

KATRINA MARIE MIRANDA
Curriculum Vitae

ADDRESS

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EDUCATION

B. S., Chemistry, American Chemical Soc. certified, Northern Arizona University, May 1989
Research Advisor: Prof. Robert W. Zoellner

Ph. D., Inorganic Chemistry, University of California, Santa Barbara, March 1996
Dissertation Title: *The Synthesis, Characterization and Investigation of the Thermal and Photochemical Properties of Novel Metal Nitrosyl Porphyrins*
Research Advisor: Prof. Peter C. Ford

Postdoctoral Fellow, Department of Cell Biology, University of New Mexico
Research Director: Prof. David G. Bear
Financial Support: NHLBI Research Training Grant
April, 1996 – July, 1998

Cancer Research Fellow, Radiation Biology Branch, National Cancer Institute, NIH
Research Director: Dr. David A. Wink
August, 1998 – October, 2002

EMPLOYMENT

1985-1989	Teaching Assistant Department of Chemistry, Northern Arizona University
1989-1994	Teaching Assistant Department of Chemistry, University of California, Santa Barbara
1990-1996	Research Assistant Research Advisor: Prof. Peter C. Ford Department of Chemistry, University of California, Santa Barbara
1995	Lecturer and Associate Department of Chemistry, University of California, Santa Barbara
1996-1998	Postdoctoral Fellow , NHLBI Research Training Grant funded Research Director: Prof. David G. Bear Dept. of Cell Biology and Physiology, University of New Mexico

1997-1998	Lecturer Department of Chemistry, University of New Mexico
1998-2002	Cancer Research Fellow Research Director: Dr. David A. Wink Radiation Biology Branch, National Cancer Institute, NIH
2000-2001	Instructor Department of Biochemistry and Molecular Biology, College of Medicine, Howard University
2002-2008	Assistant Professor Department of Chemistry, University of Arizona
2004-2008	Assistant Professor BIO5 Institute, University of Arizona
2008-present	Associate Professor Department of Chemistry and Biochemistry and the BIO5 Institute, University of Arizona
2011-2014	Assistant Chair for Education and Assessment Department of Chemistry and Biochemistry, University of Arizona

HONORS AND AWARDS

1988-1989	Mortar Board, Chapter Vice President, Northern Arizona University
1989-1991	President's Pre-doctoral Fellowship, UC Santa Barbara
1992-1993	Campus Fellowship, UC Santa Barbara
1994	UC Regents' Intern Fellowship, UC Santa Barbara
1994-1995	Graduate Student Fee Fellowship, UC Santa Barbara
1996-1998	NHLBI Research Training Grant Funding, University of New Mexico
2001	Fellows Award for Research Excellence, NIH
2002	Exceptional Stipend Increase for Outstanding Progress, NIH
2006	NSF Faculty Early Career Development (CAREER) Award
2008	Presidential Early Career Award for Scientists and Engineers (PECASE)
2010	NSF Division of Chemistry and Chemistry Committee of Visitors recognition of exemplar of excellence: CAREER Award project
2010	Graduate and Professional Student Council Achievement Award for Outstanding Mentor of Graduate/Professional Students, Univ. of Arizona
2012	Permanent Member, NIH Training and Workforce Development (TWD) Institutional Predoctoral Training Grant Review Panel
2013	Fellow of the American Association for the Advancement of Science (AAAS)
2014	College of Science Distinguished Advising Award, University of Arizona
2015	University of Arizona Foundation Award in recognition of research and contributions to the academic and Tucson community

PUBLICATIONS***h-index (Web of Science):*** 40***cover features:*** 16, 34, 70***SciBX feature:*** 70***invited reviews/commentaries:*** 65, 69, 73, 80***highly cited articles (>100 citations):*** 1, 2, 14, 17, 19, 20, 26, 27, 29, 31, 32, 34, 37, 40, 43, 53***very highly cited articles (>1000 citations):*** 16

1. **Katrina M. Miranda**, Xianhui Bu, Ivan Lorkovic and Peter C. Ford*, "Synthesis and structural characterization of several ruthenium porphyrin nitrosyl complexes", *Inorganic Chemistry*, **36**, 4838-4848 (1997). **Highly cited article.**
2. P. C. Ford*, J. Bourassa, **K. Miranda**, B. Lee, I. Lorkovic, S. Boggs, S. Kudo and L. Laverman, "Photochemistry of metal nitrosyl complexes. Delivery of nitric oxide to biological targets", *Coordination Chemistry Reviews*, **171**, 185-202 (1998). **Highly cited article.**
3. Ivan Lorkovic, **Katrina M. Miranda***, Brian J. Lee, Stefan Bernhard, Jon R. Schoonover and Peter C. Ford*, "Flash photolysis studies of the ruthenium(II) porphyrins, Ru(P)(NO)(ONO). Multiple pathways involving reactions of intermediates with nitric oxide", *Journal of the American Chemical Society*, **120**, 11674-11683 (1998).
4. David Jourdeuil, **Katrina M. Miranda**, Sung M. Kim, Michael Espey, Yoram Vodovatz, Stephan Laroux, Christie T. Mai, Allan M. Miller, Matthew B. Grisham and David A. Wink*, "The oxidative and nitrosative chemistry of the NO/O₂⁻ reaction in the presence of bicarbonate", *Archives of Biochemistry and Biophysics*, **365**, 92-100 (1999).
5. David A. Wink*, **Katrina M. Miranda** and Michael G. Espey, "Effects of oxidative and nitrosative stress in cytotoxicity", *Seminars in Perinatology*, **24**, 20-23 (2000).
6. **Katrina M. Miranda***, Michael G. Espey and David A. Wink, "A discussion of the chemistry of oxidative and nitrosative stress in cytotoxicity", *Journal of Inorganic Biochemistry*, **79**, 237-240 (2000).
7. Michael G. Espey, **Katrina M. Miranda**, Ryszard M. Pluta and David A. Wink*, "Nitrosative capacity of macrophages is dependent on nitric-oxide synthase induction signals", *Journal of Biological Chemistry*, **275**, 11341-11347 (2000).
8. Michael G. Espey, **Katrina M. Miranda**, Martin Feelisch, Matthew B. Grisham, Michael Vitek and David A. Wink, "Mechanisms of cell death governed by the balance between nitrosative and oxidative stress", *Annals of the New York Academy of Sciences*, **899**, 209-221 (2000).

9. Xiaoling Zhou, James Chen, Michael G. Espey, **Katrina M. Miranda**, Perwez Hussain, David A. Wink and Curtis C. Harris*, "Inhibitor effects of nitric oxide and iNOS on dopamine- β -hydroxylase", *Journal of Biological Chemistry*, **275**, 21241-21246 (2000).
10. Michael G. Espey*, **Katrina M. Miranda**, David A. Wink, Carol A. Colton, Ryszard M. Pluta and Sandra J. Hewett, "Nitric oxide and the NMDA receptor in ischemia and reperfusion injury: is NO protective and injurious?", *Free Radicals in Brain Pathophysiology* (G. Poli, E. Cadenas and L. Packer, Eds.), Marcel Dekker, Inc., New York, pp. 523-539 (2000).
11. Mitchell, J. B.,* Cook, J. A., Stein, W., Coffin, D., Espey, M. G., **Miranda, K. M.** and Wink, D. A., "Is there a role for nitric oxide in cancer treatment?", *Radiation Research*, **2**, pp. 618-621 (2000).
12. David A. Wink*, **Katrina M. Miranda**, Michael G. Espey, James B. Mitchell, Matthew B. Grisham, Jon Fukuto and Martin Feelisch, "The chemical biology of NO. Balancing NO with oxidative and nitrosative stress", *Handbook of Experimental Pharmacology*, (B. Mayer, Ed.), **143**, Springer-Verlag, Berlin, pp. 7-29 (2000).
13. **Katrina M. Miranda**, Michael G. Espey, David Jourdeuil, Matthew B. Grisham, Jon Fukuto, Martin Feelisch and David A. Wink*, "The chemical biology of nitric oxide", *Nitric Oxide: Biology and Pathobiology* (L. Ignarro, Ed.), Academic Press, San Diego, pp. 41-55 (2000).
14. **Katrina M. Miranda***, Michael G. Espey, Kenichi Yamada, Murali Krishna, Natalie Ludwick, SungMee Kim, David Jourdeuil, Matthew B. Grisham, Martin Feelisch, Jon M. Fukuto and David A. Wink, "Unique oxidative mechanisms for the reactive nitrogen oxide species, nitroxyl anion", *Journal of Biological Chemistry*, **276**, 1720-1727 (2001). **Highly cited article.**
15. Ryohei Ogawa, Roberto Pacelli, Michael G. Espey, **Katrina M. Miranda**, Norman Friedman, SungMee Kim, George Cox, James B. Mitchell, David A. Wink and Angelo Russo*, "Comparison of control of Listeria by nitric oxide redox chemistry from murine macrophages and NO donors. Insights into listeriocidal activity of oxidative and nitrosative stress", *Free Radical Biology and Medicine*, **30**, 268-276 (2001).
16. **Katrina M. Miranda***, Michael G. Espey and David A. Wink, "A rapid, simple spectrophotometric method for detection of nitrate and nitrite", *Nitric Oxide*, **5**, 62-71 (2001). **Cover feature. Very highly cited article.**
17. David A. Wink*, **Katrina M. Miranda**, Michael G. Espey, Ryszard M. Pluta, Carol Colton, Michael Vitek, Martin Feelisch and Mathew B. Grisham, "Mechanisms of the antioxidant effects of nitric oxide", *Antioxidant and Redox Signaling*, **3**, 203-213 (2001). **Highly cited article.**
18. Wink, D. A.* , **Miranda, K. M.** and Espey, M. G., "Cytotoxicity related to oxidative and nitrosative stress by nitric oxide", *Experimental Biology and Medicine*, **226**, 621-623 (2001).
19. Michael G. Espey*, **Katrina M. Miranda**, Douglas D. Thomas and David A. Wink, "Distinction between nitrosating mechanisms within human cells and aqueous solution", *Journal of Biological Chemistry*, **276**, 30085-30091 (2001). **Highly cited article.**

