Stanford



# Giulio De Leo

Professor of Oceans, of Earth System Science and Senior Fellow at the Woods Institute for the Environment

Curriculum Vitae available Online

## Bio

### BIO

I am a theoretical ecologist by training and vocation, and I investigate factors and processes driving the dynamics of natural and harvested populations and in understanding how to use this knowledge to inform practical management.

In recent years, since I moved to Stanford, I have focused my research effort on the resilience of natural or managed ecosystems to natural and anthropogenic stressors, environmental shocks, and climate change. I study resilience from two opposite view points: on the one hand, I study populations that prove to be resilient despite our effort to control or eradicate them, namely parasitic and infectious diseases. On the other hand, I have been working extensively to understand how to increase resilience of (mostly marine) population of commercial or conservation interest to extensive harvesting, environmental shocks, climate change and land use change.

I have been working on a number of theoretical and applied problems ranging from the conservation of the European eel to the sustainable management of the abalone fishery in Baja California in the face of climate change, the biocontrol of schistosomiasis in Western Africa and the relationship between resource exploitation, infectious diseases and poverty traps.

Ten years ago, I launched with Dr. Susanne Sokolow Galin the Stanford Program for Disease Ecology Health and the Environment and last year, I cofounded and co-chair, with Dr. Erin Mordecai (Biology, H&S), the Stanford {/I} Disease Ecology in a Changing World {/I} initiative in the Stanford Doerr School of sustainability and I am a founding member of the Stanford Human and Planetary Health Center. Our ultimate goal is to discover novel ecological solutions that can improve human wellbeing and the health of the environment that underpins it.

### ACADEMIC APPOINTMENTS

- Professor, Oceans
- Professor, Earth System Science
- Professor, Biology
- Senior Fellow, Stanford Woods Institute for the Environment
- Member, Bio-X
- Faculty Affiliate, Institute for Human-Centered Artificial Intelligence (HAI)
- Senior Fellow, Stanford Woods Institute for the Environment

### BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Faculty Fellow, Stanford Center for Innovation in Global Health (2015 - present)

### PROFESSIONAL EDUCATION

- Ph.D., University of Parma & University of Ferrara , Ecology (1993)
- B.E. & M.Sc., Politecnico di Milano , Civil and Environmental Engineering (1989)

### LINKS

- My Lab web site: https://deleolab.stanford.edu/
- Program for Disease Ecology, Health and the Environment: https://ecohealthsolutions.stanford.edu/
- video documentary on our project in Senegal: https://www.biographic.com/protected-by-prawns/
- The Upstream Alliance: http://www.theupstreamalliance.org/
- Collaborative Sustainability Research in Coastal Ecosystems: https://upwelling.stanford.edu/
- web site for k-12 education in ocean acidification: https://kidsandclimate.stanford.edu/

## Research & Scholarship

### CURRENT RESEARCH AND SCHOLARLY INTERESTS

I am a population biologist and my primary research interest is the use of ecological theory, particularly life history-based models, in population dynamics and management. I make use of advanced mathematical and computational techniques to analyse a wide variety of ecological problems ranging from the identification of basic first-principles in the ecology of infectious diseases, to the analysis of costs and benefits of alternative policies for natural resource management in a multi-objective, multi-attribute framework, to the investigation of population dynamics and extinction risk in endangered populations. I dedicated a considerable effort to assess the effect of anthopogenic pressures as well as of ecological and environmental heterogeneities - including temperature, oxygen and pH anomalies - on population dynamics and management of marine resources and to estimate key parameters that may be incorporated into population models useful for decision-making. I have been working for more than two decades on the demography and management of the European eel (A. anguilla) and, more recently, the conservation of marble trout (S. marmoratus), the optimal bioeconomic management of mollusc farming, the problem of algal bloom control in Adriatic coastal lagoons and the development of Rapid Assessment Methods to assess the status of coastal lagoons. I am currently investigating how the interaction between networks of Marine Protected Areas and different schemes of fishery management might impact the resilience, productivity and persistence of the abalone fisheries in Baja California, Mexico under alternative scenarios of climate change, including increase frequency and intensity of low oxygen, low pH and variable temperature.

