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EDUCATION

- 1999 Ph.D., Astronomy, California Institute of Technology,
“Brown Dwarf Companions of Nearby Stars,” Advisor: S. R. Kulkarni
 - 1994 B.A., Physics, Columbia College, Columbia University
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AWARDS AND HONORS

- 2009 Blavatnik Award for Young Scientists, New York Academy of Sciences
 - 2003 Carter Memorial Lecturer, Carter Observatory, Wellington, New Zealand
 - 2002-2004 Kalbfleisch Research Fellowship, American Museum of Natural History
 - 2002 National Academies of Science, Beckman Frontiers of Science, Invited Participant
 - 1999-2002 Hubble Postdoctoral Research Fellowship
 - 1994-1997 National Science Foundation Graduate Research Fellowship
 - 1990-1994 I.I. Rabi Science Scholar, Columbia University
 - 1990 Westinghouse Science Competition, Honorable Mention
 - 1989 New York Academy of Sciences Science Writing Competition, First Place
-

EMPLOYMENT

- 2013-present Curator, Department of Astrophysics, American Museum of Natural History
 - 2008-present Associate Curator, Department of Astrophysics, American Museum of Natural History
 - 2004-2008 Assistant Curator, Department of Astrophysics, American Museum of Natural History
 - 2002-2004 Research Fellow, American Museum of Natural History
 - 1999-2002 Hubble Research Fellow, University of California-Berkeley, AMNH
 - 1994-1997 Graduate Research Fellow, California Institute of Technology, with Kulkarni
 - 1993-1994 Instructor, Barnard College Physics Department, History of Physics
 - 1993-1995 Instructor, Columbia University Summer Program for High School Students
 - 1993 Summer Research Student, Nat’l Astronomy and Ionosphere Center, Arecibo, PR
 - 1992 Summer Research Student, Nat’l Radio Astronomy Obs., Very Large Array
 - 1991-1994 Research Assistant, Columbia Astrophysics Laboratory, Advisor: D. J. Helfand.
 - 1988-1991 Research Assistant, NASA Goddard Institute for Space Studies (GISS)
 - 1988 New York Academy of Sciences Summer Student: NASA GISS
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MEMBERSHIPS

- American Astronomical Society
 - SPIE International Society for Optical Engineering
-

APPOINTMENTS AND ELECTED POSITIONS

- Visiting Scientist, Institute of Astronomy, Cambridge University, 2004, 2006, 2010
 - Secretary, Senate of the Scientific Staff, American Museum of Natural History, 2008-2010
 - Vice Chair, Senate of the Scientific Staff, American Museum of Natural History, 2010-2012
 - Chair, Senate of the Scientific Staff, American Museum of Natural History, 2012-2014
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CATEGORY I: SCIENTIFIC RESEARCH

CATEGORY	CAREER TOTAL
Peer Reviewed/Refereed Publications	
Journal Articles	53 (12)
Patents	3 (2)
Refereed Book Chapters	14 (6)
SPIE Papers [†]	31 (5)
Peer-Reviewed Grants	23 (15)
<i>Totals</i>	<i>124 (40)</i>
Non-Refereed Publications	
Conference Proceedings	43 (7)
Policy White Papers	8 (0)
Encyclopedia Articles	5 (5)
<i>Totals</i>	<i>56 (12)</i>

First author publications are indicated in parentheses. h-factor = 27 as of May 2014.

[†]SPIE papers are instrumentation papers. While not anonymously refereed, they are refereed by the editors of the volume (who are experts in the field) and are full, final references, sometimes widely cited, in the field of astronomical instrumentation.

Please note, prior to July 2014 publications were under the name B. R. or Ben R. Oppenheimer.

REFEREED PUBLICATIONS

Refereed Journal Articles:

Note: All lists in Category I efforts are arranged with the most recent item first. In Categories II and III, the lists are with most recent item last. For the refereed publications, I indicate relative weighting in brackets: 1 = major contribution, 2 = equal contribution, 3 = small but significant contribution, 4 = very minor contribution. Those that I consider to be my most important contributions to the field are marked with an asterix:

1. “The Gemini Planet Imager: First Light” by Macintosh, Bruce, Graham, James R., Ingraham, Patrick, Konopacky, Quinn, Marois, Christian, Perrin, Marshall, Poyneer, Lisa, Bauman, Brian, Barman, Travis, Burrows, Adam, Cardwell, Andrew, Chilcote, Jeffrey, De Rosa, Robert J., Dillon, Daren, Doyon, Rene, Dunn, Jennifer, Erikson, Darren, Fitzgerald, Michael, Gavel, Donald, Goodsell, Stephen, Hartung, Markus, Hibon, Pascale, Kalas, Paul G., Larkin, James, Maire, Jerome, Marchis, Franck, Marley, Mark, McBride, James, Millar-Blanchaer, Max, Morzinski, Katie, Norton, Andrew, Oppenheimer, B. R., Palmer, Dave, Patience, Jennifer, Pueyo, Laurent, Rantakyro, Fredrik, Sadakuni, Naru, Saddlemyer, Leslie, Savransky, Dmitry, Serio, Andrew, Soummer, Remi, Sivaramkrishnan, Anand, Song, Inseok, Thomas, Sandrine, Wallace, J.

Kent, Wiktorowicz, Sloane, Wolff, Schuyler, *Proceedings of the National Academy of Sciences*, in press (arXiv:1403.7520; May 2014).

2. “The κ Andromedae System: New Constraints on the Companion Mass, System Age, and Further Multiplicity” by Hinkley, Sasha, Pueyo, Laurent, Faherty, Jacqueline K., Oppenheimer, B. R., Mamajek, Eric E., Kraus, Adam L., Rice, Emily L., Ireland, Michael J., David, Trevor, Hillenbrand, Lynne A., Vasisht, Gautam, Cady, Eric, Brenner, Douglas, Veicht, Aaron, Nilsson, Ricky, Zimmerman, Neil, Parry, Ian R., Beichman, Charles, Dekany, Richard, Roberts, Jennifer E., Roberts, Lewis C., Jr., Baranec, Christoph, Crepp, Justin R., Burruss, Rick, Wallace, J. Kent, King, David, Zhai, Chengxing, Lockhart, Thomas, Shao, Michael, Soummer, Rémi, Sivaramakrishnan, Anand, Wilson, Louis A., *The Astrophysical Journal*, Vol. 779, pp. 153-168 (December 2013). [1]
3. * “Reconnaissance of the HR 8799 Exosolar System. I. Near-infrared Spectroscopy” by B. R. Oppenheimer, Baranec, C., Beichman, C., Brenner, D., Burruss, R., Cady, E., Crepp, J. R., Dekany, R., Fergus, R., Hale, D., Hillenbrand, L., Hinkley, S., Hogg, David W., King, D., Ligon, E. R., Lockhart, T., Nilsson, R., Parry, I. R., Pueyo, L., Rice, E., Roberts, J. E., Roberts, L. C., Jr., Shao, M., Sivaramakrishnan, A., Soummer, R., Truong, T., Vasisht, G., Veicht, A., Vescelus, F., Wallace, J. K., Zhai, C., Zimmerman, N., *Astrophysical Journal*, Vol. 768, pp. 24-41 (May 2013). [1]
4. “High Resolution Infrared Imaging and Spectroscopy of the Z Canis Majoris System During Quiescence and Outburst” by S. Hinkley, L. A. Hillenbrand, B. R. Oppenheimer, E. L. Rice, L. Pueyo, G. Vasisht, N. T. Zimmerman, A. L. Kraus, M. J. Ireland, D. Brenner, C. A. Beichman, R. G. Dekany, J. E. Roberts, I. R. Parry, L. C. Roberts Jr, J. R. Crepp, R. Burruss, J. K. Wallace, E. Cady, C. Zhai, M. Shao, T. G. Lockhart, R. Soummer, A. Sivaramakrishnan, *Astrophysical Journal Letters*, Vol. 763, pp. L9-L13 (January 2013). [2]
5. “Constraining mass ratio and extinction in the FU Orionis binary system with infrared integral field spectroscopy” by L. Pueyo, L. Hillenbrand, G. Vasisht, B. R. Oppenheimer, J. Monnier, S. Hinkley, J. Crepp, L. C. Roberts Jr, D. Brenner, N. Zimmerman, I. Parry, C. Beichman, R. Dekany, M. Shao, R. Burruss, E. Cady, J. Roberts, R. Soummer, *Astrophysical Journal*, Vol. 757, pp. 57-68 (September 2012). [2]
6. “Spectral Typing of Late Type Stellar Companions to Young Stars from Low Dispersion Near-Infrared Integral Field Unit Data” by Roberts, L. C., Jr, E. L. Rice, C. A. Beichman, D. Brenner, R. Burruss, J. R. Crepp, R. G. Dekany, L. A. Hillenbrand, S. Hinkley, E. R. Ligon, T. G. Lockhart, D. King, S. Metchev, B. R. Oppenheimer, I. R. Parry, L. Pueyo, J. E. Roberts, M. Shao, A. Sivaramakrishnan, R. Soummer, G. Vasisht, F. E. Vescelus, J. K. Wallace, N. T. Zimmerman, & C. Zhai, *Astronomical Journal*, Vol. 144, pp. 14-25 (July 2012). [2]
7. “Application of a Damped Locally Optimized Combination of Images Method to the Spectral Characterization of Faint Companions Using an Integral Field Spectrograph” by Pueyo, L., J. R. Crepp, G. Vasisht, D. Brenner, B. R. Oppenheimer, N. Zimmerman, S. Hinkley, I. Parry, C. Beichman, L. Hillenbrand, L. C. Roberts, R. Dekany, M. Shao, R.