20. Nazareno Paolocci, Walter F. Saavedra, **Katrina M. Miranda**, Cristian Martignani, Takayoshi Isoda, Joshua M. Hare, Michael G. Espey, Jon M. Fukuto, Martin Feelisch, David A. Wink and David A. Kass*, "Nitroxyl anion exerts redox-sensitive positive cardiac inotropy *in vivo* by calcitonin gene related peptide signaling", *Proceedings of the National Academy of Science USA*, **98**, 10463-10468 (2001). **Highly cited article.**
21. C. A. Colton*, M. Gbadegesin, D. A. Wink, **K. M. Miranda**, M. G. Espey and S. Vicini, "Nitroxyl anion regulation of the NMDA receptor", *Journal of Neurochemistry*, **78**, 1126-1134 (2001).
22. Michael G. Espey, Sandhya Xavier, Douglas D. Thomas, **Katrina M. Miranda** and David A. Wink, "Direct real-time evaluation of nitration in solution and within human cells with green fluorescent protein reveals the impact of nitrogen dioxide versus peroxynitrite mechanisms", *Proceedings of the National Academy of Science USA*, **99**, 3481-3486 (2002).
23. David A. Wink*, Deborah Citrin, Michael P. Vitek, Carol Colton, Roberto Pacelli, Rygeio Ogawa, Douglas D. Thomas, **Katrina M. Miranda** and Michael G. Espey, "Immune defense: role of reactive nitrogen oxide species", *Nature Encyclopedia of Life Sciences*, Nature Publishing Group, London, [http://www.els.net/\[doi:10.1038/npg.els.0000484\]](http://www.els.net/[doi:10.1038/npg.els.0000484]) (2002).
24. **Katrina M. Miranda***, Ken-ichi Yamada, Michael G. Espey, Douglas D. Thomas, William DeGraff, James B. Mitchell, Murali C. Krishna, Carol A. Colton and David A. Wink, "Further evidence for distinct reactive intermediates from nitroxyl and peroxynitrite: effects of buffer conditions on the chemistry of Angeli's salt and synthetic peroxynitrite", *Archives of Biochemistry and Biophysics*, **401**, 134-144 (2002).
25. Michael G. Espey*, **Katrina M. Miranda**, Douglas D. Thomas, Deborah Citrin, Sandhya Xavier, Michael P. Vitek and David A. Wink, "A chemical perspective on the interplay between NO, reactive oxygen species and reactive nitrogen oxide species", *Annals of the New York Academy of Sciences*, **962**, 195-206 (2002).
26. Michael D. Bartberger, Wei Liu, Eleonora Ford, **Katrina M. Miranda**, Christopher Switzer, Jon M. Fukuto*, Patrick J. Farmer, David A. Wink and K. N. Houk*, "The reduction potential of nitric oxide (NO) and its importance to NO biochemistry", *Proceedings of the National Academy of Science USA*, **99**, 10958-10963 (2002). **Highly cited article.**
27. Michael G. Espey*, Douglas D. Thomas, **Katrina M. Miranda** and David A. Wink, "Focusing of nitric oxide mediated nitrosation and oxidative nitrosylation as a consequence of its reaction with superoxide", *Proceedings of the National Academy of Science USA*, **99**, 11127-11132 (2002). **Highly cited article.**
28. Michael G. Espey*, **Katrina M. Miranda**, Douglas D. Thomas and David A. Wink, "Ingress and reactive chemistry of nitroxyl-derived species within human cells", *Free Radical Biology and Medicine*, **33**, 827-834 (2002).
29. Douglas D. Thomas, Michael G. Espey, Michael P. Vitek, **Katrina M. Miranda** and David A. Wink*, "Protein nitration is mediated by heme and free metals through Fenton-type chemistry:

- an alternative to the NO/O₂⁻ reaction", *Proceedings of the National Academy of Science USA*, **99**, 12691-12696 (2002). **Highly cited article.**
30. Douglas D. Thomas, **Katrina M. Miranda**, Michael G. Espey, Deborah Citrin, David Jourdeuil, Nazareno Paolocci, Sandra Hewett, Carol A. Colton, Matthew Grisham, Martin Feelisch and David A. Wink*, "Guide for the use of nitric oxide (NO) donors as probes of the chemistry of NO and related redox species in biological systems", *Methods in Enzymology*, **359**, 84-105 (2003).
 31. Pasquale Pagliaro, Daniele Mancardi, Raffaella Rastaldo, Claudia Penna, Donatella Gattullo, **Katrina M. Miranda**, Martin Feelisch, David A. Wink, David A. Kass and Nazareno Paolocci*, "Nitroxyl affords thiol-sensitive myocardial protective effects akin to early preconditioning", *Free Radical Biology and Medicine*, **34**, 33-43 (2003). **Highly cited article.**
 32. Lorne J. Hofseth, Shin'ichi Saito, S. Perwez Hussain, Michael G. Espey, **Katrina M. Miranda**, Yuzuru Araki, Chamelli Jhappan, Yuichiro Higashimoto, Peijun He, Steven P. Linke, Martha M. Quezado, Irit Zurer, Varda Rotter, David A. Wink, Ettore Appella and Curtis C. Harris*, "Nitric oxide-induced cellular stress and p53 activation in chronic inflammation", *Proceedings of the National Academy of Science USA*, **100**, 143-148 (2003). **Highly cited article.**
 33. **Katrina M. Miranda**, Raymond W. Nims, Douglas D. Thomas, Michael G. Espey, Deborah Citrin, Michael D. Bartberger, Nazareno Paolocci, Jon M. Fukuto, Martin Feelisch and David A. Wink*, "Comparison of the reactivity of nitric oxide and nitroxyl with heme proteins. A chemical discussion of the differential biological effects of these redox related products of NOS", *Journal of Inorganic Biochemistry*, **93**, 52-60 (2003).
 34. Nazareno Paolocci, Tatsuo Katori, Hunter C. Champion, Marcus E. St. John, **Katrina M. Miranda**, Jon M. Fukuto, David A. Wink, David A. Kass*, "Positive inotropic and lusitropic effects of HNO/NO⁻ in failing hearts: independence from β -adrenergic signaling", *Proceedings of the National Academy of Science USA*, **100**, 5537-5542 (2003). **A "From the cover" article. Highly cited article.**
 35. Douglas D. Thomas, **Katrina M. Miranda**, Deborah Citrin, Michael G. Espey and David A. Wink*, "Nitric oxide: the biology in its chemistry", *Combat Medicine: Basic and Clinical Research in Military Trauma and Emergency Medicine* (George C. Tsokos and James Atkins, Eds.), Humana Press, Totowa, NJ, pp. 23-60 (2003).
 36. Douglas D. Thomas, **Katrina M. Miranda**, Carol A. Colton, Deborah Citrin, Michael Graham Espey and David A. Wink*, "Heme proteins and nitric oxide (NO): the neglected, eloquent chemistry in NO redox signaling and regulation", *Antioxidants and Redox Signaling*, **5**, 307-318 (2003).
 37. **Katrina M. Miranda***, Nazareno Paolocci, Tatsuo Katori, Douglas D. Thomas, Eleonora Ford, Michael D. Bartberger, Michael G. Espey, David A. Kass, Martin Feelisch, Jon M. Fukuto and David A. Wink*, "A biochemical rationale for the orthogonal behavior of nitroxyl and nitric oxide in the cardiovascular system", *Proceedings of the National Academy of Science USA*, **100**, 9196-9201 (2003). **Highly cited article.**

