

David Talmy
Assistant Professor
Department of Microbiology, University of Tennessee
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Education

- 2009-2013 **PhD Environmental Science**
School of Biological Sciences, University of Essex
- 2008-2009 **MRes Mathematics in the Living Environment (with Distinction)**
Departments of Biology and Mathematics, University of York
- 2004-2008 **MMath Mathematics**
School of Mathematical and Physical Sciences, University of Sussex

Professional Experience

- 2018-present **Assistant Professor**
Department of Microbiology and the National Institute of Mathematical and Biological Synthesis (NIMBioS), University of Tennessee
- 2020-present **Adjunct Assistant Professor**
Department of Ecology and Evolutionary Biology, University of Tennessee
- 2016-2018 **Research Scientist**
Department of Earth, Atmospheric and Planetary Sciences, Massachusetts Institute of Technology
- 2013-2016 **Postdoctoral Associate**
Department of Earth, Atmospheric and Planetary Sciences, Massachusetts Institute of Technology
- 2010-2013 **Graduate Research Assistant**
Plymouth Marine Laboratory

Research Interests

Global marine ecosystem structure and function, marine biogeochemistry, predator-prey interactions, microbial physiology and metabolism.

Peer reviewed publications

Boldened names indicate people in my research group

1. **Talmy, D., Carr, E., Rajakaruna, H.,** Våge, S., Omta, A.W. Killing the predator: impacts of top-predator mortality on global ocean ecosystem structure. *Biogeosciences Discussions*. 1-29.
2. Gross, L.J., McCord, R.P., LoRe, S., Ganusov, V.V., Hong, T., Strickland, C., **Talmy, D.**, von Arnim, A.G., Wiggins, G. Prioritization of the concepts and skills in

- quantitative education for graduate students in biomedical science (2023). *PLOS ONE* 18, e02849821.
3. Omta, A.W., Heiny, E.A., **Rajakaruna, H., Talmy, D.**, Follows, M.J., Trophic model closure influences ecosystem response to enrichment (2023). *Ecological Modeling*, 475, 110183.
 4. **Hinson, A., Papoulis, S., Fiet, L., Knight, M., Cho, P., Szeltner, B.**, Sgouralis, I., **Talmy, D.** A model of algal-virus population dynamics reveals underlying controls on material transfer. (2023). *Limnology and Oceanography*, 68, 165-180.
 5. **Talmy, D.**, Life, death, and cyanobacteria biogeography (2022) *Nature Microbiology, News and Views*, 7, 480-481.
 6. **Rajakaruna, H., Carr, E.**, Omta, A.W., **Talmy, D.**, Linear scaling between microbial predator and prey densities in the global ocean (2022). *Environmental Microbiology*. 25, 306-314.
 7. Garcia, N.S., **Talmy, D.**, Fu, W., Larkin, A.A., Lee, J., Martiny, A. The diel cycle of surface ocean elemental stoichiometry has implications for ocean productivity. (2022). *Global Biogeochemical Cycles*, 36, e2021GB007092.
 8. Martiny, A.C., Hagstrom, G.I., DeVries, T., Letscher, R.T., Britten, G.L., Garcia, C.A., Galbraith, E., Karl, D., Levin, S.A., Lomas, M.W., Moreno, A.R., **Talmy, D.**, Wang, W., Matsumoto, K. (2022). Marine phytoplankton resilience may moderate oligotrophic ecosystem responses and biogeochemical feedbacks to climate change. *Limnology and Oceanography*, 67, S378-S389.
 9. Cael, B. B., Bisson, K., Conte, M., Duret, M. T., Follett, C. L., Henson, S.A., Honda, M.C., Iversen, M.H., Karl, D.M., Lampitt, R.S., Mouw, C.B., Muller-Karger, F., Pebody, C.A., Smith, K.L., **Talmy, D.** (2021). Open ocean particle flux variability from surface to seafloor. *Geophysical Research Letters*, 48, 1-10.
 10. **Papoulis, S.E.**, Wilhelm, S.W., **Talmy, D.***, Zinser, E.R.* (2021). Nutrient loading and viral memory drive accumulation of restriction modification systems in bloom-forming cyanobacteria. *mBio*, 12, e00873-21.
*co-corresponding authors.
 11. Omta, A.W., **Talmy, D.**, Sher, D., Finkel, Z.V., Irwin, A.J., Inomura, K., Follows, M.J. (2020). Quantifying nutrient throughput and DOM production by algae in continuous culture. *Journal of Theoretical Biology*, 494, 110214.
 12. Pound, H.L., Gann, E.R., Tang, X., Krausfeldt, L. E., Huff, M., Staton, M. E., **Talmy, D.**, Wilhelm, S.W. (2020). The “neglected viruses” of *Taihu*: Abundant transcripts for viruses infecting eukaryotes and their potential role in phytoplankton succession. *Frontiers in Microbiology*, 11, 338.
 13. Inomura, K., Omta, A.W., **Talmy, D.**, Bragg, J., Deutsch, C., Follows, M.J. (2020). Elemental composition and growth rate of phytoplankton governed by macromolecular allocation. *Frontiers in Microbiology*, 11, 86.

