

## SIMON ASHER LEVIN

*James S. McDonnell Distinguished University Professor in Ecology and Evolutionary Biology*

ORCID: <https://orcid.org/0000-0002-8216-5639>

Princeton University, Department of Ecology and Evolutionary Biology  
102 Guyot Hall, Princeton, NJ 08544-1003, USA

Mailing Address: 106A Guyot Hall, Princeton, NJ 08544-1003, USA

Telephone: 609.258.6880 • Website: <http://slevin.princeton.edu>

## HONORS AND AWARDS

### Major International Prizes

A.H. Heineken Prize for Environmental Sciences 2004, Royal Netherlands Academy of Arts and Sciences (2004)

Kyoto Prize in Basic Sciences, Inamori Foundation, Japan (2005)

Margalef Prize, Government of Catalonia (2010)

Tyler Prize for Environmental Achievement (2014)

Luca Pacioli Prize, Ca'Foscari University of Venice, Italy (2014)

National Medal of Science (2014, announced 2015, awarded 2016)

BBVA Foundation Frontier of Knowledge Award in Ecology and Conservation Biology (2022)

### Major Honorary Societies

Fellow, American Academy of Arts and Sciences (1992)

Member, National Academy of Sciences (2000)

Member, American Philosophical Society (2003)

Foreign Member, Istituto Veneto di Scienze, Lettere ed Arti, Venice, Italy (2008)

Foreign Member, Istituto Lombardo, Milan (2014)

### Major Society Awards

MacArthur Award, Ecological Society of America (1988)

Fellow, American Association for the Advancement of Science (AAAS) (1992)

Distinguished Statistical Ecologist Award, International Association for Ecology (INTECOL) (1994)

Distinguished Service Citation of the Ecological Society of America (1998)

The First Okubo Lifetime Achievement Award, Society for Mathematical Biology and Japanese Society for Mathematical Biology (2001)

Distinguished Landscape Ecologist Award, U.S. Regional Association of the International Association for Landscape Ecology (US-IALE) (2003)

I.E. Block Community Lecture Award, Society for Industrial and Applied Mathematics (2006) Distinguished Scientist Award, American Institute of Biological Sciences (2007)

Fellow, Society for Industrial and Applied Mathematics (2009)

Eminent Ecologist Award, Ecological Society of America (2010)

National Associate, National Research Council of the National Academies (2011)

Fellow, Ecological Society of America (2012)

Fellow, Society for Mathematical Biology (2017)

Fellow, American Mathematical Society (AMS) (2021)

### Honorary Degrees

Honorary Doctor of Sciences, Eastern Michigan University (1990)

Honorary Doctor of Humane Letters Honoris Causa, Whittier College (2004)

Honorary Doctor of Science, Michigan State University (2009)

Honorary Doctor of Science, McMaster University (2015)

Honorary Doctor of Science, University of Victoria (2019)

### Fellowships

NSF Postdoctoral Fellow, University of California, Berkeley (1964-65)

NSF Predoctoral Fellow, University of Maryland, College Park (1962-64)  
 Guggenheim Fellow (1979-80)  
 Japan Society for the Promotion of Science Fellowship, Kyoto, Japan (1983-4)