- Burruss, A. Bouchez, J. Roberts, & R. Soummer, *The Astrophysical Journal Supplement Series*, Vol. 199, pp. 6-23 (March 2012). [3]
8. “A Data Cube Extraction Pipeline for a Coronagraphic Integral Field Spectrograph” by Zimmerman, N., D. Brenner, B. R. Oppenheimer, I. R. Parry, S. Hinkley, S. Hunt, & R. Roberts. 2011. *Publications of the Astronomical Society of the Pacific*, 123: 746. (June 2011). [1]
 9. “Apodized Pupil Lyot Coronagraphs for Arbitrary Apertures. III. Quasi-achromatic Solutions” by Soummer, R., A. Sivaramakrishnan, L. Pueyo, B. Macintosh, & B. R. Oppenheimer. 2011. *The Astrophysical Journal*, 729: 144 (March 2011). [3]
 10. “Speckle Suppression with the Project 1640 Integral Field Spectrograph” by Crepp, J. R., L. Pueyo, D. Brenner, B. R. Oppenheimer, N. Zimmerman, S. Hinkley, I. Parry, D. King, G. Vasisht, C. Beichman, L. Hillenbrand, R. Dekany, M. Shao, R. Burruss, L. C. Roberts, A. Bouchez, J. Roberts, & R. Soummer. 2011. *The Astrophysical Journal*, 729: 132 (March 2011). [1]
 11. “A New High Contrast Imaging Program at Palomar Observatory” by Hinkley, S., B. R. Oppenheimer, N. Zimmerman, D. Brenner, I. R. Parry, J. R. Crepp, G. Vasisht, E. Ligon, D. King, R. Soummer, A. Sivaramakrishnan, C. Beichman, M. Shao, L. C. Roberts, A. Bouchez, R. Dekany, L. Pueyo, J. E. Roberts, T. Lockhart, C. Zhai, C. Shelton, & R. Burruss. 2011. *Publications of the Astronomical Society of the Pacific*, 123: 74-86 (January 2011). [1]
 12. “Establishing α Oph as a Prototype Rotator: Improved Astrometric Orbit” by Hinkley, S., J. D. Monnier, B. R. Oppenheimer, L. C. Roberts, M. Ireland, N. Zimmerman, D. Brenner, I. R. Parry, F. Martinache, O. Lai, R. Soummer, A. Sivaramakrishnan, C. Beichman, L. Hillenbrand, M. Zhao, J. P. Lloyd, D. Bernat, G. Vasisht, J. R. Crepp, L. Pueyo, M. Shao, M. D. Perrin, D. L. King, A. Bouchez, J. E. Roberts, R. Dekany, & R. Burruss. 2011. *The Astrophysical Journal*, 726: 104 (January 2011). [1]
 13. “The Lyot Project Direct Imaging Survey of Substellar Companions: Statistical Analysis and Information from Nondetections”, by Leconte, Jeremy; Soummer, Remi; Hinkley, Sasha; Oppenheimer, B. R.; Sivaramakrishnan, Anand; Brenner, Douglas; Kuhn, Jeffrey; Lloyd, James P.; Perrin, Marshall D.; Makidon, Russell; Roberts, Lewis C.; Graham, James R.; Simon, Michal; Brown, Robert A.; Zimmerman, Neil; Chabrier, Gilles; Baraffe, Isabelle; *The Astrophysical Journal*, Vol. 716, pp. 1551-1565 (June 2010). [2]
 14. “Discovery and Characterization of a Faint Stellar Companion to the A3V Star ζ Virginis” by Hinkley, Sasha; Oppenheimer, B. R.; Brenner, Douglas; Zimmerman, Neil; Roberts, Lewis C.; Parry, Ian R.; Soummer, Rémi; Sivaramakrishnan, Anand; Simon, Michal; Perrin, Marshall D.; King, David L.; Lloyd, James P.; Bouchez, Antonin; Roberts, Jennifer E.; Dekany, Richard; Beichman, Charles; Hillenbrand, Lynne; Burruss, Rick; Shao, Michael; Vasisht, Gautam; *The Astrophysical Journal*, Vol. 712, pp. 421-428 (March 2010). [1]
 15. “Imaging Young Giant Planets From Ground and Space” by Beichman, Charles A.; Krist, John; Trauger, John T.; Greene, Tom; Oppenheimer, B.; Sivaramakrishnan, Anand; Doyon, René; Boccaletti, Anthony; Barman, Travis S.; Rieke, Marcia; *The Publications of the Astronomical Society of the Pacific*, Vol. 122, pp. 162-200 (February 2010). [3]

16. * “Parallactic Motion for Companion Discovery: An M-Dwarf Orbiting Alcor” by Zimmerman, Neil; Oppenheimer, B. R.; Hinkley, Sasha; Brenner, Douglas; Parry, Ian R.; Sivaramakrishnan, Anand; Hillenbrand, Lynne; Beichman, Charles; Crepp, Justin R.; Vasisht, Gautam; Roberts, Lewis C.; Burruss, Rick; King, David L.; Soummer, Rémi; Dekany, Richard; Shao, Michael; Bouchez, Antonin; Roberts, Jennifer E.; Hunt, Stephanie; *The Astrophysical Journal*, Vol. 709, pp. 733-740 (February 2010). [1]
17. * “High-Contrast Observations in Optical and Infrared Astronomy” by Oppenheimer, B. R.; Hinkley, Sasha; *Annual Review of Astronomy & Astrophysics*, Vol. 47, pp.253-289 (September 2009). [1]
18. “Speckle Suppression Through Dual Imaging Polarimetry, and a Ground-based Image of the HR 4796A Circumstellar Disk” by Hinkley, Sasha; Oppenheimer, B. R.; Soummer, Rémi; Brenner, Douglas; Graham, James R.; Perrin, Marshall D.; Sivaramakrishnan, Anand; Lloyd, James P.; Roberts, Lewis C.; Kuhn, Jeffrey; *The Astrophysical Journal*, Vol. 701, pp. 804-810 (August 2009). [1]
19. “A Search for *J*-Band Variability in Late-L and T Brown Dwarfs” by Clarke, F. J.; Hodgkin, S. T.; Oppenheimer, B. R.; Robertson, J; Haubois, X.; *Monthly Notices of the Royal Astronomical Society*, Vol. 386, pp. 2009-2014 (June 2008). [3]
20. * “The Solar-System-Scale Disk around AB Aurigae” by Oppenheimer, B. R.; Brenner, D., Hinkley, S.; Zimmerman, N.; Sivaramakrishnan, A.; Soummer, R.; Kuhn, J.; Graham, J. R.; Perrin, M.; Lloyd, J. P.; Roberts, L. C. Jr.; Harrington, D. M.; *The Astrophysical Journal*, Vol. 679, pp. 1574-1587 (June 2008). [1]
21. “The Gemini Deep Planet Survey” by Lafrenière, D.; Doyon, R.; Marois, C.; Nadeau, D.; Oppenheimer, B. R.; Roche, P. F.; Rigaut, F.; Graham, J. R.; Jayawardhana, R.; Johnstone, D.; Kalas, P. G.; Macintosh, B.; Racine, R.; *The Astrophysical Journal*, Vol. 670, pp. 1367-1390 (December 2007). [3]
22. “Trigonometric parallaxes of high velocity halo white dwarf candidates” by Ducourant, C.; Teixeira, R.; Hambly, N. C.; Oppenheimer, B. R.; Hawkins, M. R. S.; Rapaport, M.; Modolo, J.; Lecampion, J. F.; *Astronomy and Astrophysics*, Vol. 470, pp. 387-394 (July 2007). [3]
23. “The Lyot Project: status and results” by Sivaramakrishnan, Anand; Oppenheimer, B. R.; Hinkley, Sasha; Brenner, Douglas; Soummer, Rémi; Mey, Jacob L.; Lloyd, James P.; Perrin, Marshall D.; Graham, James R.; Makidon, Russell B.; Roberts, Lewis C., Jr.; Kuhn, Jeffrey R.; *Comptes Rendus Physique*, Vol. 8, pp. 355-364 (April 2007). [1]
24. “Adaptive optics for direct detection of extrasolar planets: the Gemini Planet Imager” by Macintosh, Bruce; Graham, James; Palmer, David; Doyon, Rene; Gavel, Don; Larkin, James; Oppenheimer, B.; Saddlemyer, Leslie; Wallace, J. Kent; Bauman, Brian; Erikson, Darren; Poyneer, Lisa; Sivaramakrishnan, Anand; Soummer, Rémi; Veran, Jean-Pierre; *Comptes Rendus Physique*, Vol. 8, pp. 365-373 (April 2007). [2]
25. “Temporal Evolution of Coronagraphic Dynamic Range and Constraints on Companions to Vega” by S. Hinkley, B. R. Oppenheimer, R. Soummer, A. Sivaramakrishnan, L. C. Roberts, Jr., J. Kuhn, R. B. Makidon, M. D. Perrin, J. P. Lloyd, K. Kratter, D. Brenner, *Astrophysical Journal*, Vol. 654, pp. 633-640 (January 2007). [1]

26. “The Challenges of Coronagraphic Astrometry” by A. P. Digby, S. Hinkley, B. R. Oppenheimer, A. Sivaramakrishnan, J. P. Lloyd, M. D. Perrin, L. C. Roberts, Jr., R. Soummer, D. Brenner, R. B. Makidon, M. Shara, J. Kuhn, J. Graham, P. Kalas, L. Newburgh, *Astrophysical Journal*, Vol. 650, pp. 484-496 (October 2006). [1]
27. “Astrometry and Photometry with Coronagraphs” by A. Sivaramakrishnan and B. R. Oppenheimer, *Astrophysical Journal*, Vol. 647, pp. 620-629 (August 2006). [1]
28. “Low-Order Aberrations in Band-Limited Lyot Coronagraphs” by A. Sivaramakrishnan, R. Soummer, A. V. Sivaramakrishnan, J. P. Lloyd, B. R. Oppenheimer, R. B. Makidon, *Astrophysical Journal*, Vol. 634, pp. 1416-1422 (December 2005). [2]
29. “Coronagraphic search for brown dwarfs and planets around nearby stars” by T. Nakajima, J.-I. Morino, T. Tsuji, H. Suto, M. Ishii, M. Tamura, M. Fukagawa, K. Murakawa, S. Miyama, H. Takami, N. Takato, S. Oya, S. Hayashi, T. Kudo, Y. Itoh, Y. Oasa and B. R. Oppenheimer, *Astronomische Nachrichten*, Vol. 326 (10), pp. 952-957 (December 2005). [3]
30. “Adaptive Optics Photometry and Astrometry of Binary Stars” by L. C. Roberts, Jr., N. H. Turner, L. W. Bradford, T. A. ten Brummelaar, B. R. Oppenheimer, J. R. Kuhn, K. Whitman, M. D. Perrin, J. R. Graham, *Astronomical Journal*, Vol. 130, pp. 2262-2271 (November 2005). [2]
31. “An Analysis of Fundamental Waffle Mode in Early AEOS Adaptive Optics Images” by R. B. Makidon, A. Sivaramakrishnan, M.D. Perrin, L.C. Roberts, Jr., R. Soummer, B.R. Oppenheimer, and J.R. Graham, *Publications of the Astronomical Society of the Pacific*, Vol. 117, pp. 831-846 (August 2005). [2]
32. “Polarization Effects in Reflecting Coronagraphs for White Light Applications in Astronomy” by J. B. Breckinridge and B. R. Oppenheimer, *The Astrophysical Journal*, Vol. 600, pp. 1091-1098 (January 2004). [1]
33. “Cool White Dwarfs Revisited: New Spectroscopy and Photometry” by S. Salim, R. M. Rich, B. M. Hansen, L. V. E. Koopmans, B. R. Oppenheimer, R. D. Blandford, *The Astrophysical Journal*, Vol. 601, pp. 1075-1087 (February 2004). [3]
34. “The Structure of High Strehl-Ratio Point Spread Functions” by M. D. Perrin, A. Sivaramakrishnan, R. B. Makidon, B. R. Oppenheimer, J. R. Graham, *The Astrophysical Journal*, Vol. 596, pp. 702-712 (October 2003). [2]
35. “A Mini-Survey for Variability in Early L Dwarfs” by F. J. Clarke, B. R. Oppenheimer and C. G. Tinney, *Monthly Notices of the Royal Astronomical Society*, Vol. 335, pp. 1158-1162 (October 2002). [2]
36. “The Potential of Differential Astrometric Interferometry from the High Antarctic Plateau” by J. P. Lloyd, B. R. Oppenheimer, J. R. Graham, *Publications of the Astronomical Society of Australia*, Vol. 19, pp. 318-322 (2002). [2]
37. “Behavior of Remnant Speckles in an Adaptively Corrected Imaging System” by E. E. Bloemhof, R. G. Dekany, M. Troy and B. R. Oppenheimer, *The Astrophysical Journal Letters*, Vol. 558, pp. L71-L74 (September 2001). [2]