14. **Talmy, D.**, Beckett, S.J., Taniguchi, D.A.A., Weitz, J., Follows, M.J. (2019). An empirical model of carbon transfer through marine viruses and microzooplankton grazers. *Environmental Microbiology*, 21, 2171-2181.
15. Nissimov, J.I., **Talmy, D.**, Haramaty, L., Fredricks, H., Zelzion, U., Eren, M., Gardella, R., Laber, C., More, K.D., Bhattacharya, D., Follows, M.J., Coolen, M.J.L., Van Mooy, B.A.S., Bidle, K.D. (2019). Biochemical diversity of sphingolipid biosynthesis as a driver of algal-virus competitive ecology. *Environmental Microbiology*. 21, 2182-2197.
16. **Talmy, D.**, Beckett, S.J., Taniguchi, D.A.A., Weitz, J., Follows, M.J. (2019). Contrasting controls on microzooplankton grazing and viral infection of microbial prey. *Frontiers in Marine Science*. 6, 182.
17. Thamatrakoln, K., Talmy, D., Haramaty, L., Maniscalco, C., Latham, J., Natale, F., Coolen, M.J.L., Follows, M.J., Bidle, K.D. (2018). Light-dependent regulation of coccolithophore host-virus interactions. *New Phytologist*. 221, 1289-1302.
18. Omta, A.W., Talmy, D., Sher, D., Finkel, Z.V., Irwin, A.J., Follows, M.J. (2017). Extracting phytoplankton physiological traits from batch and chemostat culture data. *Limnology and Oceanography: Methods*, 15, 453-466.
19. Record, N.R., Talmy, D., Våge, S. (2016). Quantifying tradeoffs for marine viruses. *Frontiers in Marine Science*, 3, 251.
20. Li, G., Talmy, D., Campbell, D.A. (2016). Diatom responses to photoperiod and light are predictable from diel reductant generation. *Journal of Phycology*, 53, 95-107.
21. Lopez, J.S., Garcia, N.S., Talmy, D., Martiny, A.C. (2016). Diel variability in the elemental composition of the marine cyanobacterium *Synechococcus*. *Journal of Plankton Research*, 38, 1052-1061.
22. Talmy, D., Martiny, A.C., Hill, C.N., Hickman, A.E., Follows, M.J. (2016). Microzooplankton regulation of surface ocean POC:PON ratios. *Global Biogeochemical Cycles*, 30, 311-332.
23. Talmy, D., Blackford, J., Hardman-Mountford, N., Polimene, L. Follows, M.J. Geider, R.J., (2014). Flexible C:N ratio enhances metabolism of large phytoplankton when resource supply is intermittent. *Biogeosciences*, 11, 601-602.
24. Talmy, D., Blackford, J., Hardman-Mountford, N., Dumbrell, A.J., Geider, R.J., (2013). An optimality model of phytoplankton photoadaptation in contrasting aquatic light regimes. *Limnology and Oceanography*, 58, 1802-1818.