38. Olga Sidorkina, Michael G. Espey, **Katrina M. Miranda**, David A. Wink* and Jacques Laval, "Inhibition of poly(ADP-ribose) polymerase (PARP) by nitric oxide and reactive nitrogen oxide species", *Free Radical Biology and Medicine*, **35**, 1431-1438 (2003).
39. David A. Wink*, **Katrina M. Miranda**, Tatsuo Katori, Daniele Mancardi, Douglas Thomas, Lisa Ridnour, Michael G. Espey, Martin Feelisch, Carol Colton, Jon Fukuto, David A. Kass and Nazareno Paolucci,* "The orthogonal properties of the redox siblings nitroxyl and nitric oxide in the cardiovascular system: a novel redox paradigm", *American Journal of Physiology: Heart and Circulation Physiology*, **285**, 2264-2276 (2003).
40. Lisa A. Ridnour, Douglas D. Thomas, Daniele Mancardi, Nazareno Paolucci, Michael G. Espey, **Katrina M. Miranda**, Martin Feelisch, Jon Fukuto and David A. Wink*, "The chemistry of nitrosative stress by nitric oxide and reactive nitrogen oxide species: putting perspective on stressful biological situations", *Biological Chemistry*, **385**, 1-10 (2004). **Highly cited article.**
41. Daniele Mancardi, Lisa A. Ridnour, Douglas D. Thomas, Michael G. Espey, **Katrina M. Miranda**, Nazareno Paolucci and David A. Wink*, "The chemical dynamics of NO and reactive nitrogen oxides. A practical guide", *Current Molecular Medicine*, **4**, 723-740 (2004).
42. Lisa A. Ridnour, Douglas D. Thomas, Daniele Mancardi, Sonia Donzelli, Nazareno Paolucci, Pasquale Pagliaro, **Katrina M. Miranda**, Murali Krishna, John Fukuto, Matthew B. Grisham, James B. Mitchell, Michael G. Espey and David A. Wink*, "Antioxidant properties of nitric oxide in cellular physiological and pathophysiological mechanisms. The implications of biological balance between NO and oxidative stress", *Current Medicinal Chemistry*, **3**, 181-188 (2004).
43. **Katrina M. Miranda**, "The chemistry of nitroxyl (HNO) and implications in biology", *Coordination Chemistry Reviews*, **249**, 433-455 (2005). **Highly cited article.**
44. **Katrina M. Miranda***, Andrew S. Dutton, Lisa A. Ridnour, Christian A. Foreman, Eleonora Ford, Nazareno Paolucci, Tatsuo Katori, Daniele Mancardi, Douglas D. Thomas, Michael G. Espey, K. N. Houk, Jon M. Fukuto, David A. Wink*, "Mechanism of aerobic decomposition of Angeli's salt (sodium trioxodinitrate) at physiological pH", *Journal of the American Chemical Society*, **127**, 722-31 (2005).
45. **Katrina M. Miranda**, Lisa Ridnour, Michael Espey, Tatsuo Katori, Carlo G. Tocchetti, Douglas Thomas, Daniele Mancardi, Marcella Ferlito, Sonia Donzelli, Jon Fukuto, Nazareno Paolucci and David A. Wink*, "The chemical biology of NO and HNO: an inorganic perspective", *Progress in Inorganic Chemistry*, **54**, 349-384 (2005).
46. Jon M. Fukuto*, Christopher H. Switzer, **Katrina M. Miranda** and David A. Wink, "Nitroxyl (HNO): chemistry, biochemistry and pharmacology", *Annual Reviews of Pharmacology and Toxicology*, **45**, 335-355 (2005).
47. **Katrina M. Miranda***, Herbert T. Nagasawa and John P. Toscano, "Donors of HNO", *Current Topics in Medicinal Chemistry*, **5**, 649-664 (2005).

48. **Katrina M. Miranda***, Tatsuo Katori, Claudia L. Torres de Holding, Lynta Thomas, Lisa A. Ridnour, William J. McLendon, Stephanie Cologna, Andrew S. Dutton, Hunter C. Champion, Daniele Mancardi, Carlo G. Tocchetti, Joseph Saavedra, Larry K. Keefer, K. N. Houk, Jon M. Fukuto, David A. Kass, Nazareno Paolocci and David A. Wink*, "Comparison of the NO and HNO donating properties of diazeniumdiolates. Primary amine adducts release HNO *in vivo*", *Journal of Medicinal Chemistry*, **48**, 8220-8228 (2005).
49. Sonia Donzelli, Michael G. Espey, Douglas D. Thomas, Daniele Mancardi, Carlo G. Tocchetti, Lisa A. Ridnour, Nazareno Paolocci, S. Bruce King, **Katrina M. Miranda**, Giuseppe Lazzarino, Jon M. Fukuto and David A. Wink*, "Discriminating formation of HNO from other reactive nitrogen oxide species", *Free Radical Biology and Medicine*, **40**, 1056-1066 (2006).
50. Andrew S. Dutton, Christopher. P. Suhrada, **Katrina M. Miranda**, David A. Wink, Jon M. Fukuto and K. N. Houk*, "Mechanism of pH dependent decomposition of monoalkylamine diazeniumdiolates to form HNO and NO, deduced from Density Functional Theory and CBS-QB3 calculations", *Inorganic Chemistry*, **45**, 2448-2456 (2006).
51. Sonia Donzelli, Christopher H. Switzer, Douglas D. Thomas, Lisa A. Ridnour, Michael G. Espey, Jeffrey S. Isenberg, Carlo G. Tocchetti, S. Bruce King, Giuseppe Lazzarino, **Katrina M. Miranda**, David D. Roberts, Martin Feelisch and David A. Wink*, "The activation of metabolites of nitric oxide synthase by metals is both redox- and oxygen-dependent: a new feature of nitrogen oxide signaling", *Antioxidant and Redox Signaling*, **8**, 1363-1371 (2006).
52. Tatsuo Katori, Sonia Donzelli, **Katrina M. Miranda**, Douglas T. Thomas, Carlo G. Tocchetti, Myung Jae Lee, Daniele Mancardi, David A. Kass, David A. Wink and Nazareno Paolocci*, "Peroxynitrite and myocardial contractility: in vivo versus in vitro effects", *Free Radical Biology and Medicine*, **15**, 1601-1618 (2006).
53. Nazareno Paolocci,* Matthew I. Jackson, Brenda E. Lopez, **Katrina Miranda**, Carlo G. Tocchetti, David A. Wink, Adrian Hobbs and Jon M. Fukuto*, "The pharmacology of nitroxyl (HNO) and its therapeutic potential: not just the Janus face of NO", *Pharmacology and Therapeutics*, **113**, 442-458 (2007). **Highly cited article.**
54. Anders Omsland, **Katrina M. Miranda**, Richard L. Friedman and Scott Boitano*, "*Bordetella bronchiseptica* responses to physiological reactive nitrogen and oxygen stresses", *FEMS Microbiology Letters*, **284**, 92-101 (2008).
55. Zênis Novais da Rocha, Mario Sérgio Pereira Marchesi, Josiane Cristina Molin, Claire N. Lunardi, **Katrina M. Miranda**, Lusiane Maria Bendhack, Peter C. Ford and Roberto Santana da Silva*, "The inducing NO-vasodilation by chemical reduction of coordinated nitrite ion in *cis*-[Ru(NO₂)(bpy)₂L]⁺ complex", *Dalton Transactions*, 4282-4287 (2008).
56. Sonia Donzelli, Michael G. Espey, Wilmarie Flores-Santana, Christopher H. Switzer, Grace C. Yeh, Jinming Huang, Dennis Stuehr, S. Bruce King, **Katrina M. Miranda** and David A. Wink*, "Generation of nitroxyl by heme protein-mediated peroxidation of hydroxylamine but not *N*-hydroxy-L-arginine", *Free Radical Biology and Medicine*, **45**, 578-584 (2008).

57. Antti J. Väänänen, Pertteli Salmenperä, Mika Hukkanen, **Katrina M. Miranda**, Ari Harjula, Pekka Rauhala, Esko Kankuri*, "Persistent susceptibility of cathepsin B to irreversible inhibition by nitroxyl (HNO) in the presence of endogenous NO", *Free Radical Biology and Medicine*, **5**, 749-755 (2008).
58. Christopher H. Switzer, Wilmarie Flores-Santana, Daniele Mancardi, Sonia Donzelli, Debashree Basudhar, Lisa A. Ridnour, **Katrina M. Miranda**, Jon M. Fukuto, Nazareno Paolucci, David A. Wink*, "The emergence of nitroxyl (HNO) as a pharmacological agent", *Biochimica Biophysica Acta*, **1787**, 835-840 (2009).
59. Thomas W. Miller, Melisa E. Cherney, Nestor Franco, Patrick J. Farmer, S. Bruce King, Adrian J. Hobbs, **Katrina M. Miranda**, Judith N. Burstyn, Jon M. Fukuto*, "The effects of nitroxyl (HNO) on soluble guanylate cyclase activity: interactions at ferrous heme and cysteine thiols", *Journal of Biological Chemistry*, **284**, 21788-21796 (2009).
60. Wilmarie Flores-Santana, Christopher Switzer, Lisa A. Ridnour, Debashree Basudhar, Daniele Mancardi, Sonia Donzelli, Douglas D. Thomas, **Katrina M. Miranda**, Jon M. Fukuto, David A. Wink*, "Comparing the chemical biology of NO and HNO", *Archives of Pharmacological Research*, **32**, 1139-1153 (2009).
61. Matthew I. Jackson, Tae H. Han, L. Serbulea, Andrew Dutton, Eleonora Ford, **Katrina M. Miranda**, K. N. Houk, David A. Wink and Jon M. Fukuto*, "Kinetic feasibility of nitroxyl reduction by physiological reductants and biological implications", *Free Radical Biology and Medicine*, **15**, 1130-1139 (2009).
62. Murugaeson R. Kumar, Jon M. Fukuto, **Katrina M. Miranda*** and Patrick J. Farmer*, "Reactions of HNO with heme proteins: new routes to HNO-heme complexes and insight into physiological effects", *Inorganic Chemistry – Forum on Nitric Oxide*, **49**, 6283-6292 (2010).
63. David Jourdeuil, Jack. R. Lancaster Jr, Jon Fukuto, David D. Roberts, **Katrina M. Miranda**, Berndt Mayer, Matthew B. Grisham and David A. Wink*, "The bell-shaped curve for peroxynitrite-mediated oxidation and nitration of NO/O₂⁻ is alive and well", *Journal of Biological Chemistry*, **285**, 1e15 (2010).
64. Daniela Andrei, Debra J. Salmon, Sonia Donzelli, Azadeh Wahab, John R. Klose, Michael L. Citro, Joseph E. Saavedra, David A. Wink, **Katrina M. Miranda*** and Larry K. Keefer*, "Dual mechanisms of HNO generation by a nitroxyl prodrug of the diazeniumdiolate (NONOate) class", *Journal of the American Chemical Society*, **132**, 16526-16532 (2010).
65. Wilmarie Flores-Santana, Debra J. Salmon, Sonia Donzelli, Christopher H. Switzer, Debashree Basudhar, Lisa Ridnour, Robert Cheng, Sharon A. Glynn, Nazareno Paolucci, Jon M. Fukuto, **Katrina M. Miranda** and David A. Wink*, "The specificity of HNO chemistry is unique among nitrogen oxides in biological systems", *Antioxidants Redox Signaling*, **14**, 1659-1674 (2011). **Invited Forum Review Article**.
66. Debra J. Salmon, Claudia L. Torres de Holding, Lynta Thomas, Kyle V. Peterson, Gens P. Goodman, Joseph E. Saavedra, Aloka Srinivasan, Keith M. Davies, Larry K. Keefer and