38. * “White Dwarfs and Dark Matter - Response to Technical Comments” by B. R. Oppenheimer, N. C. Hambly, A. P. Digby, S. T. Hodgkin, D. Saumon, *Science*, Vol. 292, pp. U3-U6 (June 2001). [1]
39. * “Direct Detection of Galactic Halo Dark Matter” by B. R. Oppenheimer, N. C. Hambly, A. P. Digby, S. T. Hodgkin, and D. Saumon, *Science*, Vol. 292, pp. 698-702 (March 2001). [1]
40. * “Coronagraphic Survey for Companions of Stars within 8pc” by B. R. Oppenheimer, D. A. Golimowski, S. R. Kulkarni, K. Matthews, T. Nakajima, M. Creech-Eakman, and S. T. Durrance, *The Astronomical Journal*, Vol. 121, pp. 2189-2211 (April 2001). [1]
41. * “Observations of Ultracool White Dwarfs” by B. R. Oppenheimer, D. Saumon, S. T. Hodgkin, R. F. Jameson, N. C. Hambly, G. Chabrier, A. V. Filippenko, A. L. Coil and M. E. Brown, *The Astrophysical Journal*, Vol. 550, pp. 448-456 (March 2001). [1]
42. “Tests of the Accelerating Universe with Near-Infrared Observations of a High-Redshift Type IA Supernova” by A. G. Riess et al. *The Astrophysical Journal*, Vol. 536, pp. 62-67 (June 2000). [4]
43. * “Infrared spectrum of an extremely cool white-dwarf star” by S. T. Hodgkin, B. R. Oppenheimer, N. C. Hambly, R. F. Jameson, S. J. Smartt, I. A. Steele, *Nature*, Vol. 403, pp. 57-59 (January 2000). [1]
44. “The Visual Orbit of 64 Piscum” by A. Boden et al., *The Astrophysical Journal*, Vol. 527, pp. 360-368 (December 1999). [3]
45. * “The Spectrum of the Brown Dwarf Gliese 229B” by B. R. Oppenheimer, S. R. Kulkarni, K. Matthews and M. H. van Kerkwijk, *The Astrophysical Journal*, Vol. 502, pp. 932-943 (August 1998). [1]
46. * “Wide Field Planetary Camera 2 Observations of Brown Dwarf Gliese 229B: Optical Colors and Orbital Motion” by D. A. Golimowski, C. J. Burrows, S. R. Kulkarni, B. R. Oppenheimer, and R. A. Brukardt, *Astronomical Journal*, Vol. 115, pp. 2579-2586 (June 1998). [2]
47. “A Survey of the Einstein IPC Database for Extended X-Ray Sources” by B. R. Oppenheimer, D. J. Helfand, E. J. Gaidos, *Astronomical Journal*, Vol. 113, pp. 2134-2146 (June 1997). [1]
48. “Lithium in Very Low-Mass Stars in the Pleiades” by B. R. Oppenheimer, G. Basri, T. Nakajima and S. R. Kulkarni, *Astronomical Journal*, Vol. 113, pp. 296-305 (January 1997). [1]
49. * “Spectral Energy Distribution and Bolometric Luminosity of the Cool Brown Dwarf Gliese 229B” by K. Matthews, T. Nakajima, S. R. Kulkarni and B. R. Oppenheimer, *Astronomical Journal*, Vol. 112, pp. 1678-1682 (October 1996). [2]
50. * “Near IR spectrum of the cool brown dwarf GL 229B” by B. R. Oppenheimer, S. R. Kulkarni, K. Matthews, T. Nakajima, *Science*, Vol. 270, pp. 1478-1479 (December 1995). [1]

51. * “Discovery of a cool brown dwarf” by T. Nakajima, B. R. Oppenheimer, S. R. Kulkarni, D. A. Golimowski, S. T. Durrance, K. Matthews, *Nature*, Vol. 378, pp. 463-465 (November 1995). [1]
52. “Detection of a very low mass companion to the astrometric binary Gliese 105A” by D. A. Golimowski, T. Nakajima, S. R. Kulkarni, B. R. Oppenheimer, *Astrophysical Journal, Letters*, Vol. 444, pp. L101-L104 (May 1995). [2]
53. “Test of Unified Schemes Using Jet Opening Angles” by B. R. Oppenheimer and J. A. Biretta, *Astronomical Journal*, Vol. 107, pp. 892-903 (March 1994). [1]

Patents

1. “Spectroscopy of Exoplanets from a Ground-Based Telescope,” B. R. Oppenheimer, Inventor; American Museum of Natural History, Assignee, United States Patent Office, Patent Number 7,852,555, April 20, 2007-April 19,2027, awarded December 14, 2010. [1]
2. “Astrometry and Photometry with Coronagraphs” by Anand Sivaramakrishnan and B. R. Oppenheimer, Inventors; American Museum of Natural History, Assignee, United States Patent Office, Patent Number 7,777,943, August 17, 2010-March 1, 2027, Awarded August 17-2010. [1]
3. * “Telescope Accessory-Coronagraph,” B. R. Oppenheimer and Michael Shara, Inventors; American Museum of Natural History, Assignee; United States Patent Office, Patent Number 7,130,051 B2, December 16, 2003-December 15, 2026, awarded October 16, 2006. [1]

Book Chapters

1. * “Companions of Stars: From Other Stars to Brown Dwarfs to Planets and the Discovery of the First Methane Brown Dwarf” by Oppenheimer, B. R. in *50 Years of Brown Dwarfs*, Astrophysics and Space Science Library, Volume 401 pp. 81-105 (Zurich: Springer International Publishing Switzerland, 2014) [1]
2. * “Report of the Panel on Electromagnetic Observations from Space,” by Alan Dressler, Michael Bay, Alan P. Boss, Mark Devlin, Megan Donahue, Brenna Flaugher, Tom Green, Puragra Guhathakurta, Michael G. Hauser, Harold McAlister, Peter F. Michelson, B. R. Oppenheimer, Frits Paerels, George H. Rieke, Adam G. Riess, Paul L. Schechter, and Todd Tripp, in *Panel Reports—New Worlds, New Horizons in Astronomy and Astrophysics* Committee for a Decadal Survey of Astronomy and Astrophysics, Board on Physics and Astronomy and the Space Studies Board, National Research Council of the National Academies (Washington, D. C.: The National Academies Press), Chap. 6, pp. 251-309 (2011). [2]
3. * “Direct Imaging of Exoplanets” by Wesley A. Traub and B. R. Oppenheimer in *Exoplanets*, S. Seager, ed. (Tucson: University of Arizona Press), 2010, pp.111-156. [1]
4. * “Direct Detection of Exoplanets” by J.-L. Beuzit, D. Mouillet, B. R. Oppenheimer, J. D. Monnier, in *Protostars and Planets V*, B. Reipurth, D. Jewitt, K. Keil, eds.

- (Tucson: University of Arizona Press), Sec. 7, Chap. 9, pp. 129-144 (April 2007).
Invited review. [1]
- 5-8. * *Terrestrial Planet Finder Coronagraph Science and Technology Definition Report*, ed. M. Levine, S. Shaklan, J. Kasting (NASA/JPL Publication 06-155). First Author, Chapters 1.1 (Introduction to Science Requirements)[1], 1.2 (Definition of Scientific Terms)[1], Co-author Chapters 1.3 (Science Objectives)[2], 1.4 (Specific Science Requirements)[3]. (January 2007).
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27. “The Lyot Project: Understanding the AEOS Adaptive Optics PSF” by R. B. Makidon, A. Sivaramakrishnan, R. Soummer, B. R. Oppenheimer, L. C. Roberts, J. R. Graham, M. D. Perrin, in *Direct Imaging of Exoplanets: Science and Techniques*, C. Aime, F. Vakili (editors), *Proceedings of the IAU*, Colloquium Vol. 200, pp. 603-606 (October 2006).
28. “Scintillation and Pupil Illumination in AO Coronagraphy” by A. Sivaramakrishnan, B. R. Oppenheimer, M. D. Perrin, L. C. Roberts, R. B. Makidon, R. Soummer, A. P. Digby, L. W. Bradford, M. A. Skinner, N. H. Turner, T. A. ten Brummelaar, in *Direct Imaging of Exoplanets: Science and Techniques*, C. Aime, F. Vakili (editors), *Proceedings of the IAU*, Colloquium Vol. 200, pp. 613-616 (October 2006).
29. “Speckle Statistics in Direct and Coronagraphic Imaging” by R. Soummer, C. Aime, A. Ferrari, A. Sivaramakrishnan, L. Jolissaint, J. Lloyd, B. R. Oppenheimer, R. B. Makidon, M. Carbillet, in *Direct Imaging of Exoplanets: Science and Techniques*, C. Aime, F. Vakili (editors), *Proceedings of the IAU*, Colloquium Vol. 200, pp. 581-586 (October 2006).
30. “Apodized Pupil Lyot Coronagraphs: Concepts and Application to the Gemini Planet Imager” by R. Soummer, C. Aime, A. Ferrari, A. Sivaramakrishnan, B. R. Oppenheimer, R. B. Makidon, B. Macintosh, in *Direct Imaging of Exoplanets: Science and Techniques*, C. Aime, F. Vakili, eds., *Proceedings of the IAU*, Colloquium Vol. 200, pp. 367-372 (October 2006).
31. “The Lyot Project Coronagraph: Data Processing and Performance Analysis” by R. Soummer, B. R. Oppenheimer, S. Hinkley, A. Sivaramakrishnan, R. B. Makidon, A. Digby, D. Brenner, J. Kuhn, M. D. Perrin, L. C. Roberts, Jr., K. Kratter, in *Astronomy with High Contrast Imaging*, C. Aime, ed. (Nice: EAS Publications), Vol. 22, pp. 199-212 (April 2006).