Non peer reviewed publications

1. Microbes in Models: Integrating microbes into Earth System Models for understanding climate change: Report on an American Academy of Microbiology

virtual colloquium held on Dec. 6 and 8, 2022. Washington (DC): American Society for Microbiology, 2023.

Invited talks

Talmy, D. Modeling microbial host-virus interactions: from laboratory to global ocean. University of Bergen, Norway, June 15th, 2022 Host: *Dr. Selina Våge*.

Talmy, D. A model of algal-virus population dynamics reveals underlying controls on material transfer. Green Ocean workshop, 18th May 2022, Ecole Normale Supérieure, Paris, France. Host: *Prof. Corinne Le Quéré*.

Talmy, D. Nutrient enrichment and predation defense drive cyanobacteria population dynamics. University of Waterloo, USA March 11th, 2022 Host: *Prof. Jozef Nissimov*.

Talmy, D. Trade-offs between resource acquisition and defense shape cyanobacteria communities. University of Southern California, USA, October 13th, 2020 Host: *Prof. Naomi Levine*.

Talmy, D. Trade-offs modify ecosystem biomass structure along trophic gradients. SIMPLEX project kick-off meeting. University of Bergen, Norway, August 22nd, 2019 Host: *Prof. Selina Våge*.

Talmy, D. Inferring phytoplankton host-virus traits and trade-offs from laboratory population dynamics. Weizmann Institute of Science, Rehovot, Israel, August 14th, 2019. Host: *Prof. Assaf Vardi*.

Talmy, D. Understanding microbial ecosystem structure and function on large scales using mathematical models. American Society for Microbiology Annual Meeting, San Francisco, California, USA, June 21st 2019. Host: *Prof. Alison Buchan*.

Talmy, D. Trait-based modeling of viruses in global ocean microbial ecosystems. Gordon Research Conference: Elucidating microbial processes across spatial and temporal scales. Lucca, Italy, July 5th, 2018. Host: *Prof. Kay Bidle*.

Talmy, D. What controls virus dynamics in global ocean microbial ecosystems? University of Texas, Austin, USA, March 23rd, 2018. Host: *Prof. Patrick Heimbach*.

Talmy, D. What controls microbial predator-prey ratios in the global ocean? Lamont-Doherty Earth Observatory, Columbia University, New York, USA, October 2nd, 2017. Host: *Prof. Andrew Juhl*.

Talmy, D., Martiny, A.C., Hickman, A.E., Follows, M.J. Microzooplankton regulation of particulate organic matter elemental composition. Bigelow Laboratory for Ocean Sciences, Maine, USA, March 9th, 2016. Host: *Dr. Nicolas Record*.

Talmy, D., Martiny, A.C., Hickman, A.E., Hill, C.N., Follows, M.J. Microzooplankton regulation of surface ocean POC:PON ratios. Rutgers University, New Jersey, USA, December 15th, 2015. Host: *Prof. Jozef Nissimov*.

Talmy, D., Martiny, A.C., Hickman, A.E., Follows, M.J. Zooplankton regulation of particulate organic matter elemental composition. National Oceanography Center, Southampton, UK, November 10th, 2015. Host: *Dr. Anna Hickman*.

Selected Oral Presentations

Boldened names indicate people in my research group

Carr, E., Rajakaruna, H., Vage, S., Omta, A.W., **Talmy, D.** Killing the predator: impacts of top-predator mortality on global ocean ecosystem structure. Aquatic Sciences Meeting, Palma de Mallorca, Spain, June 9th 2023.