### Publication Awards

- 1990 Best Publication in Landscape Ecology Award for 1990 (U.S. Chapter, International Association for Landscape Ecology) for: Andow, D.A., P.M. Kareiva, **S.A. Levin**, and A. Okubo. 1990. Spread of invading organisms. *Landscape Ecology* 4 (2/3): 177-188.
- 2001 Outstanding Paper in the Discipline of Landscape Ecology Award for 2001 (U.S. Chapter, International Association for Landscape Ecology) for: Keymer, J.E., Marquet, P.A., Velasco-Hernandez, J.X., and **S.A. Levin**. 2000. Extinction thresholds and metapopulation persistence in dynamic landscapes. *The American Naturalist* 156(5): 478-494.
- 2002 Most Cited Paper in the Field of Ecology and Environment for the 1990s (Institute for Scientific Information, Philadelphia, PA) for: **Levin, S.A.** 1992. The problem of pattern and scale in ecology. *Ecology* 73(6): 1943-1967.
- 2010 A Most Cited Paper(s) 2005-2009, Elsevier's Economic and Finance Journals for: Durrett, R. and **S.A. Levin**. 2005. Can stable social groups be maintained by homophilous imitation alone? *Journal of Economic Behavior and Organization* 57(3): 267-286.
- 2012 Co-author of George Mercer Award 2012 for: Staver, A.C., Archibald, S., and **S. Levin**. 2011. Tree cover in sub-Saharan Africa: Rainfall and fire constrain forest and savanna as alternative stable states. *Ecology* 92(5): 1063-1072.
- 2014 Co-author of President's Award for best paper in the *American Naturalist* for: Farrior, C.E., Dybzinski, R., **Levin, S.**, and S. Pacala. Competition for water and light in closed-canopy forests: A tractable model carbon of allocation with implications for carbon sinks. *The American Naturalist* 181(3): 314-330.
- 2018 International Consortium of Chinese Mathematicians (Beijing) Best Paper Award 2018 for: Lei, J., **Levin, S.A.**, and Nie, Q. 2014. Mathematical model of adult stem cell regeneration with cross-talk between genetic and epigenetic regulation. *PNAS* 111(10): E880-887.
- 2018 Co-author of One of the Most-Cited 2018 *PNAS* Papers for: Klein, E.Y., Van Boeckel, T.P., Martinez, E.M., Pant, S., Gandra, S., **Levin, S.A.**, Goossens, H., and R. Laxminarayan. 2018. Global increase and geographic convergence in antibiotic consumption between 2000 and 2015. *PNAS* 115(15): E3463-E3470.
- 2020 Co-author of ESA Outstanding Paper Award 2020 (Theory Section) for: Tekwa, E., Fenichel, E.P., **Levin, S.A.**, and M. Pinsky. 2019. Path-dependent institutions drive alternative stable states in conservation. *PNAS* 116(2): 689-694.
- 2021 Co-author of ESA Outstanding Paper Award 2021 (Theory Section) for: Goel, N., Guttal, V., **Levin, S.A.**, and A.C. Staver. 2020. Dispersal increases the resilience of tropical and savanna and forest distributions. *The American Naturalist* 195(5): 833-850.
- 2023 Co-author of Most Cited Paper from 2021-23 in *Population Ecology* Award for: Pinsky, M.L., Fenichel, E., Fogarty, M., **Levin, S.**, McCay, B., St. Martin, K., Selden, R.L., and T. Young. 2021. Fish and fisheries in hot water: What is happening and how do we adapt? *Population Ecology* 63: 17-26.
- 2023 Co-author of Ecological Society of America (ESA) Honorable Mention in the Outstanding Ecological Theory Paper Category for: Gibbs, T., **Levin, S.A.**, and J.M. Levine. 2022. Co-existence in diverse communities with higher-order interactions. *PNAS* 119(43): e2205063119.

### Other

The Honor Society of Phi Kappa Phi Biology Colloquium Award (1991)  
 World Innovation Foundation, Honorary Member (2003)  
 Clay Mathematics Senior Scholar-in-Residence (2004-2005)  
 Medallion of the Université de Montpellier (2004)  
 University Fellow, Resources for the Future (2008- )  
 Beijer Fellow, Beijer Institute of Ecological Economics, Stockholm, Sweden (2007- )  
 SIAM Fellow (2009)  
 Distinguished Alumnus of the Year Award, University of Maryland, College of Computer, Mathematical and Natural Sciences (2011)

Festschrift in Honor of Simon Levin's 70th Birthday, Princeton University (2011)  
 Theoretical Ecology 4(2), 2011, Special Issue in Honor of Simon Levin's 70th Birthday  
 Journal of Mathematical Biology, 2012, Special Issue in Honor of Simon Levin's 70th Birthday  
 Journal of Biological Dynamics 6, Supplement 2, 2012, Special Issue in Honor of Simon Levin's 70th Birthday  
 IIASA Honorary Scholar (2012)  
 The Mathematical, Computational and Modeling Sciences Center at Arizona State University Relaunched in  
 Honor of Simon A. Levin as The Simon A. Levin Mathematical, Computational, and Modeling Sciences Center  
 (2014)  
 IIASA Distinguished Visiting Fellow (2014)  
 Fellow, Society for Mathematical Biology Fellow (2017)  
 Science Board Lifetime Fellow, Santa Fe Institute (2018)  
 Highly Cited Researcher, Web of Science Group (2019-2023)  
 Lifetime Achievement Award, Marquis Who's Who (2019)  
 Research Fellow, Gruter Institute for Law and Behavioral Science (2020- )  
 Affiliate, MIT Laboratory for Financial Engineering (LFE) (2020-2023)  
 Honorary Professorship, Tsinghua University (2020)  
 Luohan Academy Distinguished Fellow, Hangzhou, China (2021)  
 Simon A. Levin honored with International Forum on Advanced Environmental Sciences and Technology  
 (iFAST) Symposium Held to Celebrate His 80th Birthday and Outstanding Contributions to Theoretical  
 Ecology (2021)  
 Intercollegiate Biomathematics Alliance (IBA) Distinguished Senior Fellow (2022)  
 Research Excellence Award, University of Maryland Alumni Association (2024)  
 Sven Berggren Prize, Royal Physiographic Society, Lund Sweden (2024)

