

MYA BREITBART

University of South Florida (USF)
College of Marine Science (CMS)
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<http://www.marine.usf.edu/genomics>

Education

2006 Doctor of Philosophy, Cellular and Molecular Biology, San Diego State
 University and University of California San Diego
2000 Bachelor of Science, Biology, Florida Institute of Technology

Appointments

2022-present Distinguished University Professor, USF-CMS
2016-2022 Professor, USF-CMS
2012-2016 Associate Professor, USF-CMS
2006-2012 Assistant Professor, USF-CMS

Awards

2022 Elected Member, Academy of Science, Engineering and Medicine of Florida
2019 American Academy of Microbiology Fellow
2018 USF Outstanding Faculty Award
2017 American Association for the Advancement of Science (AAAS) Fellow
2015 Girls Incorporated of Pinellas STEM Woman of the Year
2014 Florida Trend Magazine's All Star
2014 USF Outstanding Faculty Award
2013 Popular Science Magazine's "Brilliant Ten" Young Investigators
2013 Honorable Mention, USF Outstanding Graduate Mentor Award
2009, 2010 Kavli Frontiers Fellow. National Academy of Sciences
2009 USF "Each One Teach One" Phenomenal Woman Award
2008 USF Outstanding Research Achievement Award
2007 Alfred P. Sloan Research Fellow
2006 Genome Technology Magazine's Young Investigator Award
2005-2006 Achievement Rewards for College Scientists (ARCS) Scholar

Funded Research Grants

2024-2027 National Science Foundation – Biological Oceanography. "Collaborative Research: The effects of SUP05 cells and virocells on nitrogen cycling in marine oxygen minimum zones". Total award = \$449,462.
2023-2028 NOAA National Centers for Coastal Ocean Science. "Surveillance of Pollution from Emerging Chemical Threats in Tampa Bay". I am a co-PI, Steven Murawski (USF) is lead PI. Total award = \$3,400,000; my portion of the award = \$321,399.
2023-2026 Florida RESTORE Act Centers of Excellence Program. "Spawning Habitat and Early-Life Linkages to Fisheries". I am a co-PI, Chris Stallings (USF) is lead PI.

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- Total award = \$1,205,826; my portion of the award = \$842,028.
- 2022-2025 National Science Foundation – Biological Oceanography. “Collaborative Research: VIDA Seagrass: Viral Infection Dynamics Among Seagrass”. Total award = \$964,636.
- 2021-2022 National Science Foundation - Research Experience for Post-Baccalaureate Students (REPS) supplement. “Deciphering the Ecology of Aquatic Single-Stranded DNA Phages (*Microviridae/ Gokushovirinae*)”. Total award = \$39,139.
- 2021-2022 University of South Florida Internal Awards Program – Proposal Enhancement Grant. “Ecology and Evolution of Seagrass Viruses” Total award = \$25,000.
- 2021 Florida Department of Environmental Protection. “Analysis of Archived Piney Point Samples”. I am a co-PI, Kristen Buck (USF) is lead PI. My portion of the award = \$88,730.
- 2020-2025 Florida Fish and Wildlife Conservation Commission. “New Interdisciplinary Approaches to Enhance Red Tide Tracking and Forecasting on the West Florida Shelf”. I am a co-PI, Kristen Buck (USF) is lead PI. My portion of the award = \$125,000.
- 2019-2022 Florida RESTORE Act Centers of Excellence Program. “Spawning Habitat and Early-Life Linkages to Fisheries (SHELF)”. I am a co-PI, Ernst Peebles (USF) is lead-PI. Total award = \$749,999.
- 2016-2021 National Science Foundation – Coastal SEES. “Coastal SEES Collaborative Research: Integration of Human Behavior and Perception into a Risk-based Microbial Water Quality Management Approach”. I am the lead PI, Valerie Harwood (USF Integrative Biology) is a co-PI. Total award = \$999,995. 09/15/16 – 09/14/21.
- 2016-2021 National Science Foundation – Division of Environmental Biology. “Deciphering the Ecology of Aquatic Single-Stranded DNA Phages (*Microviridae/ Gokushovirinae*)”. I am the sole PI on this proposal. Total award = \$463,714.
- 2015-2020 U.S.-Israel Binational Science Foundation. “Quantifying the Recently Discovered, Ubiquitous ssDNA Phage Group and Identifying their Hosts” I am the lead PI, Debbie Lindell (Technion, Israel) is the co-PI. Total award = \$180,000.
- 2017-2019 National Science Foundation – EAGER. “Iron-Virus Interactions in the Ocean”. Lead PI is Kristen Buck, I am a co-PI. Total award = \$299,295.
- 2016-2018 Florida Institute of Oceanography, FL Centers of Excellence Research Grants Program. “Spawning Habitat and Early-Life Linkages to Fisheries (SHELF)”. Lead PI: Ernst Peebles, I am a co-PI. Total award = \$799,999.
- 2015-2018 National Science Foundation – Integrative Organismal Systems. “Role of Phages in Structuring Bacterial Communities: *Ciona intestinalis* as a Model System”. Larry Dishaw is lead PI, I am a co-PI. Total award: \$440,300.