McCullough, D.K., Calfee, B., Zinser, E.R., **Talmy, D.** Modeling the intersection of nutrient limitation and hydrogen peroxide on surface microbial communities. Aquatic Sciences Meeting, Palma de Mallorca, Spain, June 5th 2023.

Papoulis, S.E., Wilhelm, S.W., **Talmy, D.,** Zinser, E.R. Nutrient enrichment and predation defense drive cyanobacteria population dynamics. Ocean Sciences Meeting, Virtual, March 3rd, 2022.

Rajakaruna, H., Omta, A.W., **Carr, E.,** Talmy, D. The power-law biomass scaling relationship in natural microbial ecosystems. Ocean Sciences Meeting, Virtual, March 4th 2022.

Talmy, D., Vage, S., Cael, B.B., Follows, M.J. Trade-offs modify ecosystem biomass structure along trophic gradients. 4th workshop on trait-based approaches to ocean life, Buckinghamshire, UK, Aug 18th, 2019.

Showalter, G.M., Talmy, D., Deming, J.W. Modeling virus-host dynamics in sea ice brines. International Symposium on Sea Ice, Winnipeg, Manitoba, Canada, August 17-21st, 2019.

Hinson, A., Talmy, D. What controls algal-virus population dynamics in diverse systems? Aquatic Sciences Meeting, San Juan, Puerto Rico, Feb 26th, 2019.

Talmy, D., Bidle, K.D., Kranzler, C., Thamatrakoln, K. Inferring nutrient and light sensitivity of phytoplankton host-virus metabolism from laboratory population dynamics. 9th Aquatic Virus Workshop, Lincoln, Nebraska, USA, June 20th, 2018.

Talmy, D., Zakem, E., Follows, M.J. Modeling competitive interactions among viruses and microzooplankton grazers in the global ocean. Ocean Sciences Meeting, Portland, Oregon, USA, February 15th, 2018.

Talmy, D., Follett, C.L., Follows, M.J. Does viral lysis influence dissolved organic matter elemental composition? Aquatic Sciences Meeting, Honolulu, Hawaii, USA, February 28th, 2017.

Talmy, D., Thamatrakoln, K., Bidle, K.D., Follows, M.J. How does viral infection of *Emiliana huxleyi* depend on ambient irradiance? Monteiro group meeting, University of Bristol, Bristol, UK, July 26th, 2016.

Talmy, D., Hussain, F., Follows, M.J. The influence of lytic vs. lysogenic viral reproduction on host-virus populations. 8th Aquatic Virus Workshop, Plymouth, UK, July 11th, 2016.

Talmy, D., Martiny, A.C., Hickman, A.E., Hill, C.N., Follows, M.J. Microzooplankton regulation of surface ocean POC:PON ratios. Ocean Sciences Meeting, New Orleans, Louisiana, USA, February 25th, 2016.

Talmy, D., Hussain, F., Follows, M.J. The influence of viral reproduction strategies on marine microbial community dynamics. 2nd workshop on trait-based approaches to ocean life, New Hampshire, USA, October 5th, 2015.

Talmy, D., Hussain, F., Follows, M.J. The influence of viral reproductive strategies on marine microbial community dynamics. Aquatic Sciences Meeting, Granada, Spain, February 27th, 2015.

Talmy, D., Hardman-Mountford, N.J., Blackford, J.C., Geider, R.J. Phytoplankton photoadaptation in contrasting aquatic light regimes. Ocean Sciences Meeting, Honolulu, Hawaii, USA, February 27th, 2014.

Talmy, D., Hardman-Mountford, N.J., Blackford, J.C., Polimene, L., Hill, C.N., Follows, M.J., Geider, R.J. Phytoplankton photoadaptation in contrasting aquatic light regimes. Sack Lunch Seminar Series, Department of Earth, Atmospheric and Planetary Sciences, Massachusetts Institute of Technology, Massachusetts, USA, October 23rd, 2013.