- Katrina M. Miranda***, "HNO and NO release from a primary amine-based diazeniumdiolate as a function of pH", *Inorganic Chemistry*, **50**, 3262-3270 (2011).
67. Ana Zarpelon, Guilherme R. Souza, Thiago M. Cunha, Ieda I. Schivo, Mario Marchesi, Rubia Casagrande, Phileno Pinge-Filho, Fernando Q. Cunha, Sergio H. Ferreira, **Katrina M. Miranda**, Waldiceu A. Verri*, "The nitroxyl donor, Angeli's salt, inhibits inflammatory hyperalgesia in rats", *Neuropharmacology*, **71**, 1-9 (2013).
68. Gail M. Johnson, Tyler J. Chozinski, Debra J. Salmon, Alan D. Moghaddam, Hsin Chih Chen and **Katrina M. Miranda***, "Quantitative detection of nitroxyl upon trapping with glutathione and labeling with a specific fluorogenic reagent", *Free Radical Biology and Medicine*, **63**, 476-484 (2013).
- Corrigendum, *Free Radical Biology and Medicine*, **77**, 390 (2014).
69. Tassiele Heinrich, Roberto da Silva, **Katrina M. Miranda**, Christopher H. Switzer, David A. Wink, Jon M. Fukuto*, "Biological nitric oxide signaling: chemistry and terminology", *British Journal of Pharmacology*, **169**, 1417-1429 (2013). **Invited review**.
70. Debashree Basudhar, Gaurav Bharadwaj, Robert Y. Cheng, Sarthak Jain, Sa Shi, Lisa A. Ridnour, Viviane M. Caceres, Regina C. Spadari-Bratfisch, Nazareno Paolocci, Carlos A. Velázquez-Martínez, David A. Wink and **Katrina M. Miranda***, "Synthesis and comparison of nitroxyl and nitric oxide releasing diazeniumdiolate-based aspirin derivatives", *Journal of Medicinal Chemistry*, **56**, 7804-7820 (2013). **Cover feature. SciBX article**, October 31, 2013, *SciBX* 6(42); doi:10.1038/scibx.2013.1194.
71. Peter C. Ford, Jose Clayston Melo Pereira and **Katrina M. Miranda**, "Mechanisms of nitric oxide reactions mediated by biologically relevant metal centers", *Structure and Bonding: Special Issue on Nitrosyl Complexes in Inorganic Chemistry, Biochemistry and Medicine*, **154**, 99-136 (2014).
72. Larissa Staurengo-Ferrari, Ana C. Zarpelon, Daniela T. Longhi-Balbinot, Mario Marchesi, Thiago M. Cunha, José C. Alves-Filho, Fernando Q. Cunha, Sergio H. Ferreira, Rubia Casagrande, **Katrina M. Miranda** and Waldiceu A. Verri, Jr*, "Nitroxyl inhibits overt pain-like behavior in mice: role of cGMP/PKG/ATP-sensitive potassium channel signaling pathway", *Pharmacological Reports*, **66**, 691-698 (2014).
73. **Katrina M. Miranda** and David A. Wink, "Persulfides and the cellular thiol landscape", *Proceedings of the National Academy of Science USA*, **111**, 7505-7506 (2014). **Invited Commentary**.
74. Gail M. Johnson, Tyler J. Chozinski, Elyssia S. Gallagher, Craig A. Aspinwall and **Katrina M. Miranda***, "Glutathione sulfinamide serves as a selective, endogenous biomarker for nitroxyl following exposure to therapeutic levels of donors", *Free Radical Biology and Medicine*, **76**, 299-307 (2014).
75. Robert Y.S. Cheng, Debashree Basudhar, Lisa A. Ridnour, Julie Heinecke, Aparna H. Kesarwala, Sharon Glynn, Christopher H. Switzer, Stefan Ambs, **Katrina M. Miranda** and

- David A. Wink*, "Gene expression profiles of NO- and HNO-donor treated breast cancer cells: Insights into tumor response and resistance pathways", *Nitric Oxide*, **43**, 17-28 (2014).
76. Antonio Carlos Roveda Jr, Helena de Fazio Aguiar, **Katrina M. Miranda**, Carmen Cecília Tadini, Douglas Wagner Franco*, "Light-triggered and cysteine-mediated nitric oxide release from a biodegradable starch-based film", *Journal of Materials Chemistry B*, **2**, 7232-7242 (2014).
77. Gaurav Bharadwaj, Patricia G. Z. Benini, Debashree Basudhar, Cyf N. Ramos-Colon, Gail M. Johnson, Marti M. Larriva, Larry K. Keefer, Daniela Andrei and **Katrina M. Miranda***, "Analysis of the HNO and NO donating properties of alicyclic amine diazeniumdiolates", *Nitric Oxide*, **42**, 70-78 (2014).
78. Joel H. Jorolan, Lisa Ann Buttitta, Cheryl Cheah and **Katrina M. Miranda***, "Comparison of the chemical reactivity of synthetic peroxyxynitrite with that of the autoxidation products of nitroxyl or its anion", *Nitric Oxide*, **44**, 39-46 (2015).
79. Debashree Basudhar, Robert C. Cheng, Gaurav Bharadwaj, Lisa A. Ridnour, David A. Wink and **Katrina M. Miranda***, "Chemotherapeutic potential of diazeniumdiolate-based aspirin prodrugs in breast cancer", *Free Radical Biology and Medicine*, **83**, 101-114 (2015).
80. Douglas D. Thomas, Julie L. Heinecke, Lisa A. Ridnour, Robert Cheng, Aparna H. Kesarwala, Christopher H. Switzer, David D. Roberts, Sharon Glynn, Jon M. Fukuto, David A. Wink* and **Katrina M. Miranda***, "Nitrosative Signaling and Stress: the Redox Landscape in NOS2 biology", *Free Radical Biology and Medicine*, **87**, 204-225 (2015). **Invited review**.
81. Katrina M. Miranda*, "Preface: Special issue in honor of Prof. Peter C. Ford", *Coordination Chemistry Reviews*, **306**, Part 2, 445-446 (2016).
82. **Katrina M. Miranda***, "A Celebration of Inorganic Lives: Interview of Peter C. Ford (UC Santa Barbara)", *Coordination Chemistry Reviews*, **306**, Part 2, 724-733 (2016).
83. Debashree Basudhar, Gaurav Bharadwaj, Debra J. Salmon, **Katrina M. Miranda***, "HNO donors: Angeli's salt and related diazeniumdiolates", *The Chemistry and Biology of Nitroxyl (HNO)*, edited by Fabio Doctorovich, Patrick Farmer and Marcelo Marti, Elsevier, in press (2016).
84. Daniela T. Longhi-Balbinot, Ana C. Rossaneis, Felipe A. Pinho-Ribeiro, Mariana M. Bertozzi, Fernando Q. Cunha, José C. Alves-Filho, Thiago M. Cunha, Jean P.S. Peron, **Katrina M. Miranda**, Rubia Casagrande, Waldiceu A. Verri, Jr*, "The nitroxyl donor, Angeli's salt, reduces chronic constriction injury-induced neuropathic pain", *Chemico-Biological Interactions*, in press (2016).

MANUSCRIPTS SUBMITTED

85. Daniela C. Medeiros, Daniela T. Longhi-Balbinot, Cássia Calixto-Campos, Ana C. Zarpelon, Mab Corrêa, Phílano Pinge-Filho, **Katrina M. Miranda**, Rubia Casagrande and Waldiceu A.

Verri, Jr*, "Nitroxyl inhibits Ehrlich cells-induced cancer pain in mice by activating the cGMP/PKG/ATP-sensitive potassium channels signaling pathway and inhibiting TNF- α and IL-1 β production". Submitted to *Behavioral Pharmacology*.

86. Jingchao Liu, Wenhuan Ma, Zhangjian Huang, Sixun Peng, Yunman Li, **Katrina M. Miranda***, Jide Tian, Yihua Zhang*, "Nitric oxide releasing prodrugs of rosiglitazone with improved activity and safety for intervention of type 2 diabetes". Submitted to *Journal of Medicinal Chemistry*.

