Curriculum vitae

NAME: Rajeev Misra

NATIONALITY: United States of America

WORK ADDRESS: School of Life Sciences,
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Arizona State University,
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TITLE: Full Professor

EDUCATION:

B. S.	1977	Christ Church College, Kanpur University, Kanpur, India
M. S.	1981	G. B. Pant University, Pantnagar, India
Ph.D.	1986	Microbiology, Adelaide University, Australia

PROFESSIONAL EXPERIENCE:

Postdoctoral Fellow	8/1986-1988	Molecular Biology, Princeton University
Research Associate	1988-8/1991	Molecular Biology, Princeton University
Assistant Professor	8/1991-1997	Department of Microbiology, Arizona State University
Associate Professor	1997-2001	Department of Microbiology, Arizona State University
Visiting Professor	01/99-04/99	Sabbatical with Professor Hiroshi Nikaido, U. C. Berkeley
Professor	2001-present	School of Life Sciences, Arizona State University

DISTINCT RECOGNITION:

Outstanding Graduate Mentor, Graduate Women's Association, 2000
Centennial Professorship Award Finalist, 2001
Professor of the Year Nominee, 2005 & 2008
Outstanding Graduate Mentor Finalist 2008
Outstanding Graduate Mentor, 2012
Fellow, American Academy of Microbiology, 2018
Distinguished Service Recognition by the American Society for Microbiology for serving as the Editorial Board member six consecutive three-year terms (2000 to 2108)

INSTITUIONAL SERVICES:

1. Departmental Seminar Coordinator (Aug 1992-May 1996)
2. Member, MCB Executive Committee (Aug 1992-May 1994)

3. Member, MCB Seminar Committee (Aug 1992-May 1993)
4. **Director**, Microbiology Graduate Program (May 1994-Dec 1996)
5. Member, Curriculum Committee (May 1994-1996)
6. Member, MCB Admission Committee (Aug 1995-1997)
7. Member, Microbiology Chair Appointment Committee (1995)
8. Member, MCB Director Appointment Committee (1996)
9. **Chair**, MCB Graduate Admission Committee (Aug 1996-1997)
10. Member, MCB Executive Committee (Aug 1996-1998)
11. Member, Department's Budget & Personal Committee, (Aug 1997-May 2000)
12. Member, Quality of Instruction Committee, CLAS (1999-2001)
13. **Senator**, University & College Academic Assembly (1999-2002)
14. **President**, American Society for Microbiology, Arizona & Nevada branch (2000-01)
15. Member, Virology Search Committee (1999-2000)
16. **Chair**, Department Septennial Review Committee (2000-2001)
17. **Director**, Microbiology Graduate Program (July 2000-2003)
18. Member, School of Life Sciences Graduate Program Re-organization Committee (2003)
19. Member, Evolution & Systems Biology Search Committee (2003-2004)
20. Member, Research & Training Initiatives Committee (2003-2006)
21. Member, Cellular and Molecular Bioscience Faculty Personnel Committee (2004-2009)
22. Member, *Mycobacterium tuberculosis* Faculty Search Committee
23. Member, Bacterial Pathogenesis Faculty Search Committee
24. **Associate Director**, School of Life Sciences Graduate Programs (2006-2008)
25. Member, School of Life Science Academic Program Review Committee
26. Member, Quality of Instructions Committee, College of Liberal Arts and Sciences, (2009-2012)
27. Member, *Immunology* and *Virology* Faculty Search Committee
28. Member, Microbiology Graduate Program Steering Committee (2008-2019)
29. **President**, American Society for Microbiology, Arizona & Southern Nevada (2012-13)
30. Member, Cellular & Molecular Bioscience Faculty Personnel Committee (2012-24)
31. Member, Standing Committee, Office of Knowledge Enterprise Development, ASU
32. Member, School of Life Sciences Undergraduate Committee (2013-2018)
33. Member, *Microbiome* Faculty search committee (2014-15)
34. **Chair**, *Microbiome* Faculty search committee (2015-16)
35. **Chair**, *School of Life Sciences* Director search committee (2017-2018)
36. **Co-Director**, Microbiology Graduate Program (2018-2021)
37. **Director**, Microbiology Graduate Program (Dec 2021-2023)
38. Member, CFAM *Microbiome* faculty search committee (2018-19)
39. Member, CFAM *Microbiome* faculty search committee (2019-2020)
40. Member, SolS Seminar Committee

NATIONAL LEVEL SERVICES:

1. Ad Hoc Member, NIGMS study section MBC II, 2002, 2003, 2004; **Charted Member**, NIH Study Section (Prokaryote Cellular and Molecular Biology; 2005-2009; 2017-present); Member, Special Emphasis Panel (NIH) – Topics in Microbiology, Bacterial Pathogenesis (2009-2011); Member, Bacterial Pathogenesis Panel (IDM-A 80S) (2011-present).

