The N2K consortium. III. Short-period planets orbiting HD 149143 and HD 109749.

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

2005

*21. *Extragalactic globular clusters: Old spectroscopic ages and new views on their formation.*

[REDACTED] The Astronomical Journal, 130, 1315

*20. *Old globular clusters masquerading as young in NGC 4365?*

[REDACTED]
[REDACTED] 2005, The Astronomical Journal, 129, 2643

*19. The N2K consortium. II. A transiting hot saturn around HD 149026 with a large dense core.

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

*18. *Globular clusters in NGC 4365: New K-band imaging and a reassessment of the case for intermediate-age clusters.*

[REDACTED]. 2005, Astronomy & Astrophysics, 443, 413

*17. A hot wind from classical T Tauri Stars: TW Hydrae and T Tauri.

[REDACTED] The Astrophysical Journal Letters, 625, 131

*16. *Evolutionary history of the elliptical galaxy NGC 1052.*

[REDACTED] Monthly Notices of the Royal Astronomical Society, 358, 419

*15. *The chemical properties of Milky Way and Andromeda globular clusters: II. Stellar population model predictions.*

[REDACTED]
[REDACTED] 2005, The Astronomical Journal, 129, 1412

Journal, 125, 626

*3. Hubble Space Telescope observations of globular cluster systems along the Hubble sequence of spiral galaxies.

2003, Monthly Notices of the Royal Astronomical Society, 343, 665

*2. *Galaxy disruption in a halo of dark matter.*

2003, Science, 301, 1217

2002

*1. Variable stars in the core of the globular cluster M3.

S., 2002, Monthly Notices of the Royal Astronomical Society, 335, 621

Conference Proceedings, Telegrams, and Non-Refereed Publications

31. Photometric Follow-Up of A Likely Galactic Nova ASASSN-16kt: Almost Naked Eye.

The Astronomer's Telegram, 9550

30. ASAS-SN Discovery of A Likely Galactic Nova ASASSN-16kt at V=9.1.

2016, The Astronomer's Telegram, 9539

29. ATLAS16crq is a faint, fast Galactic nova.

Brimacombe, J. 2016, The Astronomer's Telegram, 9518

28. Spectroscopic classification of ASASSN-16kb and ASASSN-16kd as highly reddened Galactic novae.

, The Astronomer's Telegram, 9479

27. ASAS-SN Discovery of A Likely Galactic Nova ASASSN-16kd.

2016, The Astronomer's Telegram, 9469

26. ASAS-SN Discovery of A Likely, Heavily-Obscured Galactic Nova

ASASSN-16ig.

2016, The Astronomer's Telegram, 9343

25. Spectroscopic Classification of ASASSN-16gp as a Type Ia SN.

2016, The Astronomer's Telegram, 9233

24. ASASSN-16do confirmed as high inclination, low mass ratio CV.

2016, The Astronomer's Telegram, 8987

23. Chandra identification of the X-ray transient MAXI J0911-635/Swift J0911.9-6452 in NGC 2808.

Astronomer's Telegram, 8971

22. Spectroscopic classification of ASASSN-16do as a CV.

2016, The Astronomer's Telegram, 8969

21. ASASSN-16eo: Discovery of a supernova in an uncatalogued galaxy.

. 2016, The Astronomer's Telegram, 8965

20. Radio non-detection during nearly-simultaneous Swift/XRT observations of MAXI J0911-635/Swift J0911.9-6452 in NGC 2808.

2016, The Astronomer's Telegram, 8914

19. Spectroscopic classification of ASASSN-16cu as a Type Ia SN.

The Astronomer's Telegram, 8880

18. Observations of Nova Oph 2016 in ASAS-SN's recent expansion to the Galactic Bulge.

2016, The Astronomer's Telegram, 8841

17. VLA observations identify the currently active source in Terzan 5 as the neutron star transient EXO 1745-248.

2015, The Astronomer's Telegram, 7262

██████████ 2010, in AIP Conference Proceedings 1240, Hunting for the Dark: The Hidden Side of Galaxy Formation, ed. ██████████ (American Institute of Physics), 339