PATENTS

1. David A. Wink, David A. Kass, Nazareno Paolocci, Martin Feelisch, **Katrina M. Miranda**, Jon M. Fukuto and Tatsuo Katori, "Nitroxyl progenitors in the treatment of heart failure". US Patent application approved August 30, 2005, No. 6,936,639.
2. David A. Wink, Martin Feelisch, Pasquale Pagliaro, David A. Kass, Nazareno Paolocci, **Katrina M. Miranda** and Jon M. Fukuto, "Using nitroxyl (HNO) donors to precondition the heart against myocardial infarct". US Provisional Patent application filed June 14, 2002, No. 60/388,819.
3. David A. Wink, Martin Feelisch, Pasquale Pagliaro, David A. Kass, Nazareno Paolocci, **Katrina M. Miranda** and Jon M. Fukuto, "Method of treating ischemia/reperfusion injury with nitroxyl donors". US Provisional Patent application filed June 17, 2002, No. 60/389,757; US Patent application filed June 16, 2003, No. 10/463,084.
4. David A. Wink, **Katrina M. Miranda**, Christopher M. Bradbury, David Guis, Jon M. Fukuto and Martin Feelisch, "Administering a nitroxyl-donating diazeniumdiolate other than Angeli's salt or sulfi/NO for selectively inhibiting COX-2 inflammation without inhibiting the activity of COX-1 in non-inflamed cells; screening candidate compounds for COX-2 inhibition". US Provisional Patent application filed May 13, 2004, No. 60/470,320. US Patent application filed May 12, 2004, No. 10/845,619.
5. David A. Wink, Martin Feelisch, David A. Kass, Nazareno Paolocci, **Katrina M. Miranda**, Jon M. Fukuto and Tatsuo Katori, "Nitroxyl progenitors in the treatment of heart failure". US Patent application approved January 4, 2011, No. 7,863,262.
6. **Katrina M. Miranda**, Debra J. Salmon, David A. Wink, Larry K. Keefer, Daniela Andrei and Joseph E. Saavedra, " Nitroxyl (HNO) releasing compounds and uses thereof in treating diseases". US Provisional Patent application filed March 19, 2010, No. 61/315,604.
7. **Katrina M. Miranda**, David A. Wink and Debashree Basudhar, "Nitroxyl (HNO) releasing NSAIDs and uses thereof of treating and preventing diseases". US Provisional Patent application filed May 28, 2010, No. 61/349,716.
8. **Katrina M. Miranda**, David A. Wink, Debra J. Salmon, Debashree Basudhar, Larry K. Keefer, Joseph E. Saavedra and Daniela Andrei, "Nitroxyl (HNO) releasing compounds and uses thereof

of treating diseases". International Patent application filed March 18, 2011, No. PCT/US2011/029072. Notice of Allowance, December 2013.

9. **Katrina M. Miranda**, David A. Wink and Debashree Basudhar, "Compositions and methods of diazeniumdiolate-based prodrugs for treating cancer". US Patent application filed November 6, 2014, No. 62/075,936.

SCHOLARLY PRESENTATIONS

Invited Seminars Pre-Appointment at UA

1. 5th International Symposium on Applied Bioinorganic Chemistry, Corfu, Greece, April 1999
2. Greater Washington Oxygen Society Meeting, Bethesda, MD, November 1999
3. Neurodegenerative Disorders: Common Molecular Mechanisms Conference, Tobago, West Indies, April 2000
4. Workshop on Myoglobin, Los Alamos, NM, November 2000
5. Inorganic Reaction Mechanisms Gordon Conference, Ventura, CA, February 2001
6. Forty-eighth Annual Meeting of the Radiation Research Society, San Juan, Puerto Rico, April 2001
7. Department of Cardiology, The Johns Hopkins Medical Institutions, Baltimore, MD, September 2001
8. Thirty-seventh Western Regional ACS Meeting, Santa Barbara, CA, October, 2001
9. Department of Molecular and Medical Pharmacology, University of California, Los Angeles, March 2002

Invited Seminars Post-Appointment at UA

1. Biannual Mid-Atlantic Nitric Oxide Society Meeting, Williamsburg, VA, May 2003
2. Department of Chemistry and Biochemistry, University of California, Santa Barbara, October 2003
3. Thirty-ninth Western Regional ACS Meeting, Long Beach, CA, October 2003
4. Department of Chemistry, Western Washington University, Bellingham, WA, October 2003
5. Department of Chemistry, Humboldt State University, Arcata, CA, October 2003
6. Department of Chemistry, California State University, Los Angeles, CA, October 2003

7. Eighth Mesilla Chemistry Workshop, "The Chemistry of NO in Biological Signaling", Mesilla, NM, February 2004
8. Frederick Cancer Research and Development Center, National Cancer Institute, Frederick, MD, May 2004
9. Universidade de São Paulo, Ribeirão Preto, Brazil, September 2004, guest lectures on the photochemistry of nitrosyl complexes
10. 2005 Nitric Oxide Gordon Conference, Barga, Italy, May 2005
11. Instituto de Química de São Carlos, Universidade de São Paulo, São Carlos, Brazil, July 2005
12. Department of Chemistry, University of Oklahoma, Norman, OK, September 2005
13. Pan REU Workshop held on Capitol Hill, Washington, DC, September 2005, invited poster presentation "Collaborative research in the Chemical Sciences at the University of Arizona", **Katrina M. Miranda** and Dominic McGrath
14. Department of Chemistry, College of William and Mary, Williamsburg, VA, September 2005
15. Biannual Mid-Atlantic Nitric Oxide Society Meeting, Wintergreen, VA, October 2005
16. Department of Physiology, University of Arizona, Tucson, AZ, February 2006
17. Department of Chemistry, St. Olaf College, Northfield, MN, February 2006
18. Hemes and Heme Proteins: A Symposium in Honor of Professor F. Ann Walker, 2006 ACS Spring National Meeting, Atlanta, GA, March 2006
19. Fourth International Conference on the Biology, Chemistry and Therapeutic Applications of Nitric Oxide, Monterey, CA, June 2006
20. Chemical Biology of Nitrogen Oxides Symposium, 19th Rocky Mountain Regional Meeting of the American Chemical Society, Tucson, AZ, October 2006
21. Department of Medicinal Chemistry, University of Arizona, Tucson, AZ, November 2006
22. Department of Chemistry Inorganic-Electrochemistry Seminar Series, California Institute of Technology, Pasadena, CA, January 2007
23. Department of Chemistry, University of Houston, Houston, TX, February 2007
24. Department of Chemistry, University of Texas, Austin, TX, February 2007
25. Department of Chemistry, Texas A&M University, College Station, TX, February 2007
26. Department of Chemistry, Wake Forest University, Winston-Salem, NC, February 2007

27. Department of Chemistry, John Hopkins University, Baltimore, MD, February 2007
28. Department of Chemistry, University of Kansas, Lawrence, KS, March 2007
29. Department of Chemistry, University of Illinois at Urbana-Champaign, Urbana, IL, March 2007
30. Department of Cellular Biology and Physiology, University of Arizona, Tucson, AZ, March 2007
31. Department of Chemistry, University of California, Berkeley, CA, April 2007
32. Department of Chemistry, Stanford University, Palo Alto, CA, April 2007
33. Department of Chemistry, University of Leuven, Leuven, Belgium, May 2007
34. Department of Pharmacology, University of Helsinki, Helsinki, Finland, May 2007
35. Department of Chemistry, University of California, San Diego, CA, May 2007
36. Biannual Mid-Atlantic Nitric Oxide Society Meeting, Nemocolin, PA, May 2007
37. Organic Seminar, Department of Chemistry, University of California, Los Angeles, CA, June 2007
38. Biannual Mid-Atlantic Nitric Oxide Society Meeting, Nemocolin, PA, May 2008
39. Cancer Redox Biology Workshop, NCI Center for Cancer Research, NIH, Bethesda, MD, October 2008
40. Department of Chemistry, Sonoma State University, Rohnert Park, CA, February 2009
41. Symposium on Coordination Chemistry of NO and its Implication for Metabolism, Imaging and Toxicity, 2009 ACS Spring National Meeting, Salt Lake City, UT, March 2009
42. Laboratory of Computational Biology, Biochemistry and Biophysics Center, Division of Intramural Research, National Heart, Lung, and Blood Institute, NIH, Rockville, MD, October 2010
43. Nitric Oxide, Inflammation and Cancer Workshop, NCI Center for Cancer Research, NIH, Bethesda, MD, November 2010
44. Department of Chemistry and Biochemistry, University of California, Santa Barbara, December 2010
45. Designing Novel Bio-functional Materials Using Transition Metal Complexes, 44th Western Regional Meeting of the American Chemical Society, Pasadena, CA, November 2011

46. Cancer Biology Seminar Series, University of Arizona Health Sciences, Tucson, AZ, January 2012
47. Department of Chemistry, Marquette University, Milwaukee, WI, September 2012
48. ACS Award for Distinguished Service in the Advancement of Inorganic Chemistry: Symposium in Honor of Peter C. Ford, 2013 ACS Spring National Meeting, New Orleans, LA, April 2013
49. Ninth International Conference of Pharmaceutical Sciences (CIFARP), Ribeirão Preto, Brazil, November 2013
50. Metal Ion Interactions with Nitric Oxide and Reactive Oxygen Species in Chemistry and Biology Symposium, 248th Meeting of the American Chemical Society, San Francisco, CA, August 2014
51. Department of Chemistry and Biochemistry, University of California, Santa Barbara, January 2015
52. Tenth International Conference of Pharmaceutical Sciences (CIFARP), Ribeirão Preto, Brazil, September 2015
53. Instituto de Química de São Carlos, Universidade de São Paulo, São Carlos, Brazil, September 2015

Plenary Lectures

1. 1° Simpósio Internacional de Faculdade de Ciências Farmacêuticas de Ribeirão Preto, Universidade de São Paulo, Ribeirão Preto, Brazil, September 2004
2. XII Brazilian Meeting on Inorganic Chemistry, Instituto de Química de São Carlos, São Carlos, Brazil, September 2004
3. First Nitroxyl/Nitric Oxide Symposium: from chemical aspects to basic regulations, Ribeirão Preto, Brazil, November 2009