32. “Scintillation in High Dynamic Range Coronagraphy,” by Oppenheimer, B. R., et al. 2005, in *2005 AMOS Technical Conference*, P. W. Kervin, J. L. Africano, eds. (Hawaii: Maui Economic Development Board Publications), pp. 316-331 (December 2005).
33. “Improving Wave Front Residuals for Near-Infrared Coronagraphy with AEOS” by R. B. Makidon, A. Sivaramakrishnan, R. Soummer, B. R. Oppenheimer, L. C. Roberts, Jr., J. R. Graham, M. D. Perrin, in *2005 AMOS Technical Conference*, P. W. Kervin, J. L. Africano, eds. (Hawaii: Maui Economic Development Board Publications), pp. 585-599 (December 2005).
34. “Cool White Dwarfs from the SuperCOSMOS and Sloan Digital Sky Surveys” by N. C. Hambly, A. P. Digby and B. R. Oppenheimer, in 14th European Workshop on White Dwarfs, *ASP Conference Series*, Vol. 334, Proceedings of a meeting held at Kiel, July 19-23, 2004. D. Koester and S. Moehler, eds. (San Francisco: Astronomical Society of the Pacific), pp.113-118 (October 2005).
35. “Performance Predictions of Second Stage Adaptive Optics Coronagraphy on the AEOS Telescope” by Sivaramakrishnan, A., Makidon, R. B., Soummer, R., Perrin, M. D., Oppenheimer, B. R. and Digby, A. P., in *2004 AMOS Technical Conference*, P. W. Kervin, J. L. Africano, eds. (Hawaii: Maui Economic Development Board Publications), pp. 616-625 (March 2005).
36. “Extremely High Fidelity Imaging with AEOS and the Lyot Project Coronagraph,” by B. R. Oppenheimer, Andrew P. Digby, Laura Newburgh, Douglas Brenner, Michael Shara, Lewis C. Roberts, Jr., Anand Sivaramakrishnan, Russell B. Makidon, Remi Soummer, James R. Graham, Paul Kalas, Marshall Perrin, Jeffrey Kuhn, Kathryn Whitman, James P. Lloyd in *2004 AMOS Technical Conference*, P. W. Kervin, J. L. Africano, eds. (Hawaii: Maui Economic Development Board Publications), pp. 414 (March 2005).
37. “The Lyot Project: Status and Deployment Plans” by B. R. Oppenheimer, M. Shara, L. Newburgh, D. Brenner, J. R. Graham, P. Kalas, J. P. Lloyd, R. B. Makidon, A. Sivaramakrishnan, J. R. Kuhn. *2003 AMOS Technical Conference*, P. W. Kervin, J. L. Africano, eds. (USAF Publications; March 2004).
38. “The Lyot Project: Toward Exoplanet Images and Spectra” by B. R. Oppenheimer, A. P. Digby, L. Newburgh, D. Brenner, M. Shara, R. B. Makidon, A. Sivaramakrishnan, R. Soummer, J. R. Graham, P. Kalas, M. Perrin, L. C. Roberts, Jr., J. R. Kuhn, K. Whitman, J. P. Lloyd, *Terrestrial Planet Finder Technical Conference and Exposition*, C. Lindensmith, ed. (NASA/JPL Publications; March 2004).
39. “Near Infrared Coronagraph Optimized for the AEOS Telescope” by B. R. Oppenheimer, M. Shara, J. R. Graham, P. Kalas, J. P. Lloyd, R. B. Makidon, A. Sivaramakrishnan, P. Baudoz, J. Kuhn, D. Potter. *2002 AMOS Technical Conference*, P. W. Kervin, J. L. Africano, eds., pp. 491-498 (USAF Publications; March 2003).
40. “Companion Detection Limits with Adaptive Optics Coronagraphy” by B. R. Oppenheimer, R. G. Dekany, T. Hayward, B. Brandl, M. Troy, in *Planetary Systems in the Universe*, International Astronomical Union. Symposium no. 202. Manchester, England, A. Penny, ed. (2000 August).
41. “Lithium Abundances in the Young PMS Stars FN Tau and V927 Tau: an Interplay of Observations and Theory” by Ya. V. Pavlenko, B. R. Oppenheimer in *The Tenth*

Cambridge Workshop on Cool Stars, Stellar Systems and the Sun, 10, R. A. Donahue and J. A. Bookbinder, eds. (San Francisco: Astronomical Society of the Pacific), ASP Conf. Ser., Vol. 154, p. 1764 (1998 August).

42. “Gliese 229B and the Palomar Search for Brown Dwarf Companions of Nearby Stars” by B. R. Oppenheimer, in *Brown Dwarfs and Extrasolar Planets*, R. Rebolo, E. L. Martin and M. R. Zapatero-Osorio, eds. (San Francisco: Astronomical Society of the Pacific), ASP Conf. Ser., Vol. 134, p. 196 (1998 February).
43. “Rotation and activity in the coolest stars” by G. Basri, G. Marcy, B. R. Oppenheimer, S. R. Kulkarni, T. Nakajima, in *Cool Stars; Stellar Systems; and the Sun, 9*, R. Pallavicini and A. K. Dupree, eds. (San Francisco: Astronomical Society of the Pacific), ASP Conf. Ser., Vol. 109, p. 587 (1996 August).

White Papers:

1. “Formation and Evolution of Planetary Systems” by Beichman, C., I. Baraffe, C. Crockett, S. Dodson-Robinson, J. Fortney, A. Ghez, T. P. Greene, A. Kraus, D. Lin, N. Mahmud, F. Malbet, M. Marley, R. Millan-Gabet, L. Prato, B. Oppenheimer, M. Simon, J. Stauffer, A. Tanner, & T. Velusamy, *Astro2010: The Astronomy and Astrophysics Decadal Survey*, Project White Papers, National Academies of Science, No. 147, pp. 15(2009).
2. “Terrestrial Planet Finder Coronagraph (TPF-C) Flight Baseline Concept” by Levine, Marie; Lisman, D.; Shaklan, S.; Kasting, J.; Traub, W.; Alexander, J.; Angel, R.; Blaurock, C.; Brown, M.; Brown, R.; Burrows, C.; Clampin, M.; Cohen, E.; Content, D.; Dewell, L.; Dumont, P.; Egerman, R.; Ferguson, H.; Ford, V.; Greene, J.; Guyon, O.; Hammel, H.; Heap, S.; Ho, T.; Horner, S.; Hunyadi, S.; Irish, S.; Jackson, C.; Kasdin, J.; Kissil, A.; Krim, M.; Kuchner, M.; Kwack, E.; Lillie, C.; Lin, D.; Liu, A.; Marchen, L.; Marley, M.; Meadows, V.; Mosier, G.; Mouroulis, P.; Noecker, M.; Ohl, R.; Oppenheimer, B. R.; Pitman, J.; Ridgway, S.; Sabatke, E.; Seager, S.; Shao, M.; Smith, A.; Soummer, R.; Stapelfeldt, K.; Tenerell, D.; Trauger, J.; Vanderbei, R.; *Astro2010: The Astronomy and Astrophysics Decadal Survey*, Project White Papers, National Academies of Science, No. 128, <http://arxiv.org/abs/0911.3200> (2009).
3. “Overview of Technologies for Direct Optical Imaging of Exoplanets” by Levine, Marie; Soummer, Remi; Arenberg, Jon; Belikov, Ruslan; Bierden, Paul; Boccaletti, Anthony; Brown, Robert; Burrows, Adam; Burrows, Chris; Cady, Eric; Cash, Webster; Clampin, Mark; Cossapakis, Costas; Crossfield, Ian; Dewell, Larry; Egerman, Robert; Fergusson, Henry; Ge, Jian; Give'On, Amir; Guyon, Oliver; Heap, Sara; Hyde, Tupper; Jaroux, B.; Jasdin, Jeremy; Kasting, Jim; Kenworthy, Matthew; Kilston, Steve; Klavins, Andy; Krist, John; Kuchner, Marc; Lane, Benjamin; Lillie, Chuck; Lyon, Rick; Lloyd, James; Lo, Amy; Lowrance, Patrick J.; Macintosh, Patrick J.; McCully, Sean; Marley, Mark; Marois, Christian; Matthews, Gary; Mawet, Dimitri; Mazin, Ben; Mosier, Gary; Noecker, Charley; Pueyo, Laurent; Oppenheimer, B. R.; Pedreiro, Nelson; Postman, Marc; Roberge, Aki; Ridgeway, Stephen; Schneider, Jean; Serabyn, Gene; Shaklan, Stuart; Shao, Michael; Sivaramakrishnan, Anand; Spergel, David; Stapelfeldt, Karl; Tamura, Motohide; Tenerelli, Domenick; Tolls, Volker; Traub, Wesley; Trauger, John; Vanderbei, Robert J.; Wynn, Jeff; *Astro2010: The Astronomy and Astrophysics Decadal*

Survey, Technology Development Papers, National Academies of Science, No. 37, <http://adsabs.harvard.edu/abs/2009astro2010T..37L> (2009).

