

Matthew B. Sullivan

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(a) Professional Preparation

Long Island U, Southampton College, NY	Marine Science	B.S.	1997
Queens U, Belfast, Northern Ireland, U.K.	Biology	MPhil	1998
MIT/WHOI J.P. Biol. Oceanography, Cambridge MA	Biology	PhD	2004
MIT, Dept. Civil & Env'l Engineering, Cambridge MA	Biology	Postdoc	2004-7

(b) Appointments

2015-	Assistant Professor, Ohio State University, Dept. Microbiology
2014-2015	Associate Professor, U Arizona, Dept. Ecology & Evolutionary Biology
2009-2014	Biosphere 2 Research Professor, U. Arizona
2008-2014	Assistant Professor, U. Arizona, Dept. Ecology & Evolutionary Biology

(c.i) Publications (five most relevant) (underline = Sullivan lab members, former or current) [Sullivan career citation metrics = 61 publications, 5,447 citations, h-index=31, i-10 index=48]

- Roux, S., Hallam, S., Woyke, T. & Sullivan, M.B. 2015. Viral dark matter and virus–host interactions resolved from publicly available microbial genomes. *eLife*. **in press**.
- Brum, J.R., Ignacio-Espinoza, J.C., Roux, S. [... 28 co-authors ...] & Sullivan, M.B. 2015. Global patterns and ecological drivers of ocean viral communities. *Science* **in press**.
- Roux, S., Hawley, A.K., Beltran, M.T., Scofield, M., Schwientek, P., Stepanauskas, R., Woyke, T., Hallam, S.J., & Sullivan, M.B. (2014). Ecology and evolution of viruses infecting uncultivated SUP05 bacteria as revealed by single-cell- and meta-genomics. *eLife*. 3:e03125.
- Hurwitz, B.L., Brum, J.R., & Sullivan, M.B. (2014). Depth-stratified functional and taxonomic niche specialization in the 'core' and 'flexible' Pacific Ocean Virome. *ISME J.* 9:472-84.
- Hurwitz, B.L., Westveld, A.H., Brum, J.R., & Sullivan, M.B. (2014). Modeling ecological drivers in marine viral communities using comparative metagenomics and network analyses. *PNAS*. 111:10714–19.

(c.ii) Publications (five other significant)

- Brum, J.R. & Sullivan, M.B. (2015) Rising to the challenge: accelerated pace of discovery transforms marine virology. *Nature Rev. Microbiol.* doi:10.1038/nrmicro3404.
- Holmfeldt, K., Solonenko, N., Shah, M., Corrier, K., Riemann, L., VerBerkmoes, N.C., & Sullivan, M.B. (2013). Twelve previously unknown phage genera are ubiquitous in global oceans. *PNAS*. 110:12798-803.
- Coleman, M.C., Sullivan M.B., Martiny, A., Steglich, C., Barry, K., Delong, E.F., & Chisholm, S.W. (2006). Genomic islands and the ecology and evolution of *Prochlorococcus*. *Science*. 311:1768-70.
- Lindell, D.L. *, Sullivan, M.B. *, Johnson, Z.I., Tolonen, A., Rohwer, F. & Chisholm, S.W. (2004). Transfer of photosynthesis genes to and from *Prochlorococcus* viruses. *PNAS*. 101:11013-18. (*co-first authors)
- Sullivan, M.B., Waterbury, J.B., & Chisholm, S.W. (2003). Cyanophages infecting the oceanic cyanobacterium *Prochlorococcus*. *Nature*. 424:1047-51.