Talmy, D., Blackford, J., Hardman-Mountford, Geider, R.J. Adaptation to variable light determines resource allocation in phytoplankton. Ocean Sciences Meeting, Salt Lake City, Utah, USA, February 23rd, 2012.

Talmy, D., Blackford, J., Hardman-Mountford, Geider, R.J. Modeling phytoplankton growth in non steady-state environments. Marine Sciences Seminar, Plymouth Marine Laboratory, Plymouth, UK, May 26th, 2011.

Talmy, D., Blackford, J., Hardman-Mountford, Geider, R.J. Modeling phytoplankton productivity in the open ocean: including the effects of adaptation to different light regimes. Marine Science and Environmental Microbiology Seminar, University of Essex, January 26th, 2011.

Talmy, D., Blackford, J., Hardman-Mountford, Geider, R.J. Optimality in phytoplankton growth models and the link with satellite data. NCEO Ocean Carbon Cycle Meeting, Plymouth, UK, July 15th, 2010.

Poster Presentations

Boldened names indicate people in my research group

Carr, E., Rajakaruna, H., Talmy, D., On the influence of mortality on microbial predator-prey relationships in the surface ocean. 5th workshop on trait-based approaches to ocean-life, Knoxville, TN, Jan 27th 2022.

McCullough, D.K., Calfee, B., Zinser, E.R., **Talmy, D.** Toward a general model of the effects of exogenous reactive oxygen on bacterial community dynamics. 5th workshop on trait-based approaches to ocean-life, Knoxville, TN, Jan 27th 2022.

Rajakaruna, H., Omta, A.W., **Carr, E.**, **Talmy, D.** The power-law biomass scaling relationship in natural microbial ecosystems. 5th workshop on trait-based approaches to ocean-life, Knoxville, TN, Jan 27th 2022.

McCullough, D.K., Calfee, B., Zinser, E.R., **Talmy, D.** Connecting hydrogen peroxide damage and nutrient limitation controls on marine cyanobacterial growth. 4th workshop on trait-based approaches to ocean life, Buckinghamshire, UK, Aug 19th, 2019.

Papoulis, S.E., Wilhelm, S.W., **Talmy, D.**, Zinser, E.R. Environmental nutrients explain the distribution of restriction modification systems in prokaryotic genomes. 4th workshop on trait-based approaches to ocean life, Buckinghamshire, UK, Aug 20th, 2019.

Talmy, D., Follett, C.L., Follows, M.J. Viral regulation of dissolved organic matter elemental composition. Viruses of Microbes Meeting, Liverpool, UK, July 19th, 2016.

Talmy, D., Blackford, J., Hardman-Mountford, Geider, R.J. Phytoplankton optimal resource allocation in response to variable light intensity. Advances in Marine Ecosystem Modelling Research (AMEMR) Symposium, Plymouth, UK, June 28th, 2011.

Talmy, D., Blackford, J., Hardman-Mountford, Geider, R.J. Optimality in phytoplankton growth models and the link with satellite data. Advanced School on Complexity, Adaptation and Emergence in Marine Ecosystems, Trieste, Italy, October 21st, 2010.

Workshops, Summer Schools, and Colloquia

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| 2022 | Microbes in Models: Steps for Integrating Microbial Activity into Climate Models, Virtual. |
| 2022 | Green Ocean Workshop, École Normale Supérieure, Paris, France. |
| 2022 | 5 th Trait-Based Approaches to Ocean Life Workshop, Knoxville, Tennessee, USA. Lead Organizer. |
| 2020 | NIMBioS Investigative Workshop on Quantitative Education in Life Sciences Graduate Programs, Virtual. |
| 2019 | 4 th Trait-Based Approaches to Ocean Life Workshop, Buckinghamshire, UK. |
| 2018 | 9 th Aquatic Virus Workshop, Lincoln, Nebraska, USA. |
| 2016 | 8 th Aquatic Virus Workshop, Plymouth, UK. |
| 2015 | 2 nd Trait-Based Approaches to Ocean Life Workshop, Waterville Valley, New Hampshire, USA. |
| 2015 | Workshop for Development of Macromolecular Models of Marine Algae, Sackville, New Brunswick, Canada. |

