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EDUCATION

California Institute of Technology	Physics	B.S.	1984
Cornell University	Physics	M.S.	1988
Cornell University	Physics	Ph.D.	1989

Dissertation: Resonant Tunneling with Electron-Phonon Interaction.
Thesis adviser: Professor John W. Wilkins.

PROFESSIONAL EMPLOYMENT

9/84 – 5/89 Fannie and John Hertz Foundation Fellow, Lab of Atomic and Solid State Physics, Cornell University
5/89 – 9/89 Visiting Scientist, Weizmann Institute of Science, Israel
9/89 – 9/91 Postdoctoral Associate, Physics Department, MIT, Supervisor: Patrick A. Lee
9/91 – 3/99 Research Scientist, Physical Sciences Division, NEC Research Institute
4/99 – 10/02 Senior Research Scientist, Physical Sciences Division, NEC Research Institute
8/99 – 5/00 Sabbatical Visitor, University of California, Berkeley
11/02 – 1/04 Senior Research Staff Member, NEC Laboratories America, Inc.
2/04 – Present Professor, Department of Molecular Biology, Princeton University
10/06 – Present Associated Faculty, Department of Physics, Princeton University
5/08 – Present Member, Lewis-Sigler Institute, Princeton University
7/11 – Present Associate Director, Lewis-Sigler Institute, Princeton University
1/13 – Present Acting Director, Lewis-Sigler Institute, Princeton University

HONORS

Academic:

California Institute of Technology (1980-1984)
Presidential Scholar (1980)
Carnation Merit Scholarship (1982-1983)
Caltech Merit Scholarship (1983-1984)
Jack E. Froehlich Memorial Award (1983)
McKinney Prize in Literature (1984)

Cornell University (1984-1989)

Fannie and John Hertz Foundation Fellowship (1984-1989)

Professional:

Fellow of the American Physical Society
Fellow of the American Association for the Advancement of Science (AAAS)

PATENTS

U.S. Patent No. 5,963,571, October 5, 1999, “Quantum-Dot Cascade Laser, Ned S. Wingreen
U.S. Patent No. 5,699,215, December 16, 1997, “Non-Magnetic Magnetoresistive Reading Head Using Corbino Structure,” Stuart A. Solin, Ned S. Wingreen

U.S. Patent No. 5,692,003, November 25, 1997, "Quantum-Dot Cascade Laser," Ned S. Wingreen, Charles A. Stafford
U.S. Patent No. 7,405,050, July 29, 2008, "Small RNAs and Bacterial Strains Involved in Quorum Sensing," Derrick H. Lenz, Kenny C. Mok, Ned S. Wingreen, Bonnie L. Bassler

PUBLICATIONS

- Michele Castellana, Maxwell Z Wilson, Yifan Xu, Preeti Joshi, Ileana M Cristea, Joshua D Rabinowitz, Zemer Gitai, Ned S Wingreen
Enzyme clustering accelerates processing of intermediates through metabolic channeling.
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- Rachael M. Barry, Anne-Florence Bitbol, Alexander Lorestani, Emeric J. Charles, Chris H. Habrian, Jesse M. Hansen, Hsin-Jung Li, Enoch P. Baldwin, Ned S. Wingreen, Justin M. Kollman, Zemer Gitai.
Large-scale filament formation inhibits the activity of CTP synthetase
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- Mikhail Tikhonov, Robert W Leach, Ned S Wingreen
Interpreting 16S metagenomic data without clustering to achieve sub-OTU resolution
ISME Journal. 2014 Jul 11. doi: 10.1038/ismej.2014.117. [Epub ahead of print] PMID: 25012900 [PubMed - as supplied by publisher]
- Chase P. Broedersz, Xindan Wang, Yigal Meir, Joseph J. Loparo, David Z. Rudner, Ned S. Wingreen.
Condensation and localization of the partitioning protein ParB on the bacterial chromosome.
Proceedings of the National Academy of Science. 2014 ; published ahead of print June 3, 2014, doi:10.1073/pnas.1402529111
- Knut Drescher, Carey D. Nadell, Howard A. Stone, Ned S. Wingreen, Bonnie L. Bassler.
Solutions to the public goods dilemma in bacterial biofilms.
Current Biology. 2014 Jan 6;24(1): PMCID: PMC3935403
- Silke Neumann, Nikita Vladimirov, Anna K. Krembel, Ned S. Wingreen, Victor Sourjik.
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- Robert S. Dwyer, Dante P. Ricci, Lucy J. Colwell, Thomas J. Silhavy, Ned S. Wingreen.
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Genetics 195: 443-55 (2013). PMID:23934888
- Monica Skoge, Sahin Naqvi, Yigal Meir, Ned S. Wingreen.
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Physical Review Letters 110: 248102 (2013).
- David B. Borenstein, Yigal Meir, Joshua W. Shaevitz, Ned S. Wingreen.