I recently started to work on the bio-control of schistosomiasis in Senegal with dr. Sanna Sokolow and I keep working with Luca Bolzoni on the optimal control of infectious diseases in the wildlife and in farmed animals.

My interest for pursuing solutions for a more sustainable world brought me to take a non-academic, governmental job from 2001 to 2004 as director of the Program for Technological Innovation and Sustainable Development for the Environmental Protection Agency of the Lombardy region (Italy), where I developed agreements with business and industrial associations to foster the adoption of environmental management schemes and to improve corporate environmental performances.

I am currently associated editor of Ecology Letters and reviewers for several ecological journals. From 1999 to 2005 I was president of the Italian Association of Environmental Engineering (AIAT), member of the administration board of WWF Italy (2005-2007) and, from 2007 to 2012, chair of the Ethics and Sustainability Committee of Eurizon Capital, the investment management company of Intesa SanPaolo, the first Italian Bank. In the effort to increase awareness about the threats imposed by climate change and to foster actions to curb emissions, increase energy efficiency and saving, I wrote a book “Energia e Salute della Terra” (Energy and Planet Health, Fondazione Boroli publisher) that was distributed to 40 thousands students in high schools and colleges in Italy.

I hold a BE in Civil Engineering and a MS in Environmental Engineering from Politecnico di Milano (1989, Italy), a PhD in Applied Ecology from the Universities of Ferrara and Parma (1993, Italy) a three years research experience at Princeton University (1994-1996) and three more years (1996-1998) back to Politecnico di Milano . After more than a decade at the University of Parma, in 2012 I happily moved to Stanford as full time faculty.

## Teaching

### COURSES

**2026-27**

- Get to Know Your Oceans: OCEANS 300A (Aut)
- Get to Know Your Oceans: OCEANS 300B (Win)
- Get to Know Your Oceans: OCEANS 300C (Spr)
- Human and Planetary Health: MED 103, PUBLPOL 183, SOC 103, SUSTAIN 103 (Aut)
- Managing Your PhD: OCEANS 301 (Aut)
- Ocean Solutions: Science, Policy, and Community-Engaged Learning: OCEANS 123H, OCEANS 223H (Spr)
- Quals Prep Workshop: OCEANS 304 (Win)
- Quals Prep Writing Workshop: OCEANS 303 (Aut)
- Quantitative Methods for Marine Ecology and Conservation: BIO 143H, BIO 243H, CEE 164H, CEE 264H, EARTHSYS 143H, EARTHSYS 243H, OCEANS 143H, OCEANS 243H (Win)
- Scientific Communications: An Introduction: OCEANS 305 (Spr)

**2025-26**

- Catalyzing Solutions for a Sustainable Ocean: Learning with Local Communities: BIO 123, OCEANS 123H, OCEANS 223H (Spr)
- Get to Know Your Oceans: OCEANS 300A (Aut)
- Get to Know Your Oceans: OCEANS 300B (Win)
- Get to Know Your Oceans: OCEANS 300C (Spr)
- Human and Planetary Health: MED 103, PUBLPOL 183, SOC 103, SUSTAIN 103 (Aut)
- Managing Your PhD: OCEANS 301 (Aut)
- Quals Prep Workshop: OCEANS 304 (Win)
- Quantitative Methods for Marine Ecology and Conservation: BIO 143H, BIO 243H, CEE 164H, CEE 264H, EARTHSYS 143H, EARTHSYS 243H, OCEANS 143H, OCEANS 243H (Win)
- Scientific Communications: An Introduction: OCEANS 305 (Spr)

**2024-25**

- Catalyzing Solutions for a Sustainable Ocean: Learning with Local Communities: BIO 123, OCEANS 123H, OCEANS 223H (Spr)
- Get to Know Your Oceans: OCEANS 300A (Aut)
- Get to Know Your Oceans: OCEANS 300B (Win)
- Get to Know Your Oceans: OCEANS 300C (Spr)
- Human and Planetary Health: MED 103, PUBLPOL 183, SOC 103, SUSTAIN 103 (Aut)
- Managing Your PhD: OCEANS 301 (Aut)
- Quals Prep Workshop: OCEANS 304 (Win)
- Scientific Communications: An Introduction: OCEANS 305 (Spr)