6. *An optical/near-infrared survey of GCs in early-type galaxies.*

██████████ in Proceedings of IAU Symposium #266, Star clusters: basic galactic building blocks throughout time and space, ██████████ (Cambridge University Press: Cambridge), 184

5. LSST Science Book, Version 2.0.

The LSST Science Collaboration ██████████ 2009, arXiv:0912.0201

4. *Stellar populations of globular clusters in NGC 1407.*

██████████ ESO Astrophysics Symposium, ██████████ (Springer: Berlin), 293

3. Intermediate-age globular clusters in M31.

██████████ in ESO Astrophysics Symposia, Globular Clusters—Guides to Galaxies ed. ██████████ (Berlin), 203

2. *Extragalactic globular clusters: Unraveling galaxy formation and constraining stellar evolution theories.*

██████████ 2007, in Proceedings of IAU Symposium #241, Stellar Populations as Building Blocks of Galaxies, ██████████ (Cambridge University Press: Cambridge), 445

1. *Stellar population gradients in early-type galaxies.*

██████████ in Proceedings of IAU Symposium #241, Stellar Populations as Building Blocks of Galaxies, ██████████ University Press: Cambridge), 391

FORM D - IV B RESEARCH AND CREATIVE ACTIVITIES

2. Quantity of Research/Creative Works Produced:

For each of the categories listed in question one above, list the number of research and creative works produced.

	1	2	3	4	5	6	7	8
During the reporting period				49	17			
During career				171	31			

3. Number of Grants Received (primarily in support of research and creative activities; refer to Form D-IVE):

During the reporting period: 10 During career: 14

4. Other Evidence of Research/Creative Activity:

Cite other evidence of research and creative productivity such as: seminars, colloquia, invited papers; works/grants in progress or under review (refer to Form D-IVE); patents; formation of research-related partnerships with organizations, industries, or communities; curatorial and patient care activities, etc. Include evidence of peer recognition (within and outside the university).

Invited Talks and Seminars (since 2010)

Conference Talks

1. Packard Fellows Meeting 2016 (Monterey, CA ; Sept 2016)
2. Star Clusters as Cosmic Laboratories for Astrophysics, Dynamics, and Fundamental Physics (Bologna, Italy ; April 2016)
3. Astrophysics at Mayacamas Ranch (Calistoga, CA ; April 2016)
4. Globular Clusters and Galaxy Halos (Leiden, Netherlands ; Feb 2016)
5. Satellites and Streams in Santiago (Santiago, Chile ; April 2015)
6. Ultra-Compact Binaries as Laboratories for Fundamental Physics (Aspen, CO ; June 2014)
7. The Dance of Stars (Bad Honnef, Germany ; June 2014)
8. ICNT 2013 (East Lansing, MI ; Aug 2013)
9. Small Stellar Systems in Tuscany (Prato, Italy ; June 2013)
10. SnowPAC 2013 (Snowmass, UT ; Mar 2013)
11. MODEST-12 (Kobe, Japan ; Aug 2012)-two talks
12. The Future of Astronomy (Evanston, IL ; Sept 2011)
13. Stellar and Intermediate Mass Black Holes (Aspen, CO ; June 2011)
14. Hubble Fellows Symposium (Baltimore, MD ; Mar 2010)

Seminars and Colloquia

1. University of California-Los Angeles (May 2016)
2. Texas Tech University (Mar 2016)
3. Curtin University, Perth (July 2015)
4. Northwestern University (May 2015)
5. Columbia University (Oct 2014)

FORM D - IV B RESEARCH AND CREATIVE ACTIVITIES

6. Wayne State University (Sept 2014)
7. Indiana University (May 2014)
8. University of Notre Dame (Feb 2014)
9. University of Pittsburgh (Oct 2013)
10. Liverpool John Moores University (July 2013)
11. University of Western Ontario (Dec 2012)
12. University of Michigan (Oct 2012)
13. Michigan State University (Feb 2012)
14. Harvard-Smithsonian Center for Astrophysics (Nov 2011)
15. Brown University (Nov 2011)
16. Space Telescope Science Institute (Mar 2010)
17. Northwestern University (Mar 2010)
18. Harvard-Smithsonian Center for Astrophysics (Feb 2010)