(During this period, I have served in 40 panels and study sections)

2. Member, Microbial Genetics Panel, NSF, 2001
3. Member, NSF Graduate Research Fellowship Program Panel (2012-2016)
4. **Academic Editor**, PLoS ONE (2012-present)
5. Editorial Board Member, Journal of Bacteriology (2000-2018)
6. Member, Molecular Microbiology Editorial Advisory Board (2012-present)
7. Editorial Board Member, Frontiers in Microbiology and Microbial Physiology (Since 2011)
8. Ad Hoc reviewer: Molecular Microbiology, Nature, Journal of Biological Chemistry, Biochemistry, Journal of Molecular Biology, Microbiology, EMBO Journal, Applied and Environmental Microbiology, Antimicrobial Agents and Chemotherapy, Biochim Biophys Acta, Genetics, PNAS (USA), Structure.

BOOK REVIEW:

Genetics section, Microbiology: Principles and Applications (1994, ed. J. Black)
The Physiology & Biochemistry of Prokaryotes (David White; Oxford Press, 2009)

MEMBERSHIP:

American Society for Microbiology (1986-present)

GRANT SUPPORT:

External Grants

1. National Institutes of Health: May, 2023. Characterization of stress-tolerant RNA polymerase mutants. *Pending*
2. National Institutes of Health (R21-AI117150-01): January 01, 2016 -December 31, 2019. $407,000. Detailed mapping of drug binding and translocation sites in the AcrB pump protein.
3. National Institutes of Health (RO1-GM048167): June 01, 2008-May 31, 2013. $1,300,000. Project Title: Assembly of *E. coli* Outer Membrane Proteins.
4. National Institutes of Health (RO1-GM048167-S1): May 01, 2008-August 31, 2008. $78,644. Project Title: Assembly of *E. coli* Outer Membrane Proteins (Merit supplemental award).
5. National Institutes of Health (RO1-GM066988): August 01, 2003-July 31, 2009. $912,850. Project Title: Export and Import of Lethal Agents Mediated by TolC.
6. National Institutes of Health (RO1-GM048167): May 01, 2003-August 31, 2008. $965,499. Project Title: Targeting and Assembly of *E. coli* Outer Membrane Proteins.
7. National Institutes of Health (RO1-GM048167): August 1997-July 2002. $582,243. Project Title: Targeting and Assembly of *E. coli* Outer Membrane Proteins.
8. National Institutes of Health (R-29 GM048167): August 1992-July 1997. $536,529. Project Title: Targeting and Assembly of *E. coli* Outer Membrane Proteins.
9. National Institute of General Medical Sciences: Jan 1993-Dec 1996. $74,000. Minority Pre-doctoral Fellowship: characterization of OmpG.

10. Arizona Disease Control Research Commission: July 1992-June 1995. $70,542. Project Title: Novel Antibiotic Targets Among Bacterial Pathogens & the Role of the Outer Membrane in Antibiotic Resistance.

Internal Grants

1. SolS/OKED: January 15-June 30, 2018. $22,500. Combating Bacterial Drug Resistance by investigating mechanisms of drug resistance and novel cellular targets
2. FIFEDOMP (SoLS-RTI): January 2013. $10,308. To develop multi-PI proposals.
3. Institutional Biomedical Research Support Grant. 1991-1992. $5000. Project Title: Molecular Characterization of a New Pore Forming Outer Membrane Protein of *E. coli*.
4. Quality of Undergraduate Instructions. 2002-2003. $12,000. Upgrading the Techniques in Molecular Biology course.