4. “Bridging the Gap Between Stars and Planets: The Formation and Early Evolution of Brown Dwarfs” by Mohanty, Subhanjoy; Burgasser, Adam; Chabrier, Gilles; Padoan, Paolo; Hennebelle, Patrick; Pascucci, Ilaria; Kraus, Adam; Baraffe, Isabelle; Stassun, Jeivan; Greaves, Jane; Reiners, Ansgar; Dunham, Mike; Scholz, Aleks; Oppenheimer, B.; Ray, Tom; Apai, Daniel; Goodman, Alyssa; Cruz, Kelle; Rebull, Louisa; Moraux, Estelle; *Astro2010: The Astronomy and Astrophysics Decadal Survey*, Science White Papers, National Academies of Science, No. 212, <http://arxiv.org/abs/0903.2511> (2009).
5. “Direct detection and spectroscopic characterization of extrasolar planets” by Macintosh, Bruce; Graham, James; Marley, Mark; Jang-Condell, Hannah; Barman, Travis; Close, Laird; Hinz, Philip; Liu, Michael; Oppenheimer, B. R.; Stapelfeldt, Karl, *Astro2010: The Astronomy and Astrophysics Decadal Survey*, Science White Papers, National Academies of Science, No. 188, <http://adsabs.harvard.edu/abs/2009astro2010S.188M> (2009).
6. “Exoplanet Characterization and the Search for Life” by Kasting, James; Traub, W.; Roberge, A.; Leger, A.; Schwartz, A.; Wootten, A.; Vosteen, A.; Lo, A.; Brack, A.; Tanner, A.; Coustenis, A.; Lane, B.; Oppenheimer, B. R.; Mennesson, B.; Lopez, B.; Grillmair, C.; Beichman, C.; Cockell, C.; Hanot, C.; McCarthy, C.; Stark, C.; Marois, C.; Aime, C.; Angerhausen, D.; Montes, D.; Wilner, D.; Defrere, D.; Mourard, D.; Lin, D.; Kite, E.; Chassefiere, E.; Malbet, F.; Tian, F.; Westall, F.; Illingworth, G.; Vasisht, G.; Serabyn, G.; Marcy, G.; Bryden, G.; White, G.; Laughlin, G.; Torres, G.; Hammel, H.; Ferguson, H.; Shibai, H.; Rottgering, H.; Surdej, J.; Wiseman, J.; Ge, J.; Bally, J.; Krist, J.; Monnier, J.; Trauger, J.; Horner, J.; Catanzarite, J.; Harrington, J.; Nishikawa, J.; Stapelfeldt, K.; von Braun, K.; Biazzo, K.; Carpenter, K.; Balasubramanian, K.; Kaltenegger, L.; Postman, M.; Spaans, M.; Turnbull, M.; Levine, M.; Burchell, M.; Ealey, M.; Kuchner, M.; Marley, M.; Dominik, M.; Mountain, M.; Kenworthy, M.; Muterspaugh, M.; Shao, M.; Zhao, M.; Tamura, M.; Kasdin, N.; Haghighipour, N.; Kiang, N.; Elias, N.; Woolf, N.; Mason, N.; Absil, O.; Guyon, O.; Lay, O.; Borde, P.; Fouque, P.; Kalas, P.; Lowrance, P.; Plavchan, P.; Hinz, P.; Kervella, P.; Chen, P.; Akeson, R.; Soummer, R.; Waters, R.; Barry, R.; Kendrick, R.; Brown, R.; Vanderbei, R.; Woodruff, R.; Danner, R.; Allen, R.; Polidan, R.; Seager, S.; MacPhee, S.; Hosseini, S.; Metchev, S.; Kafka, S.; Ridgway, S.; Rinehart, S.; Unwin, S.; Shaklan, S.; ten Brummelaar, T.; Mazeh, T.; Meadows, V.; Weiss, W.; Danchi, W.; Ip, W.; Rabbia, Y., *Astro2010: The Astronomy and Astrophysics Decadal Survey*, Science White Papers, National Academies of Science, No. 151, <http://adsabs.harvard.edu/abs/2009astro2010S.151K> (2009).
7. “Toward the End of Stars: Discovering the Galaxy’s Coldest Brown Dwarfs” by Burgasser, Adam J.; Bloom, Josh; Cruz, Kelle; Cushing, Michael; Legget, Sandy; Lodders, Katharina; Mainzer, Amanda; Marley, Mark; Metchev, Stanimir; Mohanty, Subhanjoy; Oppenheimer, B. R.; West, Andrew, *Astro2010: The Astronomy and Astrophysics Decadal Survey*, Science White Papers, National Academies of Science, No. 33, <http://adsabs.harvard.edu/abs/2009astro2010S..33B> (2009).
8. “Ground-based Direct Detection of Exoplanets with the Gemini Planet Imager (GPI)” by James R. Graham, Bruce Macintosh, Rene Doyon, Don Gavel, James Larkin, Marty

Levine, B. Oppenheimer, David Palmer, Les Saddlemyer, Anand Sivaramakrishnan, Jean-Pierre Veran, and Kent Wallace, for the *NSF-NASA-DOE Astronomy and Astrophysics Advisory Committee ExoPlanet Task Force*, convened by the National Research Council/National Academies of Sciences. <http://arxiv.org/abs/0704.1454> (April 2007).

Encyclopedia Articles:

1. “Brown Dwarf” by B. R. Oppenheimer, in *The McGraw-Hill Encyclopedia of Science and Technology* (New York: McGraw-Hill; 2011).
 2. “Brown Dwarf” by B. R. Oppenheimer, in *The McGraw-Hill Encyclopedia of Science and Technology* (New York: McGraw-Hill; 2006).
 3. “Brown Dwarf” by B. R. Oppenheimer, in *The McGraw-Hill Encyclopedia of Science and Technology* (New York: McGraw-Hill; 2004).
 4. “White Dwarfs in the Galaxy’s Halo” by B. R. Oppenheimer, *Encyclopedia of Astronomy and Astrophysics*, www.ency-astro.com, P. Murdin, ed. (London: Nature Publishing Group; 2003).
 5. “Brown Dwarf” by B. R. Oppenheimer and S. R. Kulkarni, in *The McGraw-Hill Encyclopedia of Science and Technology* (New York: McGraw-Hill; 1999).
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Papers in Press or Under Review:

1. “Reconnaissance of the HR 8799 Exosolar System II: Astrometry” by L. Pueyo, C. Baranec, C. Beichman, D. Brenner, R. Burruss, E. Cady, J. R. Crepp, R. Dekany, R. Fergus, D. Hale, L. Hillenbrand, S. Hinkley, David W. Hogg, D. King, E. R. Ligon, T. Lockhart, R. Nilsson, B. R. Oppenheimer, I. R. Parry, L. Pueyo, E. Rice, J. E. Roberts, L. C. Roberts, Jr., M. Shao, A. Sivaramakrishnan, R. Soummer, T. Truong, G. Vasisht, F. Vescelous, J. K. Wallace, C. Zhai, & N. Zimmerman, submitted to the *Astrophysical Journal*
 2. “Low Resolution Spectroscopy for Exoplanet Characterization” by E. L. Rice et al. submitted to the *Astrophysical Journal*
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PEER-REVIEWED GRANTS**Total Awarded: \$10,072,730**

YEAR	TOTAL AWARDED
FY14	\$0
FY13:	\$1,176,307
FY12:	\$0
FY11:	\$769,422
FY10:	\$1,265,109
FY09:	\$502,076
FY08:	\$1,600,088
FY07:	\$3,475,668 [†]
FY06:	\$374,997
FY05 & earlier:	\$1,292,669

[†]In FY06, an award of \$1,216,861 (not included in the numbers above) was granted, but the NASA program funding it was later cancelled. Success rate on grant proposals has been 71% to date. The listing below has the latest awards at the end.

Awarded Grants (out of 31 proposal submissions):

	Funding Agency	Program	Title	Dates	PI(s)	Award Amount	Purpose
1	NSF	Major Research Instrumentation	Coronagraph for the AEOS Telescope: Imaging Exoplanets and Brown Dwarfs	08/01/02-07/31/06	Oppenheimer	\$524,120	Initial construction of Lyot Project coronagraph
2	NSF & Air Force Office of Scientific Research	Advanced Technologies and Instrumentation	The Lyot Project	9/15/03-8/31/06	Oppenheimer	\$304,726	Increase coronagraph sensitivity and fund science operations
3	NASA Michelson Science Center	Michelson Postdoctoral Fellowship	The Lyot Project	09/10/03-09/09/06	Oppenheimer	\$405,448	Prize Fellowship for Dr. A. P. Digby
4	NASA	Terrestrial Planet Finder Foundation Science	The Lyot Project: Survey of Nearby Stars for Circumstellar Disks and Exoplanets	06/01/05-05/31/08	Oppenheimer	\$374,994	Support observing survey with coronagraph
5	NSF	Major Research Instrumentation	Integral Field Spectroscopy for Exoplanetary Science with the Lyot Project	08/01/05-07/31/08	Oppenheimer	\$1,332,702	Construction of new hyperspectral imaging camera for coronagraph
6	NASA Michelson Science Center	Michelson Postdoctoral Fellowship	Advanced Coronagraphy	10/01/05-09/30/06	Oppenheimer & Sivaramakrishnan	\$105,914	Prize Fellowship for Dr. R. Soummer
7	NASA Michelson Science Center	Michelson Education and Outreach	The Instruments of Exoplanetary Science: a new Temporary Exhibition at AMNH	10/01/05-08/30/07	Oppenheimer	\$129,902	Funded "Looking for Other Worlds" Exhibition
8	NSF	Center For Adaptive Optics	Advancing Extreme AO Coronagraphy	02/01/06-09/30/06	Sivaramakrishnan	\$100,000	Support for coronagraph theory

							development
9	NSF	Advanced Technologies and Instrumentation Special Competition for AEOS Observations	NSF/AFOSR Astronomy: The Lyot Project Survey for Exoplanets, Brown Dwarfs and Circumstellar Disks	05/01/06-04/30/09	Oppenheimer and Sivaramakrishnan	\$202,497	Additional observing time and travel support for observations at the USAF AEOS telescope
10	NSF/AURA	International Gemini Observatory Instrumentation	Extreme Adaptive Optics Coronagraph	08/01/06-12/31/13	Oppenheimer	\$1,403,965	7 institution consortium to build Gemini Planet Imager; Total project funding: \$18,159,707
11	NSF	Center For Adaptive Optics	Advancing Extreme AO Coronagraphy	11/01/06-10/31/07	Sivaramakrishnan	\$100,688	Support for coronagraph theory development
12	NASA	Unsolicited	The Stars: A Digital Space Show	12/1/07-11/30/08	Kinzler	\$1,500,000	Initial funding for the fourth space show
13	NSF	Center For Adaptive Optics	Advancing Extreme AO Coronagraphy	11/01/07-10/31/08	Sivaramakrishnan	\$35,000	Support for coronagraph theory development
14	NSF	ATI	Non-Redundant Mask Interferometric Techniques for Extreme Adaptive Optics Integral Field Spectroscopy	7/15/08-6/30/11	Sivaramakrishnan and Oppenheimer	\$405,572	New experiments with deployed Project 1640 Coronagraph
15	NSF	MRI	Supplement to Award 5	7/31/08-5/31/10	Oppenheimer	\$96,504	Equipment upgrades and repairs
16	NSF	AAG	Project 1640	7/1/09-6/30/13	Oppenheimer	\$402,607	Scientific Survey at Palomar
17	NASA	APRA	Planetary System, star formation and black hole science with non-redundant masking on space telescopes	1/6/10-1/5/13	Sivaramakrishnan	\$702,362	Theoretical and laboratory-based investigations of high-contrast observations from space
18	NASA/JPL	ADP	Data Processing Methods for Direct Imaging of Exoplanets with the Palomar Project 1640	7/1/10-9/30/12	Oppenheimer and Vasisht	\$111,559	Speckle Suppression Analysis
19	NSF	Major Research Instrumentation	Development of Project 1640: Direct Exoplanet Spectroscopy	10/1/10-9/30/12	Oppenheimer	\$657,863	P1640 Sensitivity upgrades and new detector
22	NSF	EAGER	Bringing Computer Vision to Exoplanet Detection	7/1/12-6/30/13	Oppenheimer	\$165,136	Novel techniques in Speckle Suppression using Computer Vision
21	NASA	Origins	Project 1640 Phase II Science Survey	4/1/13-3/31/16	Oppenheimer	\$1,011,171	Observations and analysis for Project 1640