### Named Lectures

The Distinguished Brin Lecture, Brin Mathematics Research Center, Department of Mathematics, University of  
 Maryland, College Park, MD (2023)  
 The Messenger Lectures (3 lectures), Cornell University, Ithaca, NY (2023)  
 The Frederic and Julia Wan Distinguished Lecture Series (Inaugural Lecture), University of California, Irvine  
 (2023)  
 The Huck Distinguished Lecture, The Pennsylvania State University (2019)  
 Lawrence B. Slobodkin Lecture (2 Lectures), Stony Brook University (2018)  
 Dr. Erik B. & Mrs. Joyce D.C. Young Lecture, Bioscience Day, University of Maryland, College Park (2017)  
 Federico Leighton Lecture, Pontificia Universidad Católica de Chile (2017)  
 McKnight Zane Lecture, University of Miami, Florida (2017)  
 John R. Raben/Sullivan & Cromwell Fellow Lecture, Yale University Law School (2017)  
 Siemens Lecture, Carl Friedrich von Siemens Foundation, Munich, Germany (2016)  
 Milton Wing Lecture (2 lectures), University of Rochester, NY (2016)  
 Moore Lecture, University of Virginia, Dept. of Environmental Sciences (2016)  
 C.C. Mei Distinguished Speaker Series, Civil and Environmental Engineering, MIT (2015)  
 Hugh Hanson Ecology Seminar Series, University of Arizona, Tempe (2015)  
 The John H. Rassweiler Annual Science Forum on Strategic Techniques and Innovations in Land Preservation  
 and Stewardship, D&R Greenway Land Trust, Princeton, NJ (2014)  
 The Stockholm Seminars: Frontiers in Sustainability, Science and Policy, Sweden (2014)  
 Tyler Prize Laureate Lecture, University of Southern California, Los Angeles (2014)  
 Aisenstadt Chair for the Pan-Canadian Thematic Program on Models and Methods in Ecology, Epidemiology and  
 Public Health Related to Mathematics of Planet Earth 2013, Université de Montréal (3 Lectures)  
 Simons Public Lecture, MPE 2013, Melbourne, Australia (2013)  
 Roland Lamberson Lecture in Ecology, Humboldt State University, Arcata, CA (2011)  
 The David Bradford Seminars in Science, Technology and Environmental Policy, The Program in Science,  
 Technology and Environmental Policy (STEP), Princeton University (2011)  
 The Haldane Lecture, John Innes Centre, Norwich BioScience Institutes, Norwich, UK (2011)  
 Lansdowne Lecturer, University of Victoria, Victoria, British Columbia, Canada (2011)  
 Edward L. Reiss Memorial Lectures in Applied Mathematics (2 lectures), Northwestern University (2010)

Rachel Carson Distinguished Lecture, Center for Systems Integration and Sustainability, Michigan State University (2009)  
Shih-I Pai Lecture, Institute for Physical Science and Technology, University of Maryland (2009)  
Carnegie Capital Science Evening Lecture, Washington, DC (2008)  
Pardee Distinguished Lectures (2 lectures), Boston University (2008)  
Stelson Lecturer (2 lectures), Georgia Institute of Technology, Atlanta, GA (2008)  
Distinguished Lecturer, Distinguished Ecologists Lecture Series, University of Wyoming (2007)  
Distinguished Lecturer, Workshop on the Mathematics of Global Public Health. ASU, Phoenix, AZ (2007)  
Storer Life Sciences Lecturer, University of California, Davis (2006)  
Louis Thaler Lecturer, Université Montpellier II, France (2004)  
Michael Perkins Lecturer, University of Cambridge, UK (2003)  
Okubo Distinguished Scholar Lecturer, State University of New York, Stony Brook (2003)  
Frank G. & Jean M. Chesley Lecturer, Carleton College, Northfield, MN (2002)  
Kaesler Lecturer, University of Wisconsin (2001)  
Okubo Prize Lecturer, Society for Mathematical Biology and Japanese Society for Theoretical Biology (2001)  
Per Brinck Lecturer, Lund University (1999)  
R. Kent Nagle Lecturer, University of South Florida, Tampa (1999)  
The Third Annual Stanislaw Ulam Memorial Lecturer, Santa Fe Institute, Santa Fe, NM (1996)  
Ostrom Lecturer, Washington State University, Pullman (1994)  
Commencement Speaker, Eastern Michigan University (1990)  
MacArthur Lecturer, Ecological Society of American (1989)  
H.J. Oosting Memorial Lecturer, Duke University, Durham, NC (1987)  
Distinguished Ecologist Lecture Series Colorado State University (1987)  
Grace Kimball Memorial Lecturer, Wilkes College, Wilkes-Barre, PA (1986)  
Alexander Professorship Lecturer, Cornell University, Ithaca, NY (1985)  
CBMS Lecturer, Conference on Mathematical Ecology, University of California, Davis (1985)  
Lansdowne Lecturer, University of Victoria, Victoria, British Columbia, Canada (1981)