INVITED SEMINARS:

1. Department of Microbiology, University of Illinois, Urbana-Champaign, IL, Oct. 1995
2. Department of Microbiology, Sydney University, Sydney, Australia, July 1996
3. Department of Microbiology & Immunology, Monash University, Australia, August 1996
4. Department of Microbiology & Immunology, Adelaide University, Australia, July 1996
5. Institute Pasteur de Lille, Lille, France, April 1997
6. Department of Molecular & Cell Biology, UC Berkeley, Berkeley, February 1999
7. Department of Molecular Cell Biology, Utrecht, the Netherlands, June 1999
8. Department of Biotechnology, University of Wurzberg, Wurzberg, Germany, July 1999
9. Department of Microbiology, University of Tubingen, Tubingen, Germany, July 1999
10. Department of Biology, University of Konstanz, Konstanz, Germany, July 1999
11. Department of Structural Biology, University of Basel, Basel, Switzerland, July 1999
12. Department de Biochimie, Centre Medical Universitaire, Geneva, Switzerland, July 1999
13. Department of Microbiology, University of Arizona, Tucson, March 2001
14. Department of Molecular Biosciences, Adelaide University, South Australia, August 2002
15. Department of Microbiology, University of Illinois, Urbana-Champaign, IL, Oct. 2002
16. Department of Biology, Georgia State University, Atlanta, GA, Oct. 2003
17. Department of Microbiology, University of Maryland, College Park, MD, Sept. 2006
18. Georgia State University, Ingraham Symposium, Atlanta, GA, Sept. 2006
19. Department of Biology and Biochemistry, University of Houston, TX, Oct. 2006
20. Department of Microbiology and Cell Science, University of Florida, FL, Nov 2006
21. University of Alberta, Canada, May 2008 (Conference talk)
22. Jacobs University, Bremen, Germany, July 2010
23. Wind River Conference in Prokaryotic Biology, Estes Park, Colorado, June 2011
24. Genetic Approaches to Understanding Complex Biological Problems, Sedona, March 2013
25. Center for Membrane Proteins in Infectious Diseases, Arizona State University, Jan 2014
26. Department of Chemistry and Biochemistry, University of Oklahoma, Norman, OK, April 25, 2014

27. Karcher/Barton Seminar, Department of Chemistry and Biochemistry, University of Oklahoma, Norman, OK, April 26, 2014
28. Wind River Conference in Prokaryotic Biology, Estes Park, Colorado, June 2014
29. Department of Chemistry, University of Lexington, KY, September 2014
30. Department of Microbiology, University of Illinois, Urbana-Champaign, October 2014
31. Wind River Conference in Prokaryotic Biology, Estes Park, Colorado, June 2016
32. Gordon Research Conference on Multidrug Efflux System (Session chair), Galveston, March 2017
33. Gordon Research Conference on Multidrug Efflux System (invited conference talk), Galveston, March 2017
34. Department of Microbiology, University of Illinois, Urbana-Champaign, April 2017
35. Wind River Conference in Prokaryotic Biology, Estes Park, Colorado, June 2018
36. Genetic Approaches to Understanding Complex Biological Problems, Princeton University, NJ, May 2018
37. Midwestern University, Glendale, February 2020
38. Center for Fundamental & Applied Microbiome, Biodesign Institute, ASU, March, 2021
39. Center for Mechanisms for Evolution, Biodesign Institute, ASU, April, 2021
40. Department of Microbiology, University of Illinois, Urbana-Champaign, March 2022
41. Genetic Approaches to Understanding Complex Biological Problems, Suffolk University, Boston, MA, July 2023

GRADUATE & POSTDOCTORAL TRAINING:

	Name	Program	Degree	Year completed
1.	Andrew Kloser	Microbiology	Ph.D.	Dec 1995
2.	Mike Laird	Microbiology	Ph.D.	Dec 1996
3.	Daniel Fajardo	Microbiology	Ph.D.	Aug 1997
4.	Ming Deng	Mol Cell Biol	Ph.D.	Dec 1997
5.	Joyce Cheung	Mol Cell Biol	Ph.D.	Aug 1999
6.	Hema Vakharia	Microbiology	Ph.D.	Aug 1999
7.	Greg German	Microbiology	Ph.D.	Dec 2003
8.	Maria CastilloKeller	Mol Cell Biol	Ph.D.	May 2004
9.	John Werner	Mol Cell Biol	Ph.D.	Dec 2005
10.	Fasahath Husain	Microbiology	Ph.D.	July 2006
11.	Henri Gerken	Microbiology	Ph.D.	Dec 2009
12.	Owen Leiser	Microbiology	Ph.D.	Dec 2010
13.	Jon Weeks	Microbiology	Ph.D.	June 2012
14.	Keith Morrison	Geomicrobiology	Ph.D.	June 2015
15.	Keilen Kelley	Microbiology	Ph.D.	Dec 2025
16.	Rezvan Golmoradizadeh	MCB	Ph.D.	Current
17.	Yun Miao	Microbiology	M.S.	Dec 1993
18.	Xiaoling Xiong	Microbiology	M.S.	Dec 1995
19.	Jack Deeter	Microbiology	M.S.	Dec 1995
20.	John Jai	Microbiology	M.S.	Aug 1996
21.	Mike Traurig	Microbiology	M.S.	Dec 1996
22.	Swati Acharya	Microbiology	M.S.	Dec 1999