- 2014 The Gordon and Betty Moore Foundation Research Associate and Postdoctoral Scholar Summit, Dorado, Puerto Rico.
- 2014 North Atlantic Virus Infection of Coccolithophores Expedition (Na-VICE) post cruise meeting, Woods Hole Oceanographic Institution, Falmouth, Massachusetts, USA.
- 2013 Trait and Resource Allocation Based Modeling of Microbial Communities, University of Exeter, UK.
- 2013 Workshop for Understanding Microbial Macromolecular Composition, Haifa, Israel.
- 2010 Advanced School on Complexity, Adaptation and Emergence in Marine Ecosystems, Trieste, Italy.
- 2010 Earth System Science Spring School, Scarborough, UK.
- 2010 Modeling Evolutionary and Ecological Processes in Biogeochemical Cycles, University of East Anglia, UK.

Teaching Experience

- 2023 Instructor, Foundations in Microbiology (10 graduate students), University of Tennessee, Knoxville.
- 2023 Instructor, Microbial Ecology Journal Club (20 graduate students), University of Tennessee, Knoxville.
- 2022 Invited lecturer, Quantitative Methods in Virus Ecology and Evolution (10 graduate students), University of Bergen, Norway.
- 2020-2022 Lecturer, General Microbiology (100 undergraduate students), University of Tennessee, Knoxville. *Student evaluations consistently 4-5/5 for two semesters in which I was the sole instructor.*
- 2020-2021 Instructor, Advanced Topics in Microbiology (10 graduate students), University of Tennessee, Knoxville.
- 2018-2019 Graduate Computational Biology Journal Club, University of Tennessee, Knoxville.
- 2016 Invited lecturer, Hjort Summer school in Bergen, Norway: Complexity vs. Simplicity in Microbial Ecology.
- 2008 Associate tutor, University of Sussex, UK. Courses taught: Linear algebra II and Introduction to Matlab.
- 2007 High school classroom assistant, Student Associate Scheme, Worthing High School, Worthing, East Sussex, UK

Mentorship

Undergraduates

- 2023 Emily Landolt, NSF Research Experiences for Undergraduates, 10-week summer research placement.

- 2021 Kamryn Henderson, National Summer Undergraduate Research Project (NSURP), 8-week summer research project.
- 2020 Umang Joshi, Stephanie Westaway, Michael Lin, NIMBioS Research Experiences for Undergraduates, 6-week summer group research project.
- 2018-2019 Maitraya Ghatak, 401R, Undergraduate Research in Microbiology.
- 2019 Lucas Fiet, Margie Knight, Priscilla Cho, NIMBioS Research Experiences for Undergraduates, 10-week summer group research project.
- 2019 Aaron Lin, NSF Research Experiences for Undergraduates, 10-week summer research placement.
- 2018 Brielle Shortreed, NSF Research Experiences for Undergraduates, 10-week summer research placement.

Graduate students

- 2018-present Doctoral Committee member for 6 graduate students in the Department of Microbiology and the Department of Ecology and Evolutionary Biology, University of Tennessee.
- 2018-present Advisor and Doctoral Committee Chair, Katie McCullough, Microbiology Graduate Student, University of Tennessee. Doctoral thesis: *Modeling the impact of reactive oxygen species on ocean microbial community dynamics*.
- 2018-2022 Advisor and master's Committee Chair, Kyla Linn, Genome Science and Technology Graduate Student, University of Tennessee. Master's thesis: *Ecological controls on successional patterns in bloom forming cyanobacteria*.