(d) Synergistic Activities

- i. Invited talks*: 40 invited talks (24 domestic and 16 foreign) since 2008.
- ii. Teaching*: Established 2 new U. Arizona classes: (1) Biology of the Oceans (Fall 2008, undergrads), (2) Environmental Genomics (Spring 2009, graduates), and (3) took over IGERT Problems in Genomics (Spring 2010, graduates).
- iii. Undergraduate Research Mentoring*: Trained and mentored research projects for 32 undergrads = 10 at MIT, 22 at U. Arizona; many are co-authors on publications.
- iv. Research Cruises*: 4 Atlantic Ocean, 5 Pacific Ocean, 1 Mediterranean Sea
 - Routine (3x/yr) cruise sampling with collaborator Hallam along Line67 in the NESAP.
 - Global oceans: viral scientific coordinator for two circum-global sampling expeditions – Tara Oceans (French expedition 2009-2012) and Malaspina (Spanish expedition 2010-2011).
- v. Service to the Profession*:
 - Consultation in support of Moore Foundation Marine Virus sequencing project, 2005-present.
 - Grant reviewer for U.S. NSF (2005-present), U.K. Natural Environment Research Council (2006-present), and France L'Agence Nationale de la Recherche, ANR (2008-present).
 - Peer-review for *PLoS Biology* (2005-present), *Environmental Microbiology* (2006-present), *Molecular Biology and Evolution* (2008-present), *Science* (2009-present), *Aquatic Microbial Ecology* (2009-present), *PNAS* (2009-present), *ISME J* (2012-present), *mBio* (2012-present).
 - Editorial board at *Environmental Microbiology* (2014-present, journal impact factor = 6.2)
 - Senior Editor at Nature Publishing Group's *ISME J* (2015-present, journal impact factor = 9.3)
 - Organized and hosted Environmental Virology Workshop (Jan 2013, Biosphere 2, Tucson AZ)

(e) Collaborators (8 collaborators)

Steven Hallam (UBC), Gene Tyson (U Queensland, Australia), Jake Waldbauer (U Chicago), Maureen Coleman (U Chicago), Seth John (USC), Alexandra Worden (MBARI), Tara Oceans Consortium, Malaspina Consortium.

Co-authors - past 48 months (54 co-authors)

S.G. Acinas, A. Alberti, E. Allers, R. Amann, J. Barrero-Canosa, P. Bork, C. Bowler, J. Brum, S.W. Chisholm, M.C. Coleman, C. Cruaud, L. Deng, C. De Vargas, M.B. Duhaime, C.O. Flores, S.J. Giovannoni., G. Gorsky, A. Gregory, S.J. Hallam, M.E. Hochberg, K. Holmfeldt, P. Hugenholtz, B.L. Hurwitz, J.C. Ignacio-Espinoza, D. Iudicone, O. Jaillon, S.G. John, S. Kandels-Lewis, E. Karsenti, K.M. Konwar, R. Marine, J.R. Meyer, C. Moraru, T. Poisot, S.W. Polson, B.T. Poulos, J. Raes, V.I. Rich, L. Riemann, C. Sardet, R. Schenck, M.S. Schwalbach, M. Shah, M.E. Sieracki, N. Solonenko, S. Solonenko, B. Temperton, L.R. Thompson, J.C. Thrash, N.C. VerBerkmoes, J.S. Weitz, P. Wincker, K.E. Wommack, Y. Zhao.

Graduate and Postdoctoral Advisors and Advisees

Ph.D. Advisors: S.W. Chisholm (MIT), J.B. Waterbury (Woods Hole Oceanographic Inst.).

Post-Doctoral Advisor: S.W. Chisholm (MIT).

Thesis (PhD) advisees at U. Arizona (6 thesis advisees): Julio Ignacio-Espinoza (2008-2014), Bonnie Hurwitz (2009-2013), Cristina Howard (2012-2015), Sergei Solonenko (2010-present), Ann Gregory (2013-present), Dean Vik (2014-present).

Post-doc advisees at U. Arizona (10 postdoc advisees): Li Deng (University of Bristol, 2008-2011), Elke Allers (MPI Bremen, 2009-2012), Jennifer Brum (University of Hawaii, 2010-present), Melissa Duhaime (MPI Bremen, 2010-2012), Karin Holmfeldt (Kalmar University, 2010-2012), Vinh Dang (Flinders University, 2013-2015), Simon Roux (Clermont University, 2013-present), Sheri Flöge (Bigelow Laboratory for Ocean Science, 2014-present), Kate Hargreaves (University of Leicester, 2015-present), Joanne Emerson (UC Berkeley, 2015-present).