23. Saroj Chirravuri	Microbiology	M.N.S.	Dec 2003
24. Teresa Celaya Kolb	Mol Cell Biol	M.S.	June 2004
25. Henri Gerken	Microbiology	M.S.	Aug 2004
26. Mellecha Blake	Microbiology	M.S.	Aug 2016
27. Meody Yeh	MCB	M.S.	May 2022
28. Nghia Pham	MIC	M.S.	May 2024
29. Melissa Flake	MCB	M.S.	May 2024
30. Natalia Quinone	MIC	M.S.	Current
31. Muriel Masi	Microbiology	Postdoc	Dec 2008
32. Christoph Trautner	Microbiology	Postdoc	May 2012

HONORS STUDENT TRAINING:

1. Jared Reading	Microbiology	B.S. (Honors)	Dec 1999
2. Trevor Starr	Mol. Bio. Biotech.	B.S. (Honors)	July 2001
3. Anne Marie Augustus	Biochemistry	B.S. (Honors)	July 2001
4. James DeGiulio	Microbiology	B.S. (Honors)	July 2002
5. Daniel Buffington	Microbiology	B.S. (Honors)	May 2004
6. Eric Coon	Microbiology	B.S. (Honors)	May2006
7. Emily Charlson	Biology	B.S. (Honors)	May 2007
8. Victor Kalinkin	MBB	B.S. (Honors)	May 2016
9. Megan Mcfeely	Microbiology	B.S. (Honors)	May 2016
10. Nghia Millard	MIC & Math	B.S. (Honors)	May 2017
11. Isaac Berger	Microbiology	B.S. (Honors)	May 2017
12. Nan Qiu	Chemistry	B.S. (Honors)	May 2019
13. Maria Predtechenskaya	MIC/Comp Sci.	B.S. (Honors)	May 2020
14. Melody Yeh	Biology	B.S. (Honors)	May 2020
15. Daniel Nguyen	Chem Eng.	B.S. Honors	May 2022

Additionally, I have co-chaired Ph.D. committees of two MIC students and have been a member of the Graduate committees of over 40 students from MIC, PLB and MCB graduate programs.

ADDITIONAL UNDERGRADUATE/GRADUATE STUDENT TRAINING:

1. Sung Hong	B.S. (Microbiology)
2. Micah Williams	MNS (Microbiology)
3. Rhesa Stidham	B.S. (Microbiology)
4. Tom McDermott	Ph.D. (Microbiology; did not complete; joined law program)
5. Clint Abner	Ph.D. (Microbiology; did not complete; moved to Florida)
6. Karen Malone	B.S. (Microbiology)
7. Matt Humbard	B.S. (Microbiology)
8. Mike Leingang	High School student
9. Leyla Deschney	B.S. (Microbiology)
10. Bryce Ricken	B.S. (Microbiology)
11. Valerie Jacobs	B.S. (MBB)
12. Phu Vuong	B.S. (Microbiology)