COLLEGE OF NATURAL SCIENCE

Funded Grants Only

Title	Principal Investigator	Co-Principal Investigators	Awarding Agency	Effective Dates	Total Amount Awarded Including Indirect Costs	Total Amount Awarded to Candidate Including Indirect Costs	Indirect Cost Rate	Nature of Candidate's Participation (if not P.I.)
The Comprehensive VLA Survey for Black Holes in Globular Clusters	████████		NASA	10/1/16-9/30/17	\$23,500		55%	
Dynamical Confirmation of a Stellar- mass Black Hole in the Globular Cluster M62	████████		NASA	8/1/16-7/31/19	\$79,166		53.5%	
Confirmation of the First Ultra-compact Black Hole X-ray Binary		████████ ██████	NASA	7/1/16-6/30/19		\$37,479	53.5%	
A Candidate Transitional Millisecond Pulsar with a Giant Secondary	████████		NASA	6/8/16-6/7/18	\$42,262		53.5%	
Uncovering Fermi Galactic Binaries with SOAR Spectroscopy	████████		NASA	1/1/16-12/31/17	\$119,997		55%	
X-ray Observations of New Gamma-Ray Bright Galactic Compact Binaries	████████		NASA	11/9/15-1/22/18	\$90,944		53.5%	
Black Holes in Globular Star Cluster	████████		Packard Foundation	11/5/15-10/31/20	\$875,000			

Title	Principal Investigator	Co-Principal Investigators	Awarding Agency	Effective Dates	Total Amount Awarded Including Indirect Costs	Total Amount Awarded to Candidate Including Indirect Costs	Indirect Cost Rate	Nature of Candidate's Participation (if not P.I.)
A Black Hole in the Galactic Globular Cluster M10			NASA	9/1/15-10/20/17	\$33,606		53.5%	
Collaborative Research: Rethinking the Fundamentals of Massive Star Clusters			NSF	7/1/15-6/30/18		\$212,591	53.5%	
A Direct Distance to an Ancient Metal-Poor Star Cluster			NASA	11/1/14-10/31/17		\$6898	53.5%	
Candidate Black Holes in a Galactic Globular Cluster			NASA	5/22/14-11/24/16	\$46,424		53.5%	
Do the Globular Clusters in the fornax dSph have multiple stellar populations?			NASA	11/1/13-10/31/16		\$36,374	53.5%	
Black Holes in Globular Clusters			NSF	9/1/13-8/31/17	\$268,339		53.5%	
A Chandra Legacy Project to Resolve the Accretion Flow of Gas Captured by a Supermassive Black Hole			NASA	3/1/13-2/29/16		\$37,467	53.5%	
The First Unambiguous Detection of a Distinct Metal-poor Stellar Halo in a Massive Early-type Galaxy			NASA	10/1/12-10/31/15	\$91,839		53.5%	

[To add another row to the table, push the tab key in the very last cell.]

From the *CNS P&T Guidelines* revised November 21, 2013:

*A list of all the candidate's funded grants (using the *CNS Funded Grants Only* worksheet) including the following in order: title, principal investigator, all co-principal investigators (unless prohibitively many), awarding agency, effective dates, total amount awarded, *total amount awarded to the candidate*, whether these amounts include indirect costs or not, and *the nature of the candidate's participation in the grant if not P.I.*

FORM D - IV C SERVICE WITHIN THE ACADEMIC AND BROADER COMMUNITY

1. Service within the Academic Community

a. Service to Scholarly and Professional Organizations:

List significant committee/administrative responsibilities in support of scholarly and professional organizations (at the local, state, national, and international levels) including: elected and appointed offices held; committee memberships and memberships on review or accreditation teams; reports written and submitted; grants received in support of the organization (refer to Form D-IVE); editorial positions, review boards and ad hoc review requests; and programs and conferences planned and coordinated, coordinated or served on a panel or chaired a session. Include evidence of contributions (e.g., evaluations by affected groups or peers).