**2023-24**

- Catalyzing Solutions for a Sustainable Ocean: Learning with Local Communities: BIO 123, OCEANS 123H, OCEANS 223H (Spr)

- Get to Know Your Oceans: OCEANS 300A (Aut)
- Get to Know Your Oceans: OCEANS 300B (Win)
- Human and Planetary Health: MED 103, PUBLPOL 183, SOC 103, SUSTAIN 103 (Aut)
- Managing Your PhD: OCEANS 301 (Aut)
- Quantitative Methods for Marine Ecology and Conservation: BIO 143, BIO 243, CEE 164, CEE 264H, EARTHSYS 143H, OCEANS 143 (Win)
- Scientific Communications: An Introduction: OCEANS 305 (Spr)

### STANFORD ADVISEES

**Doctoral Dissertation Reader (AC)**

Sabrina Daley, Camille Effler, Hope Leng, Desire Nalukwago, Chinmay Sonawane

**Postdoctoral Faculty Sponsor**

Ari Freedman, Christopher Knight, Aly Singleton

**Doctoral Dissertation Advisor (AC)**

Joy Kumagai, Poppy Tobin

**Doctoral (Program)**

Ao Yu

### GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Biology (School of Humanities and Sciences) (PhD Program)

## Publications

### PUBLICATIONS

- **A Deep Learning Approach for High-Resolution Canopy Height Mapping in Indonesian Borneo by Fusing Multi-Source Remote Sensing Data** *REMOTE SENSING*
  Chamberlin, A. J., Liu, Z., Cross, C. G. L., Pourtois, J., Siregar, I., Nurrochmat, D., Setiawan, Y., Webb, K., Hopkins, S. R., Sokolow, S. H., De Leo, G. A.
  2025; 17 (21)
- **Stocking African catfish in Lake Victoria provides effective biocontrol of snail vectors of Schistosoma mansoni.** *PLoS neglected tropical diseases*
  Proud, R., Allan, F., Whiston, A., Kayanda, R., Kinung'hi, S., Angelo, T., Sylivester, Y. D., Mrosso, H. D., Kashindye, B. B., Elison, M., Cox, M. J., Yang, Y., Chamberlin, et al
  2025; 19 (9): e0013490
- **Schistosomiasis and water resources development in Africa: A scoping review and multi-case evaluation of associated snail control.** *PLoS neglected tropical diseases*
  Sule, M. N., El Lahham, I., Munkombwe, M. N., Nasike, P., Gouvras, A., Rollinson, D., Mbaziira, R., Kanshio, C., De Leo, G. A.
  2025; 19 (6): e0013180
- **New Pseudomonas infections drive Pf phage transmission in CF airways.** *JCI insight*
  Pourtois, J. D., Haddock, N. L., Gupta, A., Khosravi, A., Martinez, H. A., Schmidt, A. K., Prakash, P. S., Jain, R., Fleming, P., Chang, T. H., Milla, C., Secor, P. R., De Leo, et al
  2025
- **Modeling of wind-driven circulation of schistosome larvae in a vegetated side pond** *ENVIRONMENTAL FLUID MECHANICS*
  Pauken, B. J., Chamberlin, A. J., Wood, C. L., Fringer, O. B., De Leo, G. A.
  2025; 25 (2)
- **Reef shark population declines on remote Pacific reefs: inferences from multiple methods in a data-limited fishery** *MARINE ECOLOGY PROGRESS SERIES*

Goodman, M. C., White, T. D., Kazdan, J. L., Bradley, D., Shivji, M., Casagrandi, R., Mari, L., Gatto, M., Eurich, J. G., Mccauley, D. J., O'Connor, R. J., De Leo, G. A., Micheli, et al

2024; 751: 97-114

- **Marine Protected Areas That Preserve Trophic Cascades Promote Resilience of Kelp Forests to Marine Heatwaves.** *Global change biology*

  Kumagai, J. A., Goodman, M. C., Villaseñor-Derbez, J. C., Schoeman, D. S., Cavanuagh, K. C., Bell, T. W., Micheli, F., De Leo, G., Arafeh-Dalmau, N.