13. Chelsea Johnson	B.S. (Microbiology)
14. Sara Pecora	B.S. (Microbiology)
15. Danielle O'Neal	B.S. (Microbiology)
16. Robin Treuer	Ph.D. (Microbiology; complete M.S. from another ASU lab)
17. Jeremy Mantei	B.S. (Microbiology)
18. Cindy Castellanos	Research Technician
19. Drew Bennion	B.S. (Biology)
20. Gunnhild Albrecht	B.S. (Microbiology)
21. Neron Thomas	Lab Aide B.A. (Business)
22. Hang Pham	B.S. (Microbiology)
23. Kristina Heide	B.S. (Microbiology)
24. Brad Pfeifle	B.S. (Microbiology)
25. Ketaki Soparkar	B.S. (MBB)
26. Otto Schwake	B.S. (Microbiology)
27. Anna Thompson	Research Technician
28. Rene Tellez Jr.	B.S. (Microbiology)
29. Forrest Noelck	B.S. (Microbiology)
30. Nick Giuliano	B.S. (Microbiology)
31. Esra Ilhan	Ph. D. (Microbiology, lab rotation)
32. Sachin Nair	B.S. (Microbiology)
33. Ryan Stikeleather	B.S. (Microbiology & Biochemistry)
34. Hosnah Maududi	B.S. (Microbiology)
35. Nanhee Lee	B.S. (Microbiology)
36. Maggie Leonard-Rivera	B.S. (Microbiology)
37. Katrina Maxcy	B.S. (Princeton University; summer intern)
38. James Mar	B.S. (Biology)
39. Alex Ledesma	Ph. D. (Microbiology, lab rotation)
40. Cori Leonetti	Ph. D. (Microbiology, lab rotation)
41. Sami Kaldawi	B.S. (Microbiology)
42. Mashal Durrani	B.S. (Microbiology)
43. Tessa Geshell	B.S. (Biology)
44. Daniel Gold	B.S. (Microbiology)
45. Dan Muongpack	B.S. (Microbiology)
46. Eric Linden	B.S. (Microbiology)
47. Tye Cameron	Lab Aide (English major)
48. Minjoo Kim	B.S. (Microbiology & Biochemistry)
49. Krystal Breslow	B.S. (Microbiology)
50. Rebecca Gabriel	B.S. (Biology)
51. Mariana Palomino	B.S. (Microbiology)
52. Hyun Jae Cho	B.S. (MBB)
53. Bianca Varda	B.S. (Microbiology; Honors)
54. Lauren Lynch	B.S. (Biology)
55. Mackenzie Lynch	B.S. (Biology)
56. Aurora Ireland	B.S. (Microbiology & Biochemistry; Honors)
57. Monica Szeto	B.S. (Biological Sciences; Honors)
58. Tyler Becker	B.S. (Biological Sciences)

59. Abigail Posten	B.S. (Microbiology)
60. Brenda Victor	B.S. (Biological Sciences)
61. Merielle Alvarado	B.S. (Microbiology)
62. Liang Liu	B.S. (Biology)
63. Candice Hanna	B.S. (Microbiology)
64. Trevor Holloway	B.S. (Microbiology)
65. Megan Taylor	B.S. (Microbiology)
66. Brea Kern	B.S. (Microbiology)
67. Ashley Thomson	B.S. (Microbiology)
68. Ashley Jama	B.S. (Microbiology)
69. Jesse Esqueda	B.S. (Biological Sciences)
70. Edgar Villarreal	B.S. (Microbiology)
71. Junior Arapi	B.S. (Chem/Biochem)
72. Elly Gardev	B.S. (Biological Sciences)
73. Celeste Johnson	B.S. (Biological Sciences)
74. Melissa Flake	B.S. (Microbiology)
75. Rigdon Waite	B.S. (Microbiology)
76. Nghia Pham	B.S. (Microbiology)
77. Karen Padilla	B.S. (Microbiology)
78. Natalia Quinones	B.S. (Microbiology)
79. Isha Mahida	B.S. (MBB)
80. Brian Argueta	B.S. (Microbiology)

RESEARCH PUBLICATIONS:

1. Misra, R. 2026. Mutation-based antibiotic resistance mechanism. Microbiol Mol Biol Reviews. *Under review*
2. Yeh, M., K. Kelly, and R. Misra. 2025. Characterization of a novel RNA polymerase mutant of *Escherichia coli* that confers thermotolerance and chaperone independence. Mol. Microbiol. 124(4):310-326.
3. Kelly K., and R. Misra. 2025. Insights on the roles of stringent response, stringent-like response, and general stress response in hyperosmotic shock tolerance by *Escherichia coli* strains. mBio. e02575-25.
4. German, J.G., J.V. DeGiulio, J. Ramsey, A.M. Kropinski, and R. Misra. 2024. The TolC and lipopolysaccharide-specific (TLS) *Escherichia coli* bacteriophage TLS – the Tlsvirus archetype virus. Phage. 5(3):173-183.
5. Gerken, H., Shetty, D., Kern, B., Kenney, L.J., and Misra R. 2024. Effects of pleiotropic *ompR* and *envZ* alleles of *Escherichia coli* on envelopes stress and antibiotic sensitivity. J. Bacteriol. 10.1128/jb.00172-24.
6. Cho, H.-J., and R. Misra. 2021. Mutational activation of antibiotic resistant pathways in the absence of two major antibiotic efflux systems of *Escherichia coli*. J. Bacteriol. 203:e00109-21.
7. Nguyen, D., Kelly, K., Qiu, N., and R. Misra. 2020. YejM controls LpxC levels by regulating protease activity of the FtsH/YciM complex of *Escherichia coli*. J. Bacteriol. e00303-20.

8. Gerken, H. P. Vuong, K. Soparkar, and R. Misra. 2020. New insights into the involvement of two-component systems in iron homeostasis and porin regulation in *Escherichia coli*. mBio. 11:e01192-20.
9. Qiu, N., and Misra, R. 2019. Overcoming iron deficiency by altering outer membrane permeability. J. Bacteriol. 201:e00340-19.
10. Kern, B., O.P. Leiser, and Misra, R. 2019. Suppressor mutations in degS overcome the acute temperature-sensitive phenotype of DdegP and DdegP Dtol-pal mutants of *Escherichia coli*. J. Bacteriol. 201:e00742-18.
11. Deb *et al*. 2017. Bacterial expression, correct membrane targeting and functional folding of the HIV-1 membrane protein Vpu using a periplasmic signal peptide. PLoS One. 12(2): e0172529. https://doi.org/10.1371/journal.pone.0172529.
12. Misra, R. 2016. Modulators of the bacterial two-component systems involved in envelope stress, transport and virulence. *In* Stress and Environmental Control of Gene Expression in Bacteria. Editor, Frans J. de Bruijn, Wiley-Blackwell Publishers.
13. Morrison, K.D., R. Misra, and L.B. Williams. 2016. Unearthing the antibacterial mechanism of medicinal clay: A geochemical approach to combating antibiotic resistance. Scientific Reports (Nature). 6:19043.
14. Soparkar, K., A.D. Kinana, J.W. Weeks, K.D. Morrison, H. Nikaido, and R. Misra. 2015. Reversal of the drug-binding pocket defects of the AcrB multidrug efflux pump protein of *Escherichia coli*. J. Bacteriol. 197:3255-3264.
15. Misra, R. 2015. Entry and exit of bacterial outer membrane proteins. Trends Microbiol. 23: 452-453.
16. Misra, R., K.D. Morrison, H.-J. Cho, T. Khuu. 2015. Importance of real-time assays to distinguish multidrug efflux pump inhibiting and Outer Membrane destabilizing activities in *Escherichia coli*. J. Bacteriol. 197:2479-2488.
17. Misra, R., Stikeleather, R., and R. Gabriele. 2015. In vivo roles of BamA, BamB and BamD in the biogenesis of BamA, a core protein of the β-barrel assembly machine of *Escherichia coli*. J. Mol. Biol. 427:1061-1074.
18. Weeks, J. V. Bavro, and R. Misra. 2014. Genetic assessment of the role of AcrB β-hairpins in the assembly of the TolC-AcrAB multidrug efflux pump of *Escherichia coli*. Mol. Microbiol. 91:965-975.
19. Misra, R. 2012. Assembly of the β-barrel outer membrane proteins in Gram-negative bacteria, mitochondria, and chloroplasts. Spotlight Article. ISRN Mol. Biol. Vol. 2012 doi:10.5402/2012/708203.
20. Leonard-Rivera, M., and R. Misra. 2012. Conserved residues of the putative L6 loop of *Escherichia coli* BamA play a critical role in the assembly of β-barrel outer membrane proteins, including BamA itself. J. Bacteriol. 194:4662-4668.
21. Workman, P., K. Heide, N. Giuliano, N. Lee, J. Mar, P. Vuong, D. Bennion, and R. Misra. 2012. Genetic, biochemical and molecular characterization of the polypeptide transport-associated domain of *Escherichia coli* BamA. J. Bacteriol. 194:3512-3521.
22. Leiser, O.P., E.S. Charlson, H. Gerken, and R. Misra. 2012. Reversal of the Δ*degP* phenotypes by a novel *rpoE* allele of *Escherichia coli* K-12. PLoS One. 7:e33979.
23. Tellez, R. Jr., and R. Misra. 2012. Substitutions in the BamA β-barrel domain overcome the conditional lethal phenotype of a Δ*bamB* Δ*bamE* strain of *Escherichia coli*. J. Bacteriol. 194:317-324.