Professional Activities and Service

Chair, Star Clusters Science Subgroup for Large Synoptic Survey Telescope 2013-
Scientific Organizer, Sexten Center for Astrophysics Conf. on Globular Clusters, Sesto, Italy, 2017
Member, National Science Foundation Review Panel. 2015, 2016
External Reviewer, Cycle 24 Hubble Space Telescope Proposal Review, 2016
Scientific Organizer, Conf. on Globular Clusters and Galaxy Halos, Leiden, Netherlands, 2016
Member, Cycle 23 Hubble Space Telescope Review Panel. 2015
Principal Organizer, Compact Objects in Michigan" conference, East Lansing, MI, 2014
Judge, AAS Duxsey Travel Prize 2013, 2014
Member, Cycle 19 Hubble Space Telescope Review Panel. 2011
Organizer, OIR Seminar, Harvard/CfA. 2010-2012
Member, Stars, Milky Way, and Local Volume Science Working Group for Large Synoptic Survey Telescope. 2008-
Referee, The Astrophysical Journal, The Astrophysical Journal Letters, The Astronomical Journal, Astronomy & Astrophysics, Monthly Notices of the Royal Astronomical Society. 2004-
Proposal Review, Gemini, CFHT, Chilean FONDECYT, Chinese Telescope Access Program, Swiss NSF. 2004-

b. Service within the University:

List significant committee/administrative responsibilities and contributions within the University. Include service that advances the University's equal opportunity/affirmative action commitment. Committee service includes: appointed and elected university, college, and department ad hoc or standing committees, grievance panels, councils, task forces, boards, or graduate committees. Administrative responsibilities include: the direction/coordination of programs or offices; admissions; participation in special studies or projects; collection development, care and use; grants received in support of the institution (refer to Form D-IVE), etc. Describe roles in any major reports issued, policy changes recommended and implemented, and administrative units restructured. Include evidence of contributions (e.g., evaluations by peers and affected groups).

Department and university committees

Member, University Committee on Faculty Tenure, MSU. 2015 -
Member, Search Committee for NSCL Faculty Position, MSU. 2015-2016
Organizer, AST Seminar, MSU. 2012-2015
Member, Graduate Recruiting & Program Committee, MSU. 2012-2015
Creator and Organizer, AST journal club, MSU. 2012-
Member, MSU Thesis Committees () 2013-

FORM D - IV C SERVICE WITHIN THE ACADEMIC AND BROADER COMMUNITY, continued

2. Service within the Broader Community:

As a representative of the University, list significant contributions to local, national, or international communities that have not been listed elsewhere. This can include (but is not restricted to) outreach, MSU Extension, Professional and Clinical Programs, International Studies and Programs, and Urban Affairs Programs. Appropriate contributions or activities may include technical assistance, consulting arrangements, and information sharing; targeted publications and presentations; assistance with building of external capacity or assessment; cultural and civic programs; and efforts to build international competence (e.g., acquisition of language skills). Describe affected groups and evidence of contributions (e.g., evaluations by affected groups; development of innovative approaches, strategies, technologies, systems of delivery; patient care; awards). List evidence, such as grants (refer to Form D-IVE), of activity that is primarily in support of or emanating from service within the broader community.

Public Outreach

Talk to MSU Astronomy Club, Feb 2015, East Lansing, MI
Week of guest tweeting from @astrotweeps account (> 4k followers), Feb 2015
Public talk, Oct 2014, Abrams Planetarium, East Lansing, MI
Public talk, May 2014, Kalamazoo Astronomical Society, Kalamazoo, MI
Volunteer Docent at MSU Observatory, Apr 2014, MSU Science Festival
Public talk, Oct 2013, University Lowbrow Astronomers, Ann Arbor, MI
Public talk, Feb 2013, Abrams Planetarium, East Lansing, MI

FORM D - IV D ADDITIONAL REPORTING

1. **Evidence of Other Scholarship:**

Cite evidence of “other” scholarship as specified on p. 2 in the “summary rating” table (i.e., functions outside of instruction, research and creative activity, and service within the academic and broader community). Address the scholarship, significance, impact, and attention to context of these accomplishments.

None

2. **Integration across Multiple Mission Functions:**

Discuss ways that your work demonstrates the integration of scholarship across the mission functions of the university—instruction, research and creative activities, and service within the academic and broader community.