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- 2015-2017 Florida Institute of Oceanography: Florida Centers of Excellence Research Grants Program. “Egg and Larval Barcoding for Gulf DEPM Stock Assessments”. Lead PI is Ernst Peebles, I am a co-PI. Total award = \$129,265.
- 2014-2019 NASA Grant NNX14AP62A, funded under the National Ocean Partnership Program (NOPP RFP NOAA-NOAA-NOS-IOOS-2014-2003803) in partnership between NOAA, BOEM, and NASA. “National Marine Sanctuaries as Sentinel Sites for a Demonstration Marine Biodiversity Observation Network (MBON)”. 08/01/14-07/31/19. I am a co-PI on a large proposal with Dr. Frank Muller-Karger as lead PI. My portion of the award = \$912,314.
- 2012-2017 National Science Foundation – Assembling the Tree of Life. “Collaborative Research: ATOL: ACCESS DNA viruses: A Comprehensive survey of Circular Eukaryotic Single-Stranded DNA viruses in Invertebrates and Fungi”. I am lead PI, co-PI is Karyna Rosario. Total award = \$995,371.
- 2011-2012 University of South Florida Internal Awards Program – Proposal Enhancement Grant. “Exploring the Diversity and Ecology of Marine Single-Stranded DNA Phages” Total award = \$24,913.
- 2010-2012 University of South Florida – College of Marine Science Interdisciplinary Research Grant Program. “Development of a Serological Assay for the Detection of Sea Lion Anellovirus (ZcAV)”. I am lead PI, co-PI is Larry Dishaw. Total award = \$50,000.
- 2010-2012 National Science Foundation – EAGER. “Discovery of Viruses Infecting Marine Copepoda”. Total award = \$298,528.
- 2010-2013 National Science Foundation – Systematic Biology and Biodiversity Inventories. “Collaborative Research: Vector-Enabled Discovery: Exploiting Whiteflies to Investigate the Diversity, Evolution, and Biogeography of Begomoviruses”. Total award = \$322,502.
- 2009-2010 Mote Marine Laboratory – Protect Our Reefs Grant. “Spatial Variability in Coral-Associated Bacteria: Implications for Coral Restoration”. Total award = \$30,827.
- 2009-2012 National Science Foundation – Advances in Bioinformatics. “Collaborative Research: PHANTOME: PHage ANnotation TOols and MEthods”. Total award = \$460,142.
- 2007-2010 Department of Energy – Genomes to Life. “Development of Proteogenomic Approaches to Analyze the Role of Virus-Microbe Interactions in Shaping Natural Microbial Communities”. Co-PI with Drs. Jillian Banfield and Nathan Verberkmoes; my portion of the award = \$401,259.
- 2007-2010 National Science Foundation – Microbial Interactions and Processes. “Abundance, Dynamics, and Diversity of Viruses in the Northwestern Sargasso Sea”. Total award = \$474,929.
- 2007-2009 Alfred P. Sloan Foundation Research Fellowship. Total award = \$45,000.
- 2008-2009 Florida Sea Turtle Grants Program. "Shotgun Sequencing of Viruses Associated with Sea Turtle Fibropapillomatosis". Total award = \$29,867.

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2008-2010	American Association of University Women - Community Action Grant. "Girl Scouts Marine Science and Technology Workshop". Total award = \$5,120.
2008	Florida Institute of Oceanography. 5 days of shiptime to Dry Tortugas, Florida Keys.
2007-2008	National Geographic Society. "Impact of Human Activity on Microbes and Viruses Associated with Living Stromatolites in Cuatrociénegas, Mexico. Total award = \$19,973.
2007	Project AWARE Foundation. "The Microbiology of Coral Restoration". Total award = \$3,500.
2007	Environmental Protection Agency: Region 4 Special Studies. "Application of Historic Data Sets and Bioindicators to Assess Status and Ecological Function of Upper Keys Patch Reefs". Lead PI is Dr. Pam Hallock-Muller, I am a co-PI. My portion of the award = \$10,000.
2006-2007	Environmental Protection Agency: Region 4 Special Studies. "Diversity and Distribution of Pathogenic Viruses in the Florida Keys". Total award = \$25,000.
2006-2007	University of South Florida: Internal New Investigator Award. "Diversity and Dynamics of Viruses Associated with Stromatolites in Cuatrociénegas, Mexico". Total award = \$10,000.