  2024; 30 (12): e17620

- **Mapping schistosomiasis risk landscapes and implications for disease control: A case study for low endemic areas in the Middle Paranapanema river basin, São Paulo, Brazil.** *PLoS neglected tropical diseases*

  Ferreira da Silva, V. A., Kampel, M., Silva Dos Anjos, R., Gardini Sanches Palasio, R., Escada, M. I., Tuan, R., Singleton, A., Glidden, C. K., Chamberlin, A., De Leo, G. A., Pinter Dos Santos, A., Vieira Monteiro, A. M.

  2024; 18 (11): e0012582

- **Climate and urbanization drive changes in the habitat suitability of Schistosoma mansoni competent snails in Brazil.** *Nature communications*

  Glidden, C. K., Singleton, A. L., Chamberlin, A., Tuan, R., Palasio, R. G., Caldeira, R. L., Monteiro, A. M., Lwiza, K. M., Liu, P., Silva, V., Athni, T. S., Sokolow, S. H., Mordecai, et al

  2024; 15 (1): 4838

- **Re-assessing thermal response of schistosomiasis transmission risk: Evidence for a higher thermal optimum than previously predicted.** *PLoS neglected tropical diseases*

  Aslan, I. H., Pourtois, J. D., Chamberlin, A. J., Mitchell, K. R., Mari, L., Lwiza, K. M., Wood, C. L., Mordecai, E. A., Yu, A., Tuan, R., Palasio, R. G., Monteiro, A. M., Kirk, et al

  2024; 18 (6): e0011836

- **Social-ecological vulnerability to environmental extremes and adaptation pathways in small-scale fisheries of the southern California Current** *FRONTIERS IN MARINE SCIENCE*

  Micheli, F., Saenz-Arroyo, A., Aalto, E., Beas-Luna, R., Boch, C. A., Cardenas, J., De Leo, G. A., Diaz, E., Espinoza-Montes, A., Finkbeiner, E., Freiwald, J., Fulton, S., Hernandez, et al

  2024; 11

- **A planetary health innovation for disease, food and water challenges in Africa.** *Nature*

  Rohr, J. R., Sack, A., Bakhoum, S., Barrett, C. B., Lopez-Carr, D., Chamberlin, A. J., Civitello, D. J., Diatta, C., Doruska, M. J., De Leo, G. A., Haggerty, C. J., Jones, I. J., Jouanard, et al

  2023

- **Reframing Optimal Control Problems for Infectious Disease Management in Low-Income Countries.** *Bulletin of mathematical biology*

  Igoe, M., Casagrandi, R., Gatto, M., Hoover, C. M., Mari, L., Ngonghala, C. N., Remais, J. V., Sanchirico, J. N., Sokolow, S. H., Lenhart, S., de Leo, G.

  2023; 85 (4): 31

- **Climatic, land-use and socio-economic factors can predict malaria dynamics at fine spatial scales relevant to local health actors: Evidence from rural Madagascar.** *PLOS global public health*

  Pourtois, J. D., Tallam, K., Jones, I., Hyde, E., Chamberlin, A. J., Evans, M. V., Ihantamalala, F. A., Cordier, L. F., Razafinjato, B. R., Rakotonanahary, R. J., Tsirinomen'ny Aina, A., Soloniaina, P., Raholiarimanana, et al

  2023; 3 (2): e0001607

- **Modeling the efficacy of CRISPR gene drive for snail immunity on schistosomiasis control.** *PLoS neglected tropical diseases*

  Grewelle, R. E., Perez-Saez, J., Tycko, J., Namigai, E. K., Rickards, C. G., De Leo, G. A.

  2022; 16 (10): e0010894

- **Shifting fish distributions impact predation intensity in a sub-Arctic ecosystem** *ECOGRAPHY*

  Goodman, M. C., Carroll, G., Brodie, S., Gruss, A., Thorson, J. T., Kotwicki, S., Holsman, K., Selden, R. L., Hazen, E. L., De Leo, G. A.

  2022

- **Modelling the effect of habitat and fishing heterogeneity on the performance of a Total Allowable Catch-regulated fishery** *ICES JOURNAL OF MARINE SCIENCE*

  Pourtois, J. D., Provost, M. M., Micheli, F., De Leo, G. A.