Contributed Presentations

1. Fifth Nitric Oxide Gordon Conference, Ventura, CA, February 2003, poster
2. Eleventh International Conference on Biological Inorganic Chemistry, Cairns, Australia, July 2003, session lecture
3. Sixth International Conference on the Biology, Chemistry and Therapeutic Applications of Nitric Oxide, Kyoto, Japan, June 2010
4. Tenth Nitric Oxide Gordon Conference, Ventura, CA, February 2013, poster

5. Seventh International Conference on the Biology, Chemistry and Therapeutic Applications of Nitric Oxide, Cleveland, OH, June 2014

Session Chairs

1. Fifth Nitric Oxide Gordon Conference, Ventura, CA, February 2003, poster
2. Eleventh International Conference on Biological Inorganic Chemistry, Cairns, Australia, July 2003, session lecture
3. Biannual Mid-Atlantic Nitric Oxide Society Meeting, Nemocolin, PA, May 2008
4. 2009 Nitric Oxide Gordon Conference, Barga, Italy, March 2009
5. Designing Novel Bio-functional Materials Using Transition Metal Complexes, 44th Western Regional Meeting of the American Chemical Society, Pasadena, CA, November 2011
6. ACS Award for Distinguished Service in the Advancement of Inorganic Chemistry: Symposium in Honor of Peter C. Ford

Symposium Organizer

1. Chemical Biology of Nitrogen Oxides Symposium at the 19th Rocky Mountain Regional Meeting of the ACS, Tucson, AZ, October 2006
2. ACS Award for Distinguished Service in the Advancement of Inorganic Chemistry: Symposium in Honor of Peter C. Ford, 2013 ACS Spring National Meeting, New Orleans, LA, March 2013

EXTENAL RESEARCH FUNDING

Federal – Pending

National Institutes of Health 04/2017-03/2021
“Elucidation of thiol modifications in cell function”
\$2,484,959, Principal Investigator (Prof. Craig Aspinwall as co-I; 40%)

Industry

Google, Inc. 12/26/12-present
Massive Open Online Course (MOOC) Development Grant
“Creation of a MOOC focused on chemical bonding and reactivity”
\$50,000 (sole PI; 100%)

Completed – Federal

National Science Foundation REU Site CHE 0453466 06/2005-05/2008
“Collaborative research in the chemical sciences at the University of Arizona”

\$212,133, Principal Investigator (Prof. Dominic McGrath as co-PI; 50%)

National Institutes of Health R01 5GM076247 07/2006-06/2012 (NCE)
 “Physiological assessment of nitroxyl using new donors”
 \$1,150,000, Principal Investigator (sole PI; 100%)

National Science Foundation REU Site CHE 0852093 10/2009-9/2012
 “Collaborative research in the chemical sciences at the University of Arizona”
 \$231,000, Principal Investigator (Prof. Dominic McGrath as co-PI; 50%)

National Science Foundation CAREER CHE 0645818 03/2007-02/2013 (NCE)
 “Mechanistic analysis of nitrogen oxide chemistry under biologically relevant conditions”
 \$585,000, Principal Investigator (sole PI; 100%)

Completed – State

UA Bio5 RFP for Multidisciplinary Projects in Life Sciences 08/2004-07/2005
 “Airway epithelial cell innate immune response to pathogens through reactive nitrogen species”
 \$50,000, Co-Investigator (Prof. Scott Boitano as PI, Prof. Rick Friedman as co-PI; 33%)

UA Foreign Travel Grant to attend and present a Session lecture at the Eleventh International Conference on Biological Inorganic Chemistry held in Cairns, Australia, July, 2003.

UA Foreign Travel Grant to attend and present an invited talk at the 2005 Nitric Oxide Gordon Conference held in Barga, Italy, May, 2005.

Training Grants

NIH/NHLBI 5T32HL007249 06/01/07-present
 Interdisciplinary Training in Cardiovascular Research
 Training Faculty (Prof. Janis Burt as PI)

Research Corporation Partners in Science Program 10677 05/2009-4/2011
 \$15,000, Training Faculty and PI

NIH/NIAAA 1F31AA018069-01A1 09/2009-08/2011
 HNO-donating prodrugs for use as pharmaceuticals and biomedical research tools
 Mentoring Faculty for Debra J. Salmon
 \$34,356, Ruth L. Kirschstein National Research Service Award for Individual Predoctoral Fellows

NIH/NIGMS Training Grant 07/2008-06/2013
 Biological Chemistry Training Grant for Graduate Students
 Training Faculty (Prof. Bill Montfort as PI)

Beckman Foundation Institutional Scholars Program 05/2007-8/2010
 Training Faculty (Prof. Kate Dixon as PI)

SERVICE AND OUTREACH**Outreach**

- 2003 **Guest Lecturer**, CHEM 396a, Undergraduate Chemistry Seminar
Member, Arizona Delegation to Bio 2003 Expo, Washington, DC
Faculty Participant, Faculty Doctoral Mentoring Institute, Western Alliance to Expand Student Opportunities/Minority Graduate Education at Mountain States Alliance, Arizona State University, Tempe, AZ
- 2003-2004 Focus Group, Undergraduate Retention Coordinating Group
- 2004-2005 **Faculty Mentor**, NSF REU Chemistry Program
Undergraduate majors exit interviews, Chemistry
Guest Lecturer, CHEM 396a, Undergraduate Chemistry Seminar
Invited Faculty Presenter, Honors Convocation Ceremony
Invited Faculty Presenter, Minority Health Disparities Research Program
Poster Judge, Minority Health Disparities Summer Research Program
Faculty Participant, Flinn and National Merit Scholars campus visits
Faculty Mentor, WISE Mentoring Program for high school students
- 2005-2006 **Faculty Mentor**, NSF REU Chemistry Program
Undergraduate majors exit interviews, Chemistry
Chemistry Faculty Representative, College of Science Senior Day
Guest Lecturer, Undergraduate Biology Research Program Seminar on Collaborative Research with Prof. Scott Boitano
- 2006-2007 **Faculty Mentor**, NSF REU Chemistry Program
Undergraduate majors exit interviews, Chemistry
Lab tours (to increase research participation by majors), Chemistry
Chemistry Faculty Representative, College of Science Senior Day
Faculty Participant, National Merit Scholars campus visits
Faculty Volunteer, University of Arizona e-mentoring Initiative
Director, Arizona-Guanajuato Science & Engineering Research Program, incorporated into the Chemistry REU Program; initiated by Prof. Maria Teresa Velez, Associate Dean, Graduate College
Faculty Participant, Faculty Post Doctoral Mentoring Institute, Western Alliance to Expand Student Opportunities/Minority Graduate Education at Mountain States Alliance, Arizona State University, Tempe, AZ
UA College of Science Faculty Representative, Symposium on the Diversity in the Sciences, Seattle, WA
- 2007-2008 **Judge**, Undergraduate Poster Session, Chemistry
Undergraduate majors exit interviews, Chemistry
Lab tours (to increase research participation by majors), Chemistry
Marvel Fellowship Selection Committee, Chemistry
Chemistry Faculty Representative, College of Science Senior Day
Faculty Participant, National Merit Scholars campus visits
Beckman Scholar Selection Committee

- 2008-2009 **Faculty Mentor**, NSF REU Chemistry Program
 Lab tours (to increase research participation by majors), Chemistry
 Undergraduate majors exit interviews, Chemistry
Speaker, ACS-funded Preparing for Life After Graduate School (PFLAGGS)
 Workshop, Chemistry
Judge, Undergraduate Poster Session, Chemistry
 Age of Biology: Opportunities in Biochemistry lab tours
Faculty Participant, National Merit Scholars campus visits
 Beckman Scholar Selection Committee
Faculty Mentor, Beckman Scholars Conference
Speaker, Women in Science and Engineering course
- 2009-2010 **Faculty Mentor**, NSF REU Chemistry Program
 Lab tours (to increase research participation), Chemistry & Biochemistry
 Frontiers of Science lab tours (recruitment of Arizona high school students),
 Chemistry & Biochemistry
Faculty Mentor, Arizona Assurance Scholars
Mentor, Arizona Partners in Science Program, sponsored by Research
 Corporation
Speaker, Orientation for 2010 Arizona Partners in Science Program, sponsored
 by Research Corporation
- 2010-2011 **Faculty Mentor**, NSF REU Chemistry Program
Presenter, Frontiers of Science, Chemistry & Biochemistry
 Frontiers of Science lab tours, Chemistry & Biochemistry
Guest Lecturer, Undergraduate Chemistry Club (SMACS)
Faculty Mentor, Arizona Assurance Scholars
Mentor, Arizona Partners in Science Program, sponsored by Research
 Corporation
 Organized lab tours for the Tucson Alliance for Autism
- 2011-2012 **Instructor** (volunteer), CHEM 396a, Chemistry Majors Colloquium
Presenter, Frontiers of Science, Chemistry & Biochemistry
 Frontiers of Science lab tours, Chemistry & Biochemistry
Guest Lecturer, Undergraduate Chemistry Club (SMACS)
Faculty Mentor, Minority Health Disparities Summer Research Program
Faculty Mentor, Arizona Assurance Scholars
 Beckman Scholar Selection Committee
- 2012-2013 **Instructor** (volunteer), CHEM 396a, Chemistry Majors Colloquium
Reader, College of Science Honors Convocation
Reader, College of Science Commencement
Organizer, departmental participation in the Tucson Festival of Books Science
 City
 UA Parents Day lab tours
 Organized lab tours for the Tucson Alliance for Autism
 Society of Free Radical Biology and Medicine (SFRBM) Mentoring Program