STUDENTS, POSTDOCTORAL SCHOLARS AND SCIENTIFIC ASSOCIATES ADVISED

- Undergraduate: Laura Newburgh (Barnard, now Postdoc, Dunlap Institute, U. of Toronto)
Kaitlin Kratter (Barnard, now Faculty, Steward Observatory, U. of Arizona)
Jeremy Leconte (ENS, France, Kade Fellow at AMNH, now Postdoc, Ca. Inst. For Theoretical Astrophysics, U. of Toronto)
Stefanie Fiorenza (AMNH REU program)
Andrew Brown (AMNH)
Bence Beky (Tampere University of Technology, Finland)
Robin Roberts (CUNY)
Crystal Latham (FIT)
Jennifer Moses (Franklin and Marshall College)
Dax Feliz (UMass-Amherst)
Erica Rosenblum (UCSC, now at Scripps, NSF Graduate Research Fellowship)
Louis Wilson (Washington U.)
- Graduate: Aaron Veicht (Columbia, Ph.D., primary advisor)
Sasha Hinkley (Columbia, Ph.D., primary advisor, now Faculty Exeter, UK)
Neil Zimmerman (Columbia, Ph.D., primary advisor, now Postdoc, Princeton University)
Laurent Pueyo (Princeton University, Ph.D., dual advisor, now Faculty STScI)
Andrew Brown (Columbia M.A., primary advisor)
Destry Saul (Columbia, Ph.D., secondary advisor)
Sarah Tuttle (Columbia, Ph.D., secondary advisor)
Rahul Patel (SUNY-Stony Brook, Ph.D., secondary advisor)
Alexis Carlotti (University of Nice, Ph.D., secondary advisor)
Stephanie Hunt (Cambridge University, Ph.D., secondary advisor)
Victor Garcia (Vanderbilt, Ph.D., secondary advisor)
- Post Doctoral: Statia Cook (AMNH, current, Kalbfleisch Fellow, AMNH)
Ricky Nilsson (AMNH, now on Swedish National Research Foundation Fellowship at AMNH)
Remi Soummer (AMNH Kalbfleisch Fellow, NASA Sagan Fellow, now Faculty, STScI)
Emily Rice (AMNH, now Faculty, CUNY-Staten Island)
Laurent Pueyo (AMNH, now Faculty, STScI)
Justin Crepp (Caltech, now Faculty, Notre Dame U.)
Andrew Digby (AMNH, NASA Michelson Fellow)
- Scientific Associates: Douglas Brenner (AMNH, current)
Anand Sivaramakrishnan (AMNH, now Staff Scientist, STScI)
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CATEGORY II: SERVICE TO THE MUSEUM

Service to the Growth, Care, and Management of Museum Collections:

I have acquired 9.8 TB of observational data and 490 GB of simulation data. In addition, I have acquired one historically important astronomical instrument, which is on permanent display in the Hall of the Universe to augment the exhibitry that deals with brown dwarfs. I built four astronomical instruments. All of these efforts were funded externally and augment the assets of the museum. Donor funds raised directly for my research: \$198,000 (approximately).

Administrative Positions:

Curator-in-Charge of Astrophysics, July 2012-present
Chair of the Scientific Senate, September 2012-August 2014
Vice Chair of the Scientific Senate, September 2010-August 2012
Secretary of the Scientific Senate, September 2008-August 2010
Stand-in Secretary of the Scientific Senate, January 2008, February 2008
Curator-in-Charge of Digital Universe, January 2006-present
Curator-in-Charge of Astrobuletins, October 2005-present

AMNH Committees:

Appointments and Promotions Committee: September 2010-August 2012
Including Acting Chair for 2012 Anthropology Search.
Senate Executive Committee, September 2008-August 2014
Microscopy and Imaging Facility, Sept. 2004-August 2008
Education Committee, September 2006-August 2008
Library Committee, December 2007-August 2008
Academic Affairs and Fellowships Committee, October 2007-September 2012
Invertebrate Zoology Curatorial Search Committee, September 2007-June 2008
Curriculum Committee for Graduate School, January 2005, 1 year
Student Life Committee for Graduate School, January 2005, 1 year

Exhibitions:

1. "Looking for Other Worlds," temporary exhibition in the Hall of the Universe, March 13, 2007-March 12, 2008, with one permanent addition to the Hall, a set of public programs, a website, and off-site participation by NASA and the Mt. Wilson Observatory.
2. Co-Curator, with Mac Low, Space Show IV: "Journey to The Stars," July 2010 opening.
3. Co-Curator (with M. Brauen) part of "Visions of the Cosmos," Rubin Museum of Art, December 11, 2009-May 10, 2010.
4. "The Known Universe," curator of film production, launched on YouTube and available for download December 15, 2009. Over 13 million people have viewed it.

AMNH public education:

1. Hayden Planetarium, "This Just In . . ." April 20, 2004.
2. AMNH Junior Council Lecture, April 8, 2004.
3. AMNH Summer High School Research Program, August 2, 2004 .
4. AMNH Rose Center High School Program, August 9, 2004.

5. Summer Institute on Learning and Teaching Earth Science at AMNH, Teacher Renewal for Urban Science Teaching (TRUST), July 2005.
6. Hayden Planetarium, "Searching for other Earths," September 14, 2005.
7. AMNH Saltz Summer Internship Program, August 7, 2006.
8. Astrophysics laboratory tour for Summer Science Institute, Department of Education, June 30, 2006.
9. Summer Institute on Learning and Teaching Earth Science at AMNH, Teacher Renewal for Urban Science Teaching (TRUST), July 2006, several lectures and assistance with the program.
10. Host for "Death by Black Hole" Lecture by Neil Tyson, February 13, 2007.
11. "The Search for Life on Other Worlds," Hayden Planetarium special program at the opening of "Looking for Other Worlds" exhibition, March 13, 2007.
12. Explainers Talk on Exoplanets and AMNH research in this area, May 4, 2007.
- 13.-24. Host for 11 Planetarium evening lectures, June 2005-2011.
25. Hayden Planetarium, "International Year of Astronomy 2009: The Journey to Palomar," January 15, 2009.
26. Frontiers of Science Columbia Undergraduates, tour of lab and lecture, April 17, 2009.
27. Columbia Alumni Association, lecture and space show discussion, June 4, 2010.
28. Inaugural SciCafe event, lecture and discussion, October 7, 2009.
29. 10th Anniversary Rose Center, Presentation with NASA Astronaut Michael Massimino, October 10, 2010.
30. Video interview for new AMNH website, November 2, 2010
31. Host for Brampton Lecture Series with Columbia University-Hayden Planetarium, April 5, 2011
32. Video Interview for Space Exploration exhibit, June 7, 2011
33. Host for Dimitar Sasselov, Hayden Planetarium, February 6, 2012
34. Host for Caleb Scharf, Hayden Planetarium, September 10, 2012
35. Host for Geoff Marcy, Hayden Planetarium, March 11, 2013
36. AMNH SciCafe Lecturer, February 5, 2014

Tours, Meetings and Events for VIPs or Donors:

1. General Atlantic, Steve Denning's group (Trustee), Lab Tour, October 19, 2005.
2. NASA TPF Program Scientists, Museum Host and Lab Tour, September 13, 2005.
3. Patron's Circle Luncheon, Table Host, November 3, 2005.
4. Bill Golden/Carnegie Meeting, Lab Tour, December 3, 2005.
5. Board of Trustees Meeting, Science Presenter, December 7, 2005.
6. CIT officials, Lab Tour, March 3, 2006.
7. "Cosmic Collisions" Space Show Opening, with Astrophysics Laboratory tour for journalists via Communications Department, March 15, 2006.
8. Evan Dick, March 23, 2006.
9. Patron's Circle Science-at-Work Luncheon, March 30, 2006.
10. Eldrin Cruz, NASA JPL Officer, April 14, 2006.
11. CIT Women's Advisory Council, Behind-the-Scenes Tour and Luncheon, May 25, 2006.
12. Dick Mark, June 13, 2006.
13. Major Donors Dinner, June 26, 2006.
14. CIT Family Night at the Museum, June 29, 2006.

15. Junior Council Event, July 11, 2006.
16. Patron's Circle Luncheon, table host, November 1, 2006.
17. Board of Trustees Science Policy Committee presentation, November 9, 2006.
18. Tour and reception for Mayor Michael Bloomberg, Deputy Mayor Patricia Harris, December 28, 2006.
19. Lab tour for Junior Council members, January 25, 2007.
20. Junior Council CBC Program, January 18, 2007.
21. "Looking for Other Worlds" temporary exhibition opening reception, March 14, 2007.
22. Tour for Richard Fisher and Madhulika Guhathakurta, NASA Headquarters representatives, March 14, 2007.
23. Daniel Kirk-Foster, St. Wilfrid's Club, lab tour, October 1, 2006.
24. Annual Environmental Luncheon, Janet Asimov and Hilary Lipsitz, April 25, 2007.
25. Ellen Boer, August 2, 2007.
26. Hilary Lipsitz, September 11, 2007.
27. Patron's Circle Luncheon, Water, October 24, 2007.
28. UNESCO/AMNH Expeditions World Heritage event, September 24, 2007.
29. Institute for Advanced Studies and Carnegie Institutions of Washington Joint Commission on Science and Math Education, tour of Rose Center, November 7, 2007.
30. Tom Secunda (CTO Bloomberg), Saturday, November 10, 2007.
31. Annette Kade Charitable Foundation, review of Kade Fellowships, November 20, 2007.
32. Lab tour for Ambassador Sichan Siv, November 30, 2007.
33. Rose Center tour for the family of the Secretary General of the United Nations, Ban Ki-Moon, December 28, 2007.
34. Museum Advisory Council, Host, January 17, 2008.
35. 15th Anniversary of founding of Patron's Circle, February 5, 2008.
36. Steven Koval and Celeste Sant'Angelo, plus son Luca, Tour, March 18, 2008.
37. Guest Lecturer at for the 7th Annual Chairman's Circle Dinner, June 4, 2008.
38. Lab Tour for Marshall Levine, September 11, 2008.
39. Hilary and Ethel Lipsitz, November 20, 2008.
40. Eric Zinterhofer and Aerin Lauder, December 4, 2008.
41. Henry Arnhold, July 29, 2009.
42. Daniel Silverman, June 15, 2010.
43. Jeff Tarr, June 15, 2010.
44. Ponz Family, October 21, 2011.
45. Thoren Family, February 2, 2011.
46. Beyond Planet Earth Event, February 7, 2011.
47. Exhibitions reception, February 9, 2011.
48. Roger Altman Dome and Dinner event, June 6, 2013
49. Roger Altman Dome and Dinner event, January 16, 2013
50. Science at Work, March 13, 2013
51. Henry Arnhold, Lab visit and lunch with Pres. Futter, January 28, 2014

Meetings Hosted and Organized at AMNH:

1. NASA Terrestrial Planet Finder-Interferometer and Coronagraph Meetings at AMNH September 13-16, 2005, entire mission staff and science advisory boards (of which I am a member) had one of its six meetings at AMNH.

2. Center for High Angular Resolution Astronomy, Annual Science Meeting, March 15 and 16, 2007.
3. Space Show IV Science Colloquium, February 7 and 8, 2008.
4. Gemini Planet Imager Science Team, May 23-25, 2010.