Non-local interaction via diffusible resource prevents coexistence of cooperators and cheaters in a lattice model.

PLoS One 8(5):e63304. (2013) PMID:PMC3656920

- Siyuan Wang, Ned S. Wingreen.
Cell shape can mediate the spatial organization of the bacterial cytoskeleton.
Biophysical Journal 104(3):541-52. (2013) PMID:PMC3566457
- Victor Sourjik, Ned S. Wingreen.
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Current Opinion in Cell Biology 2012 Apr;24(2):262-8. Epub 2011 Dec 9.
PMCID:PMC3320702
- Robert M. Cooper, Ned S. Wingreen, Edward C. Cox.
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PLoS One. 2012;7(3):e33528. Epub 2012 Mar 22. PMID:PMC3310873
- Douglas Swanson, Ned S. Wingreen.
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- Monica L. Skoge, Yigal Meir, Ned S. Wingreen.
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Physical Review Letters 2011 Oct 21;107(17):178101. Epub 2011 Oct 18
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- R. Scott McIsaac, Kerwyn Casey Huang, Anirvan Sengupta, Ned S. Wingreen
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- Yigal Meir, Vladimir Jakovljevic, Olga Oleksiuk, Victor Sourjik, Ned S. Wingreen,
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- Thierry Mora, Ned S. Wingreen,
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- Sidhartha Goyal, Ned S. Wingreen,
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Proceedings of the National Academy of Science 104: pp. 2626-30 (2007). PMID: PMC1815233
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TRAINEES

Postdoctoral Fellows

Noam Sivan	May 1992 – August 1993
Alan Middleton	September 1992 – December 1994
Hao Li	September 1994 – August 1997
Igor Aleiner	September 1997 – March 1998
Eugene Tsiper	July 1997 – September 1997
Jonathan Miller	August 1998 – September 2001
Eldon Emberly	August 2000 – September 2002
Ranjan Mukhopadhyay	September 2001 – August 2003
David Moroz	July 2001 – July 2002
Rahul Kulkarni	August 2002 – July 2004
Peter Thumfort	November 2002 – November 2005
Je-Luen Li	February 2003 – March 2005
Juan Keymer	March 2003 – December 2005
Morten Kloster	September 2003 – October 2005
Robert Endres	October 2004 – August 2007
Kerwyn Huang	August 2004 – August 2008
Pankaj Mehta	September 2006 – July 2010
Konstantin Doubrovinski	November 2008 – September 2012
Sven van Teeffelen	July 2009 – December 2013
David Schwab	September 2009 – August 2014
Knut Drescher	February 2010 – August 2014
Michele Castellana	November 2011 – present
Thibaud Taillefumier	November 2011 – present
Anne-Florence Bitbol	September 2012 – present

Graduate Students

Robert Helling	June 1995 – September 1995
Tairan Wang	June 1996 – September 1997
Dmitry Green	June 2000 – March 2001
Mehdi Yahyanejad	June 2001 – September 2002
Kerwyn Huang	June 2002 – August 2004

Forrest Coleman	3 rd rotation 2003-2004
Jonathan Guberman	3 rd rotation 2003-2004, June 2004 – 2010
Tao Long	September 2004 – December 2009
Sidhartha Goyal	March 2005 – August 2009
John Rittenhouse	1 st rotation 2005-2006
Nikolai Slavov	3 rd rotation 2005-2006
Christopher Doucette	1 st rotation 2006-2007
Robert Cooper	2 rd rotation 2006-2007, June 2007 – October 2012
Jack Lee	1 st rotation 2007-2008
Marshall Reaves	3 rd rotation 2007-2008
Steven Wang	May 2008 – August 2011
Doug Swanson	September 2009 – June 2011
Lihui Feng	3 rd rotation 2009-10
Max Wilson	1 st rotation 2010-11
David Borenstein	May 2011 – present
Vikram Kumar	2 rd rotation 2012-2013, June 2013 – present
Elizabeth Rowland	1 st rotation 2013-14
Sophie Zhang	February 2014 – present
Farzan Beroz	February 2014 – present

Undergraduate Students

Philip Kidd	June 2004 – August 2006
Lenny Shulgin	February 2007 – May 2007
Clinton Hansen	September 2006 – May 2008
Howard Yu	September 2007 – May 2008
Leon Furchtgott	February 2008 – May 2009
Evgeni (Genya) Frenkel	February 2009 – May 2010
Michael Gelbart	June 2009 – May 2010
Michael Salazar	February 2010 – August 2010
Edvin Memet	February 2011 – August 2012
Jose Mena	May 2011 – May 2012
Ken Jean-Baptiste	February 2014 – present
Annie Maslan	September 2014 – present
Rosie Zhang	September 2014 – present