  2022

- **Rapid recovery of depleted abalone in Isla Natividad, Baja California, Mexico** *ECOSPHERE*
  Smith, A., Aguilar, J., Boch, C., De Leo, G., Hernandez-Velasco, A., Houck, S., Martinez, R., Monismith, S., Torre, J., Woodson, C., Micheli, F.
  2022; 13 (3)

- **Concomitant Immunity and Worm Senescence May Drive Schistosomiasis Epidemiological Patterns: An Eco-Evolutionary Perspective.** *Frontiers in immunology*
  Buck, J. C., De Leo, G. A., Sokolow, S. H.
  2020; 11: 160

- **Development, environmental degradation, and disease spread in the Brazilian Amazon.** *PLoS biology*
  Castro, M. C., Baeza, A., Codeco, C. T., Cucunuba, Z. M., Dal'Asta, A. P., De Leo, G. A., Dobson, A. P., Carrasco-Escobar, G., Lana, R. M., Lowe, R., Monteiro, A. M., Pascual, M., Santos-Vega, et al
  2019; 17 (11): e3000526

- **Precision mapping of snail habitat provides a powerful indicator of human schistosomiasis transmission.** *Proceedings of the National Academy of Sciences of the United States of America*
  Wood, C. L., Sokolow, S. H., Jones, I. J., Chamberlin, A. J., Lafferty, K. D., Kuris, A. M., Jocque, M., Hopkins, S., Adams, G., Buck, J. C., Lund, A. J., Garcia-Vedrenne, A. E., Fiorenza, et al
  2019

- **Ecological interventions to prevent and manage zoonotic pathogen spillover.** *Philosophical transactions of the Royal Society of London. Series B, Biological sciences*
  Sokolow, S. H., Nova, N., Pepin, K. M., Peel, A. J., Pulliam, J. R., Manlove, K., Cross, P. C., Becker, D. J., Plowright, R. K., McCallum, H., De Leo, G. A.
  2019; 374 (1782): 20180342

- **Unavoidable Risks: Local Perspectives on Water Contact Behavior and Implications for Schistosomiasis Control in an Agricultural Region of Northern Senegal.** *The American journal of tropical medicine and hygiene*
  Lund, A. J., Sam, M. M., Sy, A. B., Sow, O. W., Ali, S., Sokolow, S. H., Merrell, S. B., Bruce, J., Jouanard, N., Senghor, S., Riveau, G., Lopez-Carr, D., De Leo, et al
  2019

- **Modelled effects of prawn aquaculture on poverty alleviation and schistosomiasis control** *NATURE SUSTAINABILITY*
  Hoover, C. M., Sokolow, S. H., Kemp, J., Sanchirico, J. N., Lund, A. J., Jones, I. J., Higginson, T., Riveau, G., Savaya, A., Coyle, S., Wood, C. L., Micheli, F., Casagrandi, et al
  2019; 2 (7): 611–20

- **Gene drives for schistosomiasis transmission control.** *PLoS neglected tropical diseases*
  Maier, T. n., Wheeler, N. J., Namigai, E. K., Tycko, J. n., Grewelle, R. E., Woldeamanuel, Y. n., Klohe, K. n., Perez-Saez, J. n., Sokolow, S. H., De Leo, G. A., Yoshino, T. P., Zamanian, M. n., Reinhard-Rupp, et al
  2019; 13 (12): e0007833

- **THE ROLE OF IRRIGATED AGRICULTURE IN SCHISTOSOMIASIS RISK IN A DAMMED LANDSCAPE IN WEST AFRICA**
  Lund, A., Rehkopf, D., Sokolow, S., Jouanard, N., Sam, M., Fall, A., Riveau, G., Andrews, J., De Leo, G., Lopez-Carr, D.
  AMER SOC TROP MED & HYGIENE.2019: 11

- **Potential Biological Control of Schistosomiasis by Fishes in the Lower Senegal River Basin.** *The American journal of tropical medicine and hygiene*
  Arostegui, M. C., Wood, C. L., Jones, I. J., Chamberlin, A., Jouanard, N., Faye, D. S., Kuris, A. M., Riveau, G., De Leo, G. A., Sokolow, S. H.
  2018