Other Activities:

1. Designed and guided construction of Rose Center 6th floor offices and the Astrophysics Laboratory, Steven Warsavage (Construction Department) Project Manager, November 2004-May 2005.
2. Assisted with Communications and Marketing requests to check scientific accuracy, various dates.
3. AMNH Expeditions (Discovery Tour) aboard MV Hanseatic, to Norway, Spitsbergen, Arctic Ice Sheet, Russian White Sea, June 30-July 20, 2007, group leader and lecturer.
4. Assisted with American Association of Museums accreditation process, April 24, 2008.
5. Project 1640, project-wide meeting, Las Vegas, January 28-30, 2010.
6. AMNH.org video interview for new website, November 2, 2010.
7. Project 1640, project-wide meeting, Atlantic City, December 2-3, 2010.
8. Project 1640, project-wide meeting, Rincon, CA, March 25-26, 2012.

Served as an expert and was interviewed for the following press articles or other media, which either covered my own research or related work (Communications Department):

1. *Research Highlights*: Maj. Paul Belaire, Air Force Office of Scientific Research, "Coronagraph Used in Exoplanet Hunting," Jan/Feb/Mar 2004, p. 1.
2. *Sky and Telescope*: David Shiga, "Imaging Exoplanets," April 2004, Vol. 107, No. 4, p. 44 (Cover story).
3. *New York Times*: Dennis Overbye, "Grasping for Light of Distant Worlds," June 22, 2004, p. F1.
4. *Natural History Magazine*: At the Museum, "Picturing Planets," September, 2004, p. 76.
5. *New York Times*: Dennis Overbye, "Is it a Planet?" April 5, 2005, p. F4.
6. *MSNBC* and *Space.com*: Robert Roy Britt, "Planet Photo Debate Takes Wild Twist," April 30, 2005, <http://www.msnbc.msn.com/id/7684871/>.
7. *New York Times*: Dennis Overbye, "One Find, Two Astronomers: An Ethical Brawl," September 13, 2005, p. F1.
8. *Eyepiece*: Bruce Kamiat, "Finding other Earths," September 26, 2005, p. 1.
9. *USA Today*: Dan Vergano, "The definition of a planet is going under the telescope," September 22, 2005, p. E2.
10. *Danbury Times News*: Robert Miller, "Mars back in View," October 2, 2005, p. 4.
11. *Distant Light*: "Planet 10 with Dr. B. Oppenheimer & Keith Murdock," November, 2005, pg. 3.
12. *Popular Mechanics*: "Cosmic Collisions," March 16, 2006.
13. *ABC Good Morning America*: "Asteroid Near Miss," interview with Bill Weir, July 3, 2006.
14. *ABC World News Tonight*: "Giant Asteroid," interview with Charles Gibson and Terry Moran, July 3, 2006.
15. *Sky and Telescope*: Valerie C. Coffey, "MACHO Prediction Challenged," October, 2006, p. 8.

16. *Popular Science*: Lauren Aaronson, "How Big can Planets be?" December, 2006, p. 23.
17. *WOR Radio*: "The Orionid Meteor Shower," interview with Joe Bartlett and Donna Hanover, October 20, 2006.
18. *CSPAN*: "Death by Black Hole," introduction for Neil DeGrasse Tyson's book lecture, February 13, 2007.
19. *Reuters*: "Looking for New Worlds," exhibition opening coverage, March 14, 2007.
20. *NBC*: "Looking for New Worlds," exhibition opening coverage, March 14, 2007.
21. *Travelers Magazine*: "Looking for New Worlds," exhibition opening coverage, March 14, 2007.
22. *CBS News HD*: "Earth Like Planet," Evening spot, Scott Rapoport reporter, April 28, 2007.
23. *AT&T Tech News*: "Looking for Other Worlds," program on the exoplanet exhibit in the Rose Center, October 16, 2007.
24. *NASA/PlanetQuest Website*: "The Lyot Project," November 27, 2007.
25. *New York Times*: Dennis Overbye, "Star's Dust May Hold Clue to New Planet," March 26, 2008.
26. *Space.com*: Jeanna Bryner, "Photo Suggests Planet Under Construction," March 26, 2008.
27. *New Scientist*: David Shiga, "New Image May Reveal Embryonic World," March 27, 2008.
28. *Philadelphia Inquirer*: Tom Avril, "Image may be birth of distant planet," March 31, 2008.
29. *Voice of America*: interview with Mona Dhuneim on AB Aurigae paper, March 29, 2008.
30. *Science News*: "Caught in the Act? Images may reveal planetary birth," by Ron Cowen, April 5, 2008.
31. *AstroBulletins*: "Is this star gaining a planet?" Snapshot story, April 14, 2008.
32. *WNYC Leonard Lopate Show*: "Underreported: New Planet Forming?" 20 minute interview with Julie Burstein, April 17, 2008.
33. *New Scientist*: "Telescope could focus light without a mirror or lens" by David Shiga, May 1, 2008.
34. *Natural History*: "Science in the Summer," by Kristin Phillips, June 2008.
35. *SEED Magazine*: "Profiles," interview July 18, 2008, unpublished.
36. *NBC Nightly News*: "Planets imaged," with Bob Bazell, November 13, 2008.
37. *New York Times*: "Images of Planetary Systems," by Dennis Overbye, November 13, 2008.
38. *University of Cambridge*: "The Naked Astronomer," February 15, 2010.
39. *Austrian Broadcasting Company*, "Other Worlds," by Madeleine Amberger, interview on May 11, 2010.
40. *Washington Post*, "Stephen Hawking may be right about marauding aliens," by Brian Palmer, September 27, 2010.
41. *About.com*, "What is a planet?" video interview, October 20, 2010.
42. *Science Magazine*: "A Distant Glimpse of Alien Life?," by Yudhijit Bhattacharjee, Vol. 333, pp 930-932 (August 19, 2011).
43. *MIT Press Release*: "Two new earth-sized exoplanets discovered" December 21, 2011.
44. *SIFT Pod Casts*, "Origins of Life: Define Life," by Bishop (Aaron) Sand, July 6, 2012

45. *Discover Magazine*, 80 Beats blog, “To Photograph Distant Planets, Just Turn Off the Starlight,” by Sophie Bushwick, July 9, 2012
 46. *Sky and Telescope*, “Exoplanet Hunters Dim the Lights,” by Stephen Craft, July 11, 2012
 47. *The Verge (theverge.com)*, “New telescope can spot planets orbiting stars outside our solar system,” by Andrew Webster, July 10, 2012
 48. *Popular Science*, “New Telescope Optics Can Directly View Exoplanets By Hiding Interfering Starlight,” by Rebecca Boyle, July 10, 2012
 49. *engadget*, “Project 1640 offers new way to search for planets beyond our solar system,” by Donald Melanson, July 11, 2012
 50. *Scientific American*, “Scopes See Exoplanets and Violent Astrophysics,” by John Matson, July 31, 2012
 51. *LiveScience*, “New Technique Allows Discovery of New Worlds,” by Kendra Snyder, August 1, 2012
 52. *SIFT Pod Casts*, “Origins of Life: Origin Stories,” by Bishop (Aaron) Sand, August 7, 2012
 53. *SIFT Pod Casts*, “Origins of Life: Origins Research Motives,” by Bishop (Aaron) Sand, August 23, 2012
 54. *SIFT Pod Casts*, “Origins of Life: The Route to the Origin of Life,” by Bishop (Aaron) Sand, September 7, 2012
 55. *SIFT Pod Casts*, “Origins of Life: The Story of Earth,” by Bishop (Aaron) Sand, September 26, 2012
 56. *Skeptic Magazine*, “The Glare of Other Suns An inside look at how astronomers are searching for extrasolar planets,” by Apurva Narechania, Vol. 17, pp. 36-44 October 31, 2012
 57. *SIFT Pod Casts*, “Origins of Life: Searching Space,” by Bishop (Aaron) Sand, October 31, 2012
 - 58-??. Some thirty or forty articles published internationally covered my paper on HR8799 in March/April of 2013, ranging from *Scientific American* to *Fortune* magazine.
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Category III: Service to Science and Education

Offices or editorial positions held in scholarly organizations:

1. AMNH's Institutional Representative for the Astronomical Society of New York, February 2006-2011, led the successful application for membership in this society for the Museum.
2. Member, Board of Directors, Astronomical Society of New York, September 2011-present.

Official committees of governmental organizations or NGO agencies:

1. National Science Foundation, Advanced Technologies and Instrumentation Panel, January 2004.
2. National Research Council Committee on Astronomy and Astrophysics, Terrestrial Planet Finder Subpanel, May 2004-September 2004.
3. National Optical Astronomical Observatories Adaptive Optics Development Panel, 2004.
4. National Aeronautics and Space Administration, ASTID Program Panelist, May 2004.
5. Gemini Observatory, Adaptive Optics Science Working Group, September 2003-August 2004.
6. National Aeronautics and Space Administration, TPF Foundation Science Program Referee, August 2004.
7. European Southern Observatory, Very Large Telescope Planet Finder Review Committee, December 15-16, 2004.
8. National Aeronautics and Space Administration, Terrestrial Planet Finder Coronagraph Mission, Science and Technology Definition Team, February 2005-May 2006.
9. Nederlandse Organisatie voor Wetenschappelijk Onderzoek, Astronomy Open Competition 2005, Proposal Reviewer.
10. Scientific Organizing Committee, Ultra-Low-Mass Star and Brown Dwarf Formation Conference, La Palma, Canary Islands, June 2005.
11. National Research Council Panel to Review NASA Capabilities Roadmap: Panel C Observatories and Telescopes, Instruments and Sensors, March 2005-April 2005.
12. National Aeronautics and Space Administration, Terrestrial Planet Finder Foundation Science Review Panel, September 2005.
13. Chair, Astronomy Section, US Air Force Maui Optical Site Technical Conference, September 2005.
14. Columbia University, Committee on Graduate Admissions, 2005-2006 academic year.
15. National Aeronautics and Space Administration, Universe Working Group for direct advisory to the Astrophysics Subcommittee of the NASA Advisory Committee, April 2006-April 2009.
16. World Scientific Publishing, book proposal referee, March 2006.
17. US Air Force, Advanced Maui Optical Station, External Advisor for telescope and system upgrades, AO Integrated Product Team, March 2006-October 2006.