Professional Activities

2024-present	Member of the USF Nelson Poynter Memorial Library Faculty Advisory Committee
2023-present	Member of the Curriculum Committee for the American Society for Virology
2023-present	CMS Seminar Committee (chair in Fall 2023, member in Spring 2024)
2023-present	Member of the University Discipline Committee for the Distinguished University Professor nomination process
2023-present	Faculty Mentor to Dr. Margaret Brisbin
2023-2024	Faculty advisor, CMS Graduate Student Symposium
2022-2027	Elected Member, Subcommittee on Elections, American Academy of Microbiology
2022-2024	Editorial Board Member, Applied and Environmental Microbiology
2022	Member of the USF-CMS Phytoplankton Biologist Search Committee
2020-present	USF Publication Council
2020-present	USF-CMS Safety Committee
2018-present	Member of the <i>Circoviridae</i> Subgroup of the International Committee on the Taxonomy of Viruses
2017-present	Editorial Board Member, PeerJ
2017-2024	USF Honors and Awards Council
2016-present	Chair, USF-CMS Honors and Awards Committee
2015-present	Editor, Aquatic Microbial Ecology
2007-present	Faculty advisor, Marine Science Advisory Committee (MSAC)
2021	USF Strategic Planning Advisory Task Force

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2020	Selection Committee for the USF Outstanding Thesis/Dissertation Awards
2020	Co-chair, Keystone Symposium on the Global Virome in Health and Disease
2019	USF-CMS Dean Search Committee
2018-2019	USF Ad-hoc Research Misconduct Committee
2018	USF Biology Tenure & Promotion Committee
2017-2020	International Society for Microbial Ecology (ISME) International Board of Ambassadors
2017	American Society for Microbiology Officer Nominating Committee
2016	USF Academy for Teaching and Learning Excellence (ATLE) Pedagogy All-Day Workshop
2015	Session Chair, Gordon Conference on Animal-Microbe Symbiosis
2015	Session Chair, American Society for Microbiology General Meeting
2015-2017	USF Research Advisory Committee
2015-2019	Scientific Advisory Board Member for International Society of Viruses of Microbes
2015-2016	Division M (Bacteriophage) Chair of the American Society for Microbiology
2014-2016	Editorial Board Member for Scientific Reports
2014-2018	Chair of the <i>Circoviridae</i> Subgroup of the International Committee on the Taxonomy of Viruses
2014-2015	Chair-Elect of Division M (Bacteriophage) of the American Society for Microbiology
2013-2015	Councilor for the Florida Branch of the American Society for Microbiology
2013-2015	USF QEP Steering Committee, Global Citizen Project
2013-2014	Nominating Committee for the ARCS Tampa Bay Chapter
2012-2013	USF Incentivizing, Recognizing and Rewarding International Engagement Among Faculty Workgroup
2012-2015	USF-CMS Curriculum Committee
2011-2014	Elected Member, Executive Committee of the International Committee on the Taxonomy of Viruses
2011	Organizing committee member, National Academy of Science's Kavli Frontiers in Science Meeting
2011-2013	President, Florida Branch of the American Society for Microbiology
2011	Co-organizer, 19 th Evergreen International Phage Biology Meeting
2011	Presentation judge, USF 9 th Annual Undergraduate Research Symposium
2011	USF-CMS Phytoplankton Ecologist Search Committee
2011	Organizing committee member, National Academy of Science's Kavli Frontiers in Science Meeting
2010-2016	USF-CMS Honors and Awards Committee Member
2009-2010	USF-CMS Dean Search Committee
2009-2011	Scientific Member of the USF/Mote Affiliation Committee
2009	Co-organizer of the 18 th Evergreen International Phage Biology Meeting
2008-2010	Vice-President for the Florida Branch of the American Society for Microbiology
2007	Member of initiating group for the Tampa Bay ARCS Foundation

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2007-2012	USF University Laboratory and Field Safety Committee
2007-2015	Florida Aquarium's Conservation and Research Advisory Committee
2006-2014	Chair of USF-CMS Graduate Student Recruitment Weekend
2008-2016	Faculty advisor, USF-CMS Graduate Student Symposium
2006-2008	Secretary, Florida Branch of the American Society for Microbiology

Significant Outreach Activities (<https://www.marine.usf.edu/genomics/outreach/>)