None

3. **Other Awards/Evidence:**

Cite other distinctive awards, accomplishments of sabbatical or other leaves, professional development activities, and any other evidence not covered in the preceding pages. (If the reporting period differs from the usual review period, then justify and support that period here.)

None

FORM D - IV E GRANT PROPOSALS

List grant proposals submitted during reporting period relating to teaching, research and creative activities, or service within the academic and broader community. Include grants in support of outreach, international, urban, and extension activities.*

See next page

*Anyone with an MSU Net username and password can log onto the web-based Information Reference database, maintained by the Office of Contract and Grant Administration, to search for records of proposals and grant awards by principal investigator. Printouts may be attached to this page.

Grants

Funded Grants

Title	PI	Agency	Dates	Amount to [REDACTED]	Role
"The Comprehensive VLA Survey for Black Holes in Globular Clusters"	[REDACTED]	NASA	10/1/16 - 9/30/17	\$23500	PI
"Dynamical Confirmation of a Stellar-mass Black Hole in the Globular Cluster M62"	[REDACTED]	NASA	8/1/16 - 7/31/19	\$79166	PI
"Confirmation of the First Ultra-compact Black Hole X-ray Binary"	[REDACTED]	NASA	7/1/16 - 6/30/19	\$37479	co-I
"A Candidate Transitional Millisecond Pulsar with a Giant Secondary"	[REDACTED]	NASA	6/8/16 - 6/7/18	\$42262	PI
"Uncovering Fermi Galactic Binaries with SOAR Spectroscopy"	[REDACTED]	NASA	1/1/16 - 12/31/17	\$119997	PI
"X-ray Observations of New Gamma-Ray Bright Galactic Compact Binaries"	[REDACTED]	NASA	11/9/15 - 1/22/18	\$90944	PI
"Black Holes in Globular Star Clusters"	[REDACTED]	Packard Found.	11/5/15 - 10/31/20	\$875000	PI
"A Black Hole in the Galactic Globular Cluster M10"	[REDACTED]	NASA	9/1/15 - 10/20/17	\$33606	PI
"Collaborative Research: Rethinking the Fundamentals of Massive Star Clusters"	[REDACTED] (co-PIs)	NSF	7/1/15 - 6/30/18	\$212591	PI
"A Direct Distance to an Ancient Metal-Poor Star Cluster"	[REDACTED]	NASA	11/1/14 - 10/31/17	\$6898	co-I
"Candidate Black Holes in a Galactic Globular Cluster"	[REDACTED]	NASA	5/22/14 - 11/24/16	\$46424	PI
"Do the Globular Clusters in the Fornax dSph have multiple stellar populations?"	[REDACTED]	NASA	11/1/13 - 10/31/16	\$36374	co-I
"Black Holes in Globular Clusters"	[REDACTED]	NSF	9/1/13 - 8/31/17	\$268339	PI
"A Chandra Legacy Project to Resolve the Accretion Flow of Gas Captured by a Supermassive Black Hole"	[REDACTED]	NASA	3/1/13 - 2/29/16	\$37467	co-I
"The First Unambiguous Detection of a Distinct Metal-poor Stellar Halo in a Massive Early-type Galaxy"	[REDACTED]	NASA	10/1/12 - 10/31/15	\$91839	PI

Pending Grants

Title	PI	Agency	Dates	Amount to [REDACTED]	Role
"A Year in the Whirlpool"	[REDACTED]	[REDACTED]	5/1/17 - 4/30/19	\$39564	co-I

Declined Grants

Title	PI	Agency	Dates	Amount to [REDACTED]	Role
"Black Holes in Galactic Globular Clusters"	[REDACTED]	NASA	1/1/16 - 12/31/18	\$275715	PI
"Black Holes in Galactic Globular Clusters"	[REDACTED]	NASA	1/1/15 - 12/31/17	\$273384	PI
"Collaborative Research: Rethinking the Fundamentals of Massive Star Clusters"	[REDACTED]	NSF	7/1/14 - 6/30/17	\$214204	PI
"Black Holes in Galactic Globular Clusters"	[REDACTED]	NASA	1/1/14 - 12/31/16	\$222716	PI