24. Vuong, P., and R. Misra. 2011. Guide to genome-wide bacterial transcription factor binding site prediction using OmpR as model, p. 41-56. *In* X. Xia (ed.) Selected *Works in Bioinformatics*. InTech (Publisher).
25. Gerken, H., and R. Misra. 2010. MzrA-EnvZ interactions in the periplasm influence the EnvZ-OmpR two-component regulon. J. Bacteriol. 192:6271-6278.
26. Bennion, D., E.S. Charlson, E. Coon, and R. Misra. 2010. Dissection of β-barrel outer membrane protein assembly pathways through characterizing BamA POTRA 1 mutants of *Escherichia coli*. Mol. Microbiol. 77:1153-1171.
27. Weeks, J.W., T. Celaya-Kolb, S. Pecora, and R. Misra. 2010. AcrA suppressor alterations reverse the drug hypersensitivity phenotype of a TolC mutant by inducing TolC aperture opening. Mol. Microbiol. 75:1468-1483.
28. Gerken, H., O. Leiser, D. Bennion, and R. Misra. 2010. Involvement and necessity of the Cpx regulon in the event of aberrant assembly of β-barrel outer membrane proteins. Mol. Microbiol. 75:1033-1046.
29. Misra, R., and V.N. Bavro. 2009. Assembly and transport mechanism of tripartite drug efflux systems. Biochim. Biophys. Acta 1794:817-825.
30. Gerken, H., E.S. Charlson, E.M. Cicirelli, L.J. Kenney, and R. Misra. 2009. MzrA, a novel modulator of the EnvZ/OmpR two-component regulon. Mol. Microbiol. 72:1408-1422.
31. Masi, M., G. Duret, A.H. Delcour, and R. Misra. 2009. Folding and trimerization of signal sequence-less mature TolC in the cytoplasm of *Escherichia coli*. Microbiology. 155:1847-1857.
32. Bavro, V.N., Z. Pietras, N. Furnham, L. Pérez-Cano, J. Fernández-Recio, X. Yuan Pei, R. Misra and B. Luisi. 2008. Channel-opening and assembly in a bacterial drug efflux machine. Mol. Cell. 30:114-121.
33. Vuong, P., D. Bennion, J. Mantei, D. Frost, and R. Misra. 2008. Analysis of YfgL and YaeT Interactions through Bioinformatics, Mutagenesis, and Biochemistry. J. Bacteriol. 190:1507-1517.
34. Misra, R. 2007. First glimpse of the crystal structure of YaeT's POTRA domains. Chem. Biol. 2:649-651.
35. Perry G. H., N. J. Dominy, K. G. Claw, A. S. Lee, H. Fiegler, R. Redon, J. Werner, F. A Villanea, J. L. Mountain, R. Misra, N. P. Carter, C. Lee and A. C. Stone. 2007. Diet and the evolution of copy number variation of the human amylase gene. Nature Genetics 39:1256-1260.
36. Masi, M., P. Vuong, M. Humbard, K. Malone, and R. Misra. 2007. Initial steps of colicin E1 import across the outer membrane of *Escherichia coli*. J. Bacteriol. 189:2667-2676.
37. Charlson, S. E., J. N. Werner, and R. Misra. 2006. Differential effects of *yfgL* mutation on the biogenesis of *Escherichia coli* outer membrane proteins and lipopolysaccharide. J. Bacteriol. 188:7186-7194.
38. Malinverni, J. C., J. Werner, S. Kim, J. G. Sklar, D. Kahne, R. Misra, and T. J. Silhavy. 2006. YfiO stabilizes the YaeT complex and is essential for outer membrane protein assembly in *E. coli*. Mol. Microbiol. 61:151-164.
39. Castillo-Keller, M., P. Vuong, and R. Misra. 2006. Novel mechanism of *Escherichia coli* porin regulation. J. Bacteriol. 188:576-586.
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