2023-2025	Art & Science Collaborations with local artists, Creative Clay, and Sparks Creative Stories
2013-2023	FabFems Role Model
2011-present	Annual Exhibitor at the Saint Petersburg Science Festival
2007-present	Faculty mentor, USF Oceanography Camp for Girls
2006-present	Various activities with Girls Incorporated of Pinellas and Girl Scouts at Camp Wai Lani, reaching over 500 girls
2021	Created online "Virus Hunters" activity for the Saint Petersburg Science Festival (https://www.marine.usf.edu/genomics/virus-hunters/)
2021	Resource and Expert Graphic Reviewer for National Geographic issue on Viruses
2020	Created in-person and virtual DNA Detectives outreach activity for the Saint Petersburg Science Festival (https://sites.google.com/view/dnadetectives/home)
2020	Created a series of outreach videos on microbial water quality (http://mera.marine.usf.edu/outreach-education/)
2019-2020	Ran an Art & Science workshop, beginning with lab tours and hands-on experiences for the artists, and ending with an exhibit showcasing science-themed artwork
2016	Keynote speaker, Bright House Networks "Bright Ideas STEM From Today's Youth" Semi-finalist Competition
2014-2015	National Ocean Sciences Spoonbill Bowl Moderator
2010-2015	Leadership Team Member, Florida Girls Collaborative Project
2011	Designed a fully functional Marine Science Lab for Girl Scout Camp Wai Lani
2007	Created bilingual educational videos about microbialites in our field site of Cuatro Ciénegas, Mexico (http://www.desertfishes.org/cuatroc/literature/pdf/Breitbart_videos.php)

Formal Courses Taught

2019-present	Guest Lectures in Microbiology and Molecular Biology for Biological Oceanography
2019-present	Guest Lectures on Viral Ecology for undergraduate Virology
2014-2020	Co-Instructor, Professional Development II, every other Spring semester
2010-present	Lead Instructor, Professional Development I, every Fall semester
2022	Lead Instructor, Molecular Biology Oceanography Readings
2021	Lead Instructor, Inclusive Readings in Oceanography
2020-2021	Guest Lectures on Viral Ecology for online USF Microbiome course
2018	Lead Instructor, Virology

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2017	Co-Instructor, Microbes and Metals
2015	Lead Instructor, Molecular Microbiology Methods
2013, 2014	Lead Instructor, Micro-Macro Interactions
2009, 2012	Co-Instructor, Foundations of Biological and Fisheries Oceanography
2009	Lead Instructor, Biological Oceanography
2007-2008	Co-Instructor, Biological Oceanography
2007	Lead Instructor, Marine Molecular Methods
2007	Lead Instructor, Metagenomic Bioinformatics

Graduate Students

2023-present	Alexis Mitchem – Ph.D. student
2022-present	Isabella Ritchie – Ph.D. student
2021-present	Alicia Hoeglund – M.S. student
2015-2024	Natalie Sawaya – Ph.D. student. Currently a Postdoctoral Researcher at the University of Alaska.
2021-2024	Keith Keel – M.S. student. Currently a Gulf Research Program Science Policy Fellow with NOAA - National Centers for Environmental Information.
2021-2024	Caitlyn Parente – M.S. student, co-advised with Dr. Kristen Buck. Currently applying to PhD programs.
2019-2023	Christina Chadwick – M.S. student. Currently a Laboratory Scientist at Immunologix Laboratories.
2017-2019	Makenzie Burrows Kerr – M.S. student. Currently outreach coordinator for my lab and co-director of the USF-CMS Oceanography Camp for Girls
2016-2021	Kema Malki – Ph.D. student. Currently a Senior Scientist at Illumina
2015-2017	Amanda Sosnowski – M.S. student, co-advised with Heather Judkins. Subsequently earned a MA in Wildlife Filmmaking at the University of the West of England and is now a Researcher for Offspring Films.
2015-2018	Alexandria Creasy – M.S. student, co-advised with Larry Dishaw. Currently a Microbiologist at VistaPharm, Inc
2014-2019	Chelsea Bonnain Chase – M.S. student, co-advised with Dr. Kristen Buck. Currently North FL Area Representative for LABRepCo, LLC
2013-2016	Stephanie Lawler-Ellington – M.S. student, co-advised with Christina Kellogg. Currently Program Director at Keep Pinellas Beautiful
2012-2017	Brittany Leigh – Ph.D. student, co-advised with Larry Dishaw. Currently an Account Executive at LifeSci Communications
2012-2017	Elizabeth Fahsbender – Ph.D. student. Currently a Product Applications Scientist at the Chan Zuckerberg Initiative
2011-2014	Max Hopkins – M.S. student, 2011-2014. M.S. received Summer 2014. Currently a Scientist at Felix Biotechnology
2009-2012	Darren Dunlap – M.S. student. Currently a Microbiologist at Boeing Research & Technologies
2009-2012	Sheila O’Dea – M.S. student. Currently a Lead Marine Mammal Observer for Petroleum Geo-Services (Africa)