18. National Aeronautics and Space Administration, Navigator Science Forum and Chapter writer, May 2006.
19. National Aeronautics and Space Administration, Discovery Class Missions Review Panel, July 17-21, 2006.
20. National Aeronautics and Space Administration, Origins Review Panel, Sept. 17-19, 2007.
21. Columbia University, Committee on Graduate Admissions, 2007-2008 academic year.
22. Cool Stars 15, Scientific Organizing Committee, Conference at St. Andrew's, Scotland, July 2008 (August 2007-July 2008).
23. Philadelphia Retina Endowment Fund, proposal referee, April 2008.
24. National Science Foundation, proposal referee, MRI Program, November 2009.
25. National Academies of Science, Astro2010, Electromagnetic Observations from Space, April 2009-May 2010.
26. National Science Foundation, Panelist for Congressionally mandated GSMT Partnership Review, June 2012.
27. Sagan Workshop, Scientific Organizing Committee, July 2013, (September 2012-).
28. National Aeronautics and Space Administration, Large Binocular Telescope Interferometer, Science Review Board, December 2012.
29. National Aeronautics and Space Administration, Mission Reviewer, February-March 2013.
30. National Science Foundation, ATI Program referee, February 2014.
31. NASA WFIRST-AFTA Mission Technology Assessment Committee, November 2013-2016.
32. NASA Astrophysics Senior Review, Panel Chair, April-May 2014.

Invited presentations at other scholarly institutions (includes only talks after July 2004):

1. NASA/JPL/Caltech, Michelson Summer School on Coronagraphy, July 24, 2004, "Practical Coronagraphy."
2. Cambridge University, Institute for Astronomy, October 13, 2004, "The Lyot Project."
3. Boston University, November 30, 2004, "The Lyot Project."
4. University of Delaware, November 11, 2004, "The Lyot Project."
5. Yale University, December 2, 2004, "The Lyot Project."
6. SUNY-Stony Brook Physics Department, April 5, 2005, "The Lyot Project."
7. Kobe University, International Summer School on Planetary Science, July 12-15, 2005, "Exoplanetary Science."
8. NSF Center for Adaptive Optics, November 12, 2004, "Exoplanet Imaging."
9. Terrestrial Planet Finder Science Definition Team, September 13, 2005, "The Lyot Project."
10. Protostars and Planets V, Kona, HI, October 27, 2005 "Direct Detection of Exoplanets: Now and into the Future."
11. Space Telescope Science Institute, December 14, 2005, "The Lyot Project."
12. Carnegie Institution of Washington, Department of Terrestrial Magnetism, March 22, 2006, "The Lyot Project."

13. University of Leiden, Science Faculty Luncheon, October 24, 2006, “The Scientific Search for Life Outside the Solar System.”
14. University of Leiden, Lorentz Center, October 24, 2006, “Observations of Brown Dwarfs and Exoplanets.”
15. Cool Stars XIV, Pasasdena, CA, November 8, 2006, “Observations of Brown Dwarfs and Exoplanets.”
16. Michigan State University, Physics Department, January 31, 2007, “Comparative Exoplanetary Science.”
17. University of Michigan, Physics and Astrophysics Department, February 1, 2007, “Comparative Exoplanetary Science.”
18. Massachusetts Institute of Technology, Physics Department, February 22, 2007, “Comparative Exoplanetary Science.”
19. New York Astronomical Society/American Physical Society meeting at Skidmore University, October 19, 2007, “Comparative Exoplanetary Science.”
20. NASA Jet Propulsion Laboratory, September 16, 2008, “Comparative Exoplanetary Science.”
21. CUNY-Graduate Center, Tri-State Astronomy Meeting, October 31, 2008, “Seeing Exoplanets”
22. NYU, Physics Colloquium, “Comparative Exoplanetary Science,” April 3, 2009.
23. California Institute of Technology, Sagan Summer Workshop, “Imaging Exoplanets,” July 21, 2009.
24. California Institute of Technology, Astrophysics Department, “The Making of Journey to the Stars,” July 22, 2009.
25. NASA Ames Research Center, Colloquium, “Comparative Exoplanetary Science,” September 8, 2009.
26. New York Academy of Sciences, Annual Board Meeting, “Imaging Exoplanets,” September 16, 2009.
27. University of California-Berkeley, Astronomy AO-Group Colloquium, “Project 1640 and GPI,” January 12, 2010.
28. Cambridge University, Institute for Astronomy, “Project 1640,” February 17, 2010.
29. Rutgers University, Department of Astronomy, “Comparative Exoplanetary Science,” November 5, 2010.
30. Penn State University, Department of Physics and Astronomy, “Comparative Exoplanetary Science,” April 13, 2011
31. Ringberg Workshop, “50 Years of Brown Dwarfs,” Keynote, October 2012
32. Palomar Science Meeting November 2012
33. Queens University, April 3, 2013
34. University of Montreal, April 4, 2013
35. International Subaru Conference, Kona Hawaii, December 2013
36. Columbia Astrophysics, March 5, 2014

Adjunct appointments with universities or other institutions:

1. Adjunct Professor of Astronomy, Columbia University, September 2013-present.
2. Adjunct Associate Professor of Astronomy, Columbia University, September 2008-2013.

3. Visiting Scientist, Cambridge University, Institute for Astronomy, February 2010.
4. Adjunct Assistant Professor of Astronomy, Columbia University, September 2004-2008.
5. Visiting Scientist, Cambridge University, Institute for Astronomy, April-May 2006.
6. Visiting Scientist, Cambridge University, Institute for Astronomy, October 2004.

Courses taught:

- Kobe University International Summer School on Exoplanetary Science (3 lectures), July 2006.
- Frontiers of Science, Columbia University, core undergraduate course (17 lectures and 17 lab classes), Spring 2009.
- Physical Sciences Lecture Series, Richard Gilder Graduate School, American Museum of Natural History, Spring 2009 (1 lecture).

Student committees:

1. Gail Schaeffer, Ph.D., Thesis Defense Committee, Stony Brook University, November 5, 2004.
2. Sasha Hinkley, Ph.D., Columbia University, 2005-June 2009. I was his primary advisor. Graduated with distinction.
3. Neil Zimmerman, Ph.D., Columbia University, 2006-2011. I was his primary advisor.
4. Andrew Brown, M.A., Columbia University, 2008-2011. I was his primary advisor
5. Sarah Tuttle, Ph.D., Columbia University, February 2007-June 2010.
6. Emily Rauscher, Ph.D., Columbia University, November 2007-June 2010.
7. Rahul Patel, Ph.D., Stony Brook University, 2012-, committee member.
8. Victor Garcia, Ph.D., Vanderbilt, February 2013-, committee member.
9. Aaron Veicht, Ph.D., Columbia University, January 2013-, I am his primary advisor.

Lectures aimed at popular audiences (only since 2004 and not at AMNH):

1. Cadawalader, Wickersham and Taft, Library Week, April 22, 2004.
2. New Jersey Amateur Astronomers Association, June 19, 2004.
3. New York Amateur Astronomy Association, Lecture, "When will we be able to see exoplanets?" February 3, 2005.
4. Rockland Astronomy Club, "The 10th Planet or What is a Planet Anyway?" October 14, 2005.
5. MacMillan/McGraw Hill Texbook "Meet a Scientist" Feature for California Edition, with R. Kinzler and O. De Marco, December 2005.
6. North East Astro Forum, "Exoplanets," May 6, 2006, one of the largest meetings of amateur astronomers in the country.
7. St. Wilfrid's Club, "Exoplanets," January 29, 2007.
8. The Explorer's Club, "Toward Exploration of Other Worlds," January 28, 2008.
9. The Secret Science Club, "Comparative Exoplanetary Science," April 2, 2008.
10. Morgan-Stanley, "Journey to the Stars and the Search for Other Worlds," July 14, 2009.
11. Hudson River Museum, "Seeing Other Worlds," September 27, 2009.

12. California Academy of Sciences, "The research behind Journey to the Stars," January 11, 2010.
13. Rubin Museum of Art, "Carl Sagan and Exoplanets," March 10, 2010.
14. New York Academy of Sciences, "Exoplanets: A Galaxy of Worlds Awaits Us," May 27, 2010.
15. New York Academy of Sciences, "Comparative Planetary Science", April 12, 2011, also broadcast by webinar.
16. Rolnick Observatory, Westport, CT, "Comparative Planetary Science," November 15, 2011.

Popular Press Articles Authored:

1. "Mauna Kea" by B. R. Oppenheimer, *Natural History*, Spring Travel Issue (New York: Natural History Magazine; 2003), Vol. 112, pp. 86-87.
2. "White Dwarfs by the Billions" by B. R. Oppenheimer, in *Power Web Astronomy: 2002 Annual Edition*, D. Dathe, ed. (New York: McGraw-Hill; 2002).
3. "White Dwarfs by the Billions" by B. R. Oppenheimer, *Mercury*, Vol. 30, p. 16 (2001 May and June).

Contributing author for *Cosmic Frontiers: Astronomy at the Cutting Edge*, S. Soter and N. deG. Tyson, eds. (New York: New Press and the National Center for Science Literacy, Education and Technology, American Museum of Natural History; 2001 April).

Contributions include essays, written in collaboration with S. Soter, on the historical development of ideas concerning the following:

4. "Friedrich Bessel and the Companion of Sirius"
 5. "Ernst Chladni and Rocks from the Sky"
 6. "The Cosmic Microwave Background Radiation"
 7. "Gerard Kuiper and the Trans-Neptunian Comet Belt"
 8. "Georges Lemaitre, Father of the Big Bang"
 9. "John Michell and Black Holes"
 10. "Ole Roemer and the Speed of Light"
 11. "Vera Rubin and Dark Matter"
 12. "Neutrino Observatories"
 13. "Lyman Spitzer and the Space Telescope"
 14. "Fritz Zwicky's Extraordinary Vision"
 15. "Cecilia Payne-Gaposchkin and the Stuff of Stars"
16. "Reasons behind 1950s Oppenheimer security decision are debated" by B. R. Oppenheimer, *Physics Today*, Vol. 52, p. 13 (1999 June).
 17. "Brown Dwarf Science Matures" by B. R. Oppenheimer. News Note in the March 1999 issue of *Sky and Telescope*, p. 20.
 18. "A Measured Step into the Universe's Farthest Reaches" by B. R. Oppenheimer. News Note in the December 1998 issue of *Sky and Telescope*, p. 18.
 19. "Where Have All the Baryons Gone?" by B. R. Oppenheimer. News Note in the October 1998 issue of *Sky and Telescope*, p. 26.
 20. "The Milky Way's Deadly Spiral Arms" by B. R. Oppenheimer. News Note in the July 1998 issue of *Sky and Telescope*, p. 20.

21. "Brown Dwarf" by S. R. Kulkarni and B. R. Oppenheimer, in *The McGraw-Hill Yearbook of Science and Technology 1998* (New York: McGraw-Hill; 1998), p. 40.
22. "Brown Dwarf" by B. R. Oppenheimer, in the *McGraw-Hill Encyclopedia of Science*, 2011 (New York: McGraw-Hill).

Paid or unpaid professional activities outside of the AMNH, not listed above:

Refereed typically 5 papers per year for *Astrophysical Journal*, *Astronomische Nachrichten*, *Publications of the Astronomical Society of the Pacific*, *Astronomical Journal*, *Astronomy and Astrophysics*, *Monthly Notices of the Royal Astronomical Society*.