- **Estimating the elimination feasibility in the 'end game' of control efforts for parasites subjected to regular mass drug administration: Methods and their application to schistosomiasis.** *PLoS neglected tropical diseases*
  Arakala, A., Hoover, C. M., Marshall, J. M., Sokolow, S. H., De Leo, G. A., Rohr, J. R., Remais, J. V., Gambhir, M.
  2018; 12 (11): e0006794

- **Agrochemicals increase risk of human schistosomiasis by supporting higher densities of intermediate hosts** *NATURE COMMUNICATIONS*
  Halstead, N. T., Hoover, C. M., Arakala, A., Civitello, D. J., De Leo, G. A., Gambhir, M., Johnson, S. A., Jouanard, N., Loerns, K. A., McMahon, T. A., Ndione, R. A., Nguyen, K., Raffel, et al
  2018; 9: 837

- **To Reduce the Global Burden of Human Schistosomiasis, Use 'Old Fashioned' Snail Control** *TRENDS IN PARASITOLOGY*
  Sokolow, S. H., Wood, C. L., Jones, I. J., Lafferty, K. D., Kuris, A. M., Hsieh, M. H., De Leo, G. A.
  2018; 34 (1): 23–40

- **Ecological control of schistosomiasis in Sub-Saharan Africa: restoration of predator-prey dynamics to reduce transmission** *ECOLOGY AND EVOLUTION OF INFECTIOUS DISEASES: PATHOGEN CONTROL AND PUBLIC HEALTH MANAGEMENT IN LOW-INCOME COUNTRIES*
  Jones, I., Lund, A., Riveau, G., Jouanard, N., Ndione, R. A., Sokolow, S. H., De Leo, G. A.
  edited by Roche, B., Broutin, H., Simard, F.
  2018: 236–51

- **AN ECO-EVOLUTIONARY PERSPECTIVE ON SCHISTOSOMIASIS**
  Buck, J., De Leo, G., Rosental, B., Sokolow, S.
  AMER SOC TROP MED & HYGIENE.2018: 418

- **LOCAL PERCEPTIONS OF SEASONALITY AND REPORTED WATER CONTACT BEHAVIOR IN THE SAHEL: IMPLICATIONS FOR SCHISTOSOMIASIS TRANSMISSION**
  Lund, A., Sow, O., Sokolow, S., Chamberlin, A., Jones, I., Jouanard, N., Riveau, G., Lopez-Carr, D., De Leo, G.
  AMER SOC TROP MED & HYGIENE.2018: 418–19

- **COMPUTER VISION AND MACHINE LEARNING ENABLE ENVIRONMENTAL DIAGNOSTICS FOR TARGETING SCHISTOSOMIASIS CONTROL**
  Sokolow, S., Liu, Z., Chamberlin, A., Le Boa, C., Wood, C., Jones, I., Grewelle, R., De Leo, G.
  AMER SOC TROP MED & HYGIENE.2018: 418

- **The spatial spread of schistosomiasis: A multidimensional network model applied to Saint-Louis region, Senegal** *ADVANCES IN WATER RESOURCES*
  Ciddio, M., Mari, L., Sokolow, S. H., De Leo, G. A., Casagrandi, R., Gatto, M.
  2017; 108: 406–15

- **General ecological models for human subsistence, health and poverty** *NATURE ECOLOGY & EVOLUTION*
  Ngonghala, C. N., De Leo, G. A., Pascual, M. M., Keenan, D. C., Dobson, A. P., Bonds, M. H.
  2017; 1 (8): 1153–59

- **Nearly 400 million people are at higher risk of schistosomiasis because dams block the migration of snail-eating river prawns** *PHILOSOPHICAL TRANSACTIONS OF THE ROYAL SOCIETY B-BIOLOGICAL SCIENCES*
  Sokolow, S. H., Jones, I. J., Jocque, M., La, D., Cords, O., Knight, A., Lund, A., Wood, C. L., Lafferty, K. D., Hoover, C. M., Collender, P. A., Remais, J. V., Lopez-Carr, et al
  2017; 372 (1722)