- 2013-2014 **Instructor** (volunteer), CHEM 396a, Chemistry Majors Colloquium
Guest Lecturer, CHEM 595c, How to Successfully Navigate Graduate School
Co-organizer, ACS on Campus program, Chemistry & Biochemistry
Coordinator, UA-Nottingham Student Exchange Program
Co-organizer, 2013 Astronaut Scholarship Foundation Check Presentation
Judge, Student Showcase 2013 (UA student poster session)
Mentor, Arizona's Science, Engineering, and Mathematics Scholars Program (ASEMS)
- 2014-2015 **Guest Lecturer**, CHEM 595c, How to Successfully Navigate Graduate School
Coordinator, UA-Nottingham Exchange Program
Fulbright Interview/Feedback Sessions
Mentor, ASEMS Program
Judge, UA Grad Slam Preliminary Round (campus-wide competition for the best 3-minute presentation of student research and discovery)
- 2015-2016 **Coordinator**, UA-Nottingham Exchange Program
Fulbright Interview/Feedback Sessions
UA Teaching Quality Brainstorming Group
Mentor, Society for Free Radical Biology and Medicine Mentorship Program
Mentor, ASEMS Program
Judge, UA Grad Slam Preliminary Round
Guest Lecturer, BIOC 395a, Minority Biomedical Research Colloquium

Intramural Service

- 2002-2003 Graduate Admissions/Recruiting Committee, Chemistry
Graduate Student Seminar Organizing Committee, Chemistry
Founder and Coordinator, Eminent Scholar Seminar Series, College of Science
- 2003-2004 Graduate Admissions/Recruiting Committee, Chemistry
Graduate Student Seminar Organizing Committee, Chemistry
Chemical Education Committee, Chemistry
100 Level Education Committee, Chemistry
Biological Chemistry Program Graduate Admissions Committee
Coordinator, Eminent Scholar Seminar Series, College of Science
- 2004-2005 Graduate Admissions/Recruiting Committee, Chemistry
Graduate Student Seminar Organizing Committee, Chemistry
Chemical Education Committee, Chemistry
100 Level Education Committee, Chemistry
Biological Chemistry Program Graduate Admissions Committee
Coordinator, Eminent Scholar Seminar Series, College of Science
Undergraduate Recruiting Committee, College of Science

- 2005-2006 Graduate Admissions/Recruiting Committee, Chemistry
Coordinator, Inorganic Chemistry Seminar Series, Chemistry
Coordinator, Graduate Seminar Orientation, Chemistry
 Chemical Education Committee, Chemistry
 100 Level Education Committee, Chemistry
 Biological Chemistry Program Graduate Admissions Committee
Coordinator, Eminent Scholar Seminar Series, College of Science
 Undergraduate Recruiting Committee, College of Science
- 2006-2007 Graduate Program Committee, Chemistry
 Graduate Admissions/Recruiting Committee, Chemistry
Coordinator, Inorganic Chemistry Seminar Series, Chemistry
Coordinator, Graduate Seminar Orientation, Chemistry
 Chemical Education Committee, Chemistry
 Departmental Seminar Committee, Chemistry
 Biophysical Chemistry Faculty Search Committee, Chemistry
 Biological Chemistry Program Graduate Admissions Committee
 Undergraduate Biological Research Program (UBRP) Selection Committee
Coordinator, Eminent Scholar Seminar Series, College of Science
 Undergraduate Recruiting Committee, College of Science
 Faculty Search Committee, Medicinal Chemistry, College of Pharmacy
- 2007-2008 Graduate Admissions/Recruiting Committee, Chemistry
 Department Head Review Committee, Chemistry
Coordinator, Inorganic Chemistry Seminar Series, Chemistry
Coordinator, Graduate Seminar Orientation, Chemistry
 Chemical Education Committee, Chemistry
 Departmental Seminar Committee, Chemistry
 Weed Chair Selection Committee, Chemistry
 Biological Chemistry Program Graduate Admissions Committee
 Undergraduate Recruiting Committee, College of Science
- 2008-2009 Graduate Admissions/Recruiting Committee, Chemistry
 Executive Committee, Chemistry
 Graduate Program Committee, Chemistry
 Hiring Plan Committee, Chemistry
Coordinator, Inorganic Chemistry Seminar Series, Chemistry
Coordinator, Graduate Seminar Orientation, Chemistry
 Chemical Education Committee, Chemistry
 Weed Seminar Selection Committee, Chemistry
Chair, Ad hoc Undergraduate Curriculum Committee, Chemistry
 Joint Executive Committee, Chemistry & Biochemistry
- 2009-2010 **Founder and Chair**, Undergraduate Curriculum Committee, Chemistry &
 Biochemistry
 Executive Committee, Chemistry & Biochemistry
 Graduate Program Committee, Chemistry & Biochemistry
Coordinator, Inorganic Chemistry Seminar Series, Chemistry & Biochemistry

- Coordinator**, Graduate Seminar Orientation, Chemistry & Biochemistry
 Graduate Admissions/Recruiting Committee, Chemistry & Biochemistry
 Weed Seminar Selection Committee, Chemistry & Biochemistry
 Inorganic Synthetic Search Committee, Chemistry & Biochemistry
 College of Science Grade Appeal Committee
- 2010-2011 **Chair**, Undergraduate Program Committee, Chemistry & Biochemistry
 Executive Committee, Chemistry & Biochemistry
 Graduate Program Committee, Chemistry & Biochemistry
Coordinator, Inorganic Chemistry Seminar Series, Chemistry & Biochemistry
Coordinator, Graduate Seminar Orientation, Chemistry & Biochemistry
 Graduate Admissions/Recruiting Committee, Chemistry & Biochemistry
 Weed Seminar Selection Committee, Chemistry & Biochemistry
 Faculty Advisory Committee for Elisa Tomat, Chemistry & Biochemistry
 Academic Program Review Self Study Committee, Chemistry & Biochemistry,
 ad hoc
- 2011-2012 **Chair**, Undergraduate Program Committee, Chemistry & Biochemistry
Founder and Chair, Undergraduate Advising Committee, Chemistry &
 Biochemistry
Founder and Organizer, Lab Assessment Committee, Chemistry &
 Biochemistry
 Executive Committee, Chemistry & Biochemistry
 Graduate Program Committee, Chemistry & Biochemistry
Coordinator, Inorganic Chemistry Seminar Series, Chemistry & Biochemistry
Coordinator, Graduate Seminar Orientation, Chemistry & Biochemistry
 Outreach Committee, Chemistry & Biochemistry
 Weed Seminar Selection Committee, Chemistry
 Faculty Advisory Committee for Elisa Tomat, Chemistry & Biochemistry
 Teaching Evaluation Committee, Chemistry & Biochemistry
Member, UA Faculty Learning Community on Assessment
Liaison, UA Office of Instruction and Assessment (OIA)
- 2012-2013 **Chair**, Undergraduate Program Committee, Chemistry & Biochemistry
Chair, Undergraduate Advising Committee, Chemistry & Biochemistry
 Faculty Search Committee, Chemistry & Biochemistry
 Executive Committee, Chemistry & Biochemistry
 Graduate Program Committee, Chemistry & Biochemistry
Coordinator, Inorganic Chemistry Seminar Series, Chemistry & Biochemistry
Coordinator, Graduate Seminar Orientation, Chemistry & Biochemistry
 Outreach Committee, Chemistry & Biochemistry
 Weed Seminar Selection Committee, Chemistry & Biochemistry
 Faculty Advisory Committee for Elisa Tomat, Chemistry & Biochemistry
Organizer, Lab Assessment Committee, Chemistry & Biochemistry
Founder and Organizer, Adjunct Professional Development Committee,
 Chemistry & Biochemistry
 100 Level Committee, Chemistry & Biochemistry
 Teaching Evaluation Committee, Chemistry & Biochemistry

College of Science Curriculum Committee
Association of American Universities (AAU) STEM Discussion Group, College
of Science
AAU STEM Discussion Group, UA
Member, UA Faculty Learning Community on Assessment
Liaison, UA Office of Instruction and Assessment
UA Teacher Course Evaluation (TCE) Advisory Group
UA Senior Awards Selection Committee

2013-2014 **Chair**, Undergraduate Program Committee, Chemistry & Biochemistry
Chair, Undergraduate Advising Committee, Chemistry & Biochemistry
Founder and Chair, Undergraduate Lab Course Committee, Chemistry &
Biochemistry
Executive Committee, Chemistry & Biochemistry
Graduate Program Committee, Chemistry & Biochemistry
Coordinator, Graduate Seminar Orientation, Chemistry & Biochemistry
Faculty Advisory Committee for Elisa Tomat, Chemistry & Biochemistry
Chemical Thinking Working Group, Chemistry & Biochemistry
Teaching Professional Evaluation Committee, Chemistry & Biochemistry
Instructor/Lecturer Search Committee, Chemistry & Biochemistry
College of Science Curriculum Committee
Liaison, UA Office of Instruction and Assessment
Member, UA Faculty Learning Community on STEM Course Development
UA Teacher Course Evaluation (TCE) Advisory Group
UA AAU STEM Discussion Group

2014-2015 Graduate Admissions/Recruiting Committee, Chemistry & Biochemistry
Faculty Advisory Committee for Elisa Tomat, Chemistry & Biochemistry
College of Science Curriculum Committee
Dean's Audit Committee for the Annual Performance Review/Post-Tenure
Review Process, College of Science
Faculty Coach, UA NSF CAREER Preparation Program

2015-2016 Graduate Admissions/Recruiting Committee, Chemistry & Biochemistry
College of Science Curriculum Committee
Dean's Audit Committee for the Annual Performance Review/Post-Tenure
Review Process, College of Science
Faculty Coach, UA NSF CAREER Preparation Program