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2007-2015	Monica Mion Cook – Ph.D. student, co-advised by Ted Van Vleet. Currently an Instructor at Saint Petersburg College
2007-2010	Anthony Nitti – M.S. student, co-advised by David Hollander. Currently employed at NovoBiotic Pharmaceuticals
2007-2014	Dawn Goldsmith – Ph.D. student. Currently a Forensic DNA Examiner for the Defense Forensic Science Center
2006-2010	Terry Fei Fan Ng – Ph.D. student. Currently a Senior Service Fellow at the Center for Disease Control in Atlanta and an Adjunct Assistant Professor at the University of Georgia
2006-2010	Karyna Rosario – Ph.D. student. Currently a Scientific Writer at the Chan Zuckerberg Initiative
2006-2011	Camille Daniels – Ph.D. student. Currently a bioinformatician at Medical Device Innovation Consortium
2006-2008	Erin Symonds – M.S. student. Currently Strategic Partnership Manager at Water for Good

Postdoctoral Researchers

2023-present	Luis Alvarado
2022-present	Shen Jean Lim
2021-2022	Meredith Kernbach. Currently in Oncology Sales at Pfizer
2018-2019	Y Nguyen. Currently a Gene Therapy Reviewer at the Food & Drug Administration
2017-2021	Erin Symonds. Currently Program Development Officer at Water for Good
2017-2018	Noemi Van Bogaert, Belgian American Education Foundation Fellow. Currently a Research Scientist at the Flanders Research Institute for Agriculture, Fisheries, and Food
2015-2019	Anni Djurhuus. Currently an Assistant Professor at the University of the Faroe Islands
2015-2016	Dawn Goldsmith. Currently employed as a Forensic DNA Examiner for the Defense Forensic Science Center
2013-2015	Anna Szekely, Marie Curie Fellow. Currently an Associate Professor at the Swedish University of Agricultural Sciences
2011-2022	Karyna Rosario. Postdoc from 2011 – 2013, Research Associate from 2013-2020. Currently a Scientific Writer at the Chan Zuckerberg Initiative
2009-2012	Bhakti Dwivedi. Currently a Senior Research Scientist at The Winship Cancer Institute of Emory University
2007-2010	Kimberly Pause. Currently the Direction of STEM Initiatives and an Assistant Professor of Biology at Stevenson University

Undergraduates and Other Lab Interns

2025	Cassandra Schneider – USF Undergraduate
2025	Zoe Lawrence – USF Undergraduate
2025	Jewelina Keller – USF Undergraduate

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2024-2025	Madeleine Lile-Delfino – Countryside High School Student
2024	Rishi Mehta – High School Student
2023-2024	Alexandra Rogers – USF Undergraduate
2023-present	Arianna Rodriguez Perez – USF Undergraduate
2023-present	Maria Hopson-Fernandes – USF Undergraduate
2023	Laura Liu – High School Student
2021-2022	Michael Chase – USF Undergraduate, Senior Honors Thesis Advisor
2019-2022	Paige Boleman – USF Undergraduate, Senior Honors Thesis Advisor (2021)
2021	Taylor Little – USF Undergraduate, Senior Honors Thesis Advisor
2021	Brett Galvin – USF Undergraduate, Senior Honors Thesis Advisor
2020-2021	Akash Dutta – Indian Institute of Science Education and Research Undergraduate
2020	Noah Yonas – University of Maryland Undergraduate, NSURP Fellow
2019-2020	Shelby Mahank – USF Undergraduate
2019	Emma Willett – Saint Petersburg High School Student
2019	Sophie Goldsmith – Palm Harbor University High School Student
2017-2019	Grace Koziol – Eckerd College Undergraduate
2017	Eva-Maria Bonnelycke – Eckerd College Undergraduate
2017	Kaitlin Mettel – USF Undergraduate
2017	Mason Kerr – Saint Petersburg College Undergraduate
2017	Haris Paliogiannis – International Intern from Belgium
2015-2017	Makenzie Burrows – USF Undergraduate
2015-2016	Travis Thorn – USF Undergraduate
2015-2016	Anna Walters – Saint Petersburg High School Student
2014