- **Disease ecology, health and the environment: a framework to account for ecological and socio-economic drivers in the control of neglected tropical diseases** *PHILOSOPHICAL TRANSACTIONS OF THE ROYAL SOCIETY B-BIOLOGICAL SCIENCES*
  Garchitorena, A., Sokolow, S. H., Roche, B., Ngonghala, C. N., Jocque, M., Lund, A., Barry, M., MORDECAI, E. A., Daily, G. C., Jones, J. H., Andrews, J. R., Bendavid, E., Luby, et al
  2017; 372 (1722)

- **Big-data-driven modeling unveils country-wide drivers of endemic schistosomiasis** *SCIENTIFIC REPORTS*
  Mari, L., Gatto, M., Ciddio, M., Dia, E. D., Sokolow, S. H., De Leo, G. A., Casagrandi, R.
  2017; 7

- **The Potential Role of Direct and Indirect Contacts on Infection Spread in Dairy Farm Networks.** *PLoS computational biology*
  Rossi, G., De Leo, G. A., Pongolini, S., Natalini, S., Zarenghi, L., Ricchi, M., Bolzoni, L.
  2017; 13 (1)

- **Global Assessment of Schistosomiasis Control Over the Past Century Shows Targeting the Snail Intermediate Host Works Best.** *PLoS neglected tropical diseases*
  Sokolow, S. H., Wood, C. L., Jones, I. J., Swartz, S. J., Lopez, M., Hsieh, M. H., Lafferty, K. D., Kuris, A. M., Rickards, C., De Leo, G. A.
  2016; 10 (7)

- **Infection with schistosome parasites in snails leads to increased predation by prawns: implications for human schistosomiasis control** *JOURNAL OF EXPERIMENTAL BIOLOGY*
  Swartz, S. J., De Leo, G. A., Wood, C. L., Sokolow, S. H.

2015; 218 (24): 3962-3967

- **Reconciling predator conservation with public safety** *FRONTIERS IN ECOLOGY AND THE ENVIRONMENT*
  Ferretti, F., Jorgensen, S., Chapple, T. K., De Leo, G., Micheli, F.
  2015; 13 (8): 412-417

- **A Theoretical Analysis of the Geography of Schistosomiasis in Burkina Faso Highlights the Roles of Human Mobility and Water Resources Development in Disease Transmission** *PLOS NEGLECTED TROPICAL DISEASES*
  Perez-Saez, J., Mari, L., Bertuzzo, E., Casagrandi, R., Sokolow, S. H., De Leo, G. A., Mande, T., Ceperley, N., Froehlich, J., Sou, M., Karambiri, H., Yacouba, H., Maiga, et al
  2015; 9 (10)

- **ECOLOGICAL THEORY. A general consumer-resource population model.** *Science*
  Lafferty, K. D., DeLeo, G., Briggs, C. J., Dobson, A. P., Gross, T., Kuris, A. M.
  2015; 349 (6250): 854-857

- **A general consumer-resource population model** *SCIENCE*
  Lafferty, K. D., DeLeo, G., Briggs, C. J., Dobson, A. P., Gross, T., Kuris, A. M.
  2015; 349 (6250): 854-857

- **Epidemiological modelling for the assessment of bovine tuberculosis surveillance in the dairy farm network in Emilia-Romagna (Italy)** *EPIDEMICS*
  Rossi, G., De Leo, G. A., Pongolini, S., Natalini, S., Vincenzi, S., Bolzoni, L.
  2015; 11: 62-70

- **React or wait: which optimal culling strategy to control infectious diseases in wildlife** *JOURNAL OF MATHEMATICAL BIOLOGY*
  Bolzoni, L., Tessoni, V., Groppi, M., De Leo, G. A.
  2014; 69 (4): 1001-1025

- **Does biodiversity protect humans against infectious disease?** *ECOLOGY*
  Wood, C. L., Lafferty, K. D., DeLeo, G., Young, H. S., Hudson, P. J., Kuris, A. M.
  2014; 95 (4): 817-832

- **Long-term change and seasonal spillover risks of fatal acanthocephalan infection in southern sea otters** *ECOSPHERE*
  Grewelle, R. E., Young, C., Gibble, C., Greenwald, K., Henkel, L., De Leo, G. A., Miller, M.
  2025; 16 (8)

- **Estimating the infection fatality rate of emerging diseases using a regression approach applied to global COVID-19 cases.** *Journal of infection and public health*
  Grewelle, R. E., De Leo, G. A.
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