Extramural Service

2003 **Co-chair**, Biannual Mid-Atlantic Nitric Oxide Society Meeting
Judge, Oral Presentation Abstracts, 10th Annual Meeting of the Society for Free
Radical Biology and Medicine (SFRBM)

2004 **Reviewer**, NSF Major Research Instrumentation/Chemistry Proposal Panel
Reviewer, NIH Minority Biomedical Research Support Proposal Panel
19th Rocky Mountain Regional Meeting of the ACS Program Committee

Judge, Oral Presentation Abstracts and Young Investigator Awards, 11th Annual Meeting, SFRBM

- 2005 **Director**, NSF REU Site: Collaborative Research in the Chemical Sciences
Participant, Pan-REU Workshop held at the National Science Foundation
Reviewer, NSF REU Proposal Panel
 19th Rocky Mountain Regional Meeting of the ACS Program Committee
- 2006 **Director**, NSF REU Site: Collaborative Research in the Chemical Sciences
Reviewer, NSF REU Proposal Panel
Evaluator, University of Oklahoma George Lynn Cross Professorship
External Dissertation Referee, University of Helsinki, Finland
 19th Rocky Mountain Regional Meeting of the ACS Program Committee
- 2007 **Director**, NSF REU Site: Collaborative Research in the Chemical Sciences
- 2008 **Reviewer**, Beckman Scholars Program Proposal Panel
- 2009 **Director**, NSF REU Site: Collaborative Research in the Chemical Sciences
Participant, NSF Chemistry REU PIs Workshop, San Antonio, TX
Reviewer, NSF REU Proposal Panel
Reviewer, Beckman Scholars Program Proposal Panel
Judge, Poster Presentation Abstracts, 16th Annual Meeting, Society for Free Radical Biology and Medicine (SFRBM)
- 2010 **Director**, NSF REU Site: Collaborative Research in the Chemical Sciences
Reviewer, NSF REU Proposal Panel
Reviewer, NSF Chemistry of Life Processes Proposal Panel
Reviewer, NIH Predoctoral Diversity NRSA Fellowship Proposal Panel
Judge, Poster Presentation Abstracts, 17th Annual Meeting, SFRBM
- 2011 **Director**, NSF REU Site: Collaborative Research in the Chemical Sciences
Reviewer, NSF Chemistry of Life Processes Proposal Panel
Reviewer, NIH Macromolecular Structure and Function A (MSFA) Panel
Reviewer, promotion package, University of California, Santa Barbara
Judge, Poster Presentation Abstracts, 18th Annual Meeting, SFRBM
- 2012 **Reviewer and Permanent Member**, NIH Training and Workforce Development (TWD) Institutional Predoctoral Training Grant Review Panel
Reviewer, NIH Chemistry, Biochemistry, Biophysics and Bioengineering (F04) Fellowship Proposal Panel, March 2012
Reviewer and Co-chair, NIH Chemistry, Biochemistry, Biophysics and Bioengineering (F04) Fellowship Proposal Panel, July 2012
Judge, Poster Presentation Abstracts, 19th Annual Meeting, SFRBM
- 2013 **Reviewer and Permanent Member**, NIH TWD Institutional Predoctoral Training Grant Review Panel
Reviewer, NSF Chemistry of Life Processes Proposal Panel

- Member**, Electorate Nominating Committee (ENC) of the Section on Chemistry, AAAS (national election)
Judge, Poster Presentation Abstracts, 20th Annual Meeting, SFRBM
- 2014 **Reviewer and Permanent Member**, NIH TWD Institutional Predoctoral Training Grant Review
Reviewer, NIH T32 Biomedical Big Data Application Review Panel
Member, ENC of the Section on Chemistry, AAAS
Guest Editor, *Coordination Chemistry Reviews*, special issue in honor of Peter C. Ford
 Beckman Scholars Program Advisory Panel
Judge, Poster Presentation Abstracts, 21st Annual Meeting, SFRBM
- 2015 **Reviewer and Permanent Member**, NIH TWD Institutional Predoctoral Training Grant Review
Reviewer, NSF Partnerships for International Research and Education (PIRE) Proposal Panel
Reviewer, NSF Research Experience for Undergraduate Proposal Panel
Member, ENC of the Section on Chemistry, AAAS
Judge, Poster Presentation Abstracts, 22nd Annual Meeting, SFRBM
External Dissertation Referee, Indian Institute of Science Education and Research, Pune, India
- 2016 **Reviewer and Permanent Member**, NIH TWD Institutional Predoctoral Training Grant Review
Member, ENC of the Section on Chemistry, AAAS
 Senior Awards Committee (Lifetime Achievement Award), SFRBM
 Young Investigator & Trainee Committee, SFRBM

Grant Proposal Review (total number of proposals reviewed)

- 2003 National Science Foundation (3)
- 2004 National Institutes of Health (6)
 National Science Foundation (10)
- 2005 National Science Foundation (15)
 U.S. Civilian Research and Development Foundation (1)
- 2006 National Science Foundation (13)
 U.S. Civilian Research and Development Foundation (1)
- 2007 National Science Foundation (3)
 Research Corporation (1)
- 2008 National Science Foundation (2)
 Beckman Foundation (22)

2009	National Institutes of Health (5) National Science Foundation (14) Beckman Foundation (14) Research Corporation (2) University of Wisconsin-Milwaukee Research Growth Initiative (1)
2010	National Institutes of Health (19) National Science Foundation (20) Research Corporation (2) Canada Foundation for Innovation (1)
2011	National Institutes of Health (6) National Science Foundation (10) American Chemical Society Petroleum Research Fund (1)
2012	National Institutes of Health (25) Israel Science Foundation (1)
2013	National Institutes of Health (7) National Science Foundation (13) Research Corporation (2)
2014	National Institutes of Health (12) National Science Foundation (9) Beckman Foundation (42) Israel Science Foundation (1) Research Corporation (1)
2015	National Institutes of Health (6) National Science Foundation (19)
2016	National Institutes of Health (1)

Book Chapter Review

Inorganic Chemistry, Third Edition (2003) by G. Miessler and D. Tarr, Prentice Hall
Essentials of Inorganic Chemistry, First Edition (2008) by M. Hagerman, W.H. Freeman
Inorganic Chemistry, Fifth Edition (2009) by D. Shriver and P. Atkins, W.H. Freeman
Organometallic Chemistry, Second Edition (2009) by G. Spessard and G. Miessler, Oxford University Press
 OpenStax *Chemistry*, First Edition (2015), Words & Numbers, Inc.
 The Chemistry and Biology of HNO (2015) edited by F. Doctorovich, P. Farmer and M. Marti, Elsevier

Manuscript Review (number of manuscripts reviewed); * served as adjudicative reviewer

Accounts of Chemical Research (1)
 American Journal of Physiology: Heart and Circulatory Physiology (2)

Analytical Biochemistry (1)
Analytical Chemistry (1)
Analytical and Bioanalytical Chemistry (1)
Anti-Cancer Agents In Medicinal Chemistry (1)
Archives of Biochemistry and Biophysics (5)
Biochemistry (9)
Biochimica et Biophysica Acta (4)
Bioconjugate Chemistry (1)
Bioinorganic Chemistry and Applications (1)
Bioorganic Chemistry (1)
Bioorganic & Medicinal Chemistry (3)
Bioorganic & Medicinal Chemistry Letters (2)
BioMed Research International (1)
British Journal of Pharmacology (2)
Central European Journal of Chemistry (1)
Chemical Communications (3)
ChemMedChem (2)
Chemistry – A European Journal (1)
Clinical Chemistry (1)
Coordination Chemistry Reviews (5)
Current Drug Metabolism (2)
Current Medicinal Chemistry (2)
Dalton Transactions (5)
Dove Medical Press (1)
Energy & Environmental Science (1)
European Journal of Medicinal Chemistry (3)
European Journal of Organic Chemistry (1)
Expert Review of Dermatology (1)
Free Radical Biology and Medicine (13)
Future Medicinal Chemistry (1)
Hypertension (1)
Inorganic Chemistry (11)
Inorganica Chimica Acta (5)
International Journal of Chemical Kinetics (1)
Journal of the American Chemical Society (30)
Journal of Biochemical and Pharmacological Research (1)
Journal of Biological Inorganic Chemistry (4)
Journal of Cellular and Molecular Medicine (1)
Journal of Inorganic Biochemistry (18)
Journal of Materials Chemistry (2)
Journal of Medicinal Chemistry (40)
Journal of Molecular Graphics and Modelling (1)
Journal of Organic Chemistry (9)
Journal of Pharmaceutical and Biomedical Analysis (1)
Journal of Photochemistry and Photobiology A (1)
Journal of Physical Chemistry (3)
JoVE, the Journal of Visualized Experiments (1)
Life Sciences (2)

MedChemComm (1)
Molecular Pharmaceutics (4)
Molecules (6)
Monatshefte fur Chemie (1)
Nanomedicine (2)
Nature Chemistry (1)
Nitric Oxide: Biology and Chemistry (20)
Nucleosides, Nucleotides and Nucleic Acids (1)
Organic Letters (3)
Organometallics (1)
Oxidative Medicine and Cellular Longevity (1)
Pharmacological Research (1)
Polyhedron (1)
Polymer Chemistry (3)
Polymers (1)
Proceedings of the National Academy of Sciences USA (3)
Proteins: Structure, Function and Bioinformatics (1)
RSC Advances (13)*
Scientific Reports (1)
Toxicology Research (1)