Postdoctoral researchers

- 2020-2022 Dr. Harshana Rajakaruna
- 2020-2021 Dr. Spiro Papoulis
- 2018-2020 Dr. Audra Hinson

Technical professionals

- 2020-present Eric Carr

Professional Service and Outreach

- Ongoing Reviewer, *Science*, *Nature Communications*, *Nature Ecology and Evolution*, *Science Advances*, *The ISME Journal*, *The American Naturalist*, *Limnology and Oceanography*, *Global Biogeochemical Cycles*, *Biological Invasions*, *Biophysical Journal*, *New Biotechnology*, *Journal of Theoretical Biology*, *Marine Ecology Progress Series*, *PLOS ONE*, *Frontiers in Marine Science*, *Journal of Marine Systems*
- Ongoing NSF Biological Oceanography, mail-in reviewer

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| 2020-present | University of Tennessee, Department of Microbiology, Diversity, Equity, and Inclusivity Committee member |
| 2020-present | University of Tennessee, Department of Microbiology, member of the Committee for Curriculum and Undergraduate Affairs |
| 2022 | Lead organizer, 5 th Workshop on Trait-Based Approaches to Ocean Life, Knoxville, Tennessee |
| 2021 | NSF Panelist, Biological Oceanography Postdoctoral Fellowship program |
| 2021-2022 | Choice Health Network (LGBTQ+ community outreach and public health non-profit) Community Impact Committee Member |
| 2018-2020 | University of Tennessee, Department of Microbiology, Graduate Admissions Committee member |
| 2018-2019 | Annual Volunteer, Girl Scouts of Greater New York STEM programming events |
| 2017 | NASA panelist, EXPORTS program |
| 2015-2016 | Interviewee for outreach movie for high school students to learn about scientific modeling, collaboration between Tilapia Film (Los Angeles) and scientists in the Department of Marine and Coastal Sciences at Rutgers University |
| 2016 | Demonstrator, The 6 th Annual John Carlson Lecture, New England Aquarium |
| 2016 | Demonstrator, Oceans Alive! Display for MIT Open House |
| 2014 | Demonstrator, Nautical Night at the MIT Museum |
| 2011-2012 | STEMNET (Science, Technology and Engineering Network) Ambassador (various locations) |
| 2011 | Researcher in Residence, Ridgeway School (now Plympton Academy), Plympton, UK |

Grants and Awards

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| 2020-2024 | NSF Principal Investigator award (Total award: \$913,189; \$397,804 to PI David Talmy, \$515,385 to co-PI Erik Zinser) “ <i>Characterizing the effects of exogenous reactive oxygen species on marine microbial ecosystem dynamics</i> ” ID number: OCE-2023680 |
| 2020-2023 | Simons Early Career Investigator in Marine Microbial Ecology and Evolution Award (Total award: \$666,000; full amount to PI David Talmy). ID number: 690671 |

- 2018-2020 Burroughs Wellcome Fund Total award: (\$150,000 to PI Louis Gross; \$18,750 to co-PI David Talmy): “*Enhancing Quantitative and Data Science Education for Graduate Students in Biomedical Science at the University of Tennessee, Knoxville*” ID number: 1018963
- 2018-2019 NSF Principal Investigator award (Total award: \$55,642 to PI David Talmy; transfer of unspent funds from OCE-1536521 from MIT to UTK): “*Elucidating algal host-virus dynamics in different nutrient regimes - mechanistic interactions and biogeochemical impact*. ID number: OCE-1849926
- 2015-2019 NSF Co-Principal Investigator award (Total award: \$326,864 to PI Mick Follows; co-PI David Talmy was a postdoc on the award): “*Elucidating algal host-virus dynamics in different nutrient regimes - mechanistic interactions and biogeochemical impact*. ID number: OCE-1536521
- 2009-2013 National Centre for Earth Observation PhD studentship
- 2009 NERC subsidy to attend Earth System Science Spring School
- 2008-2009 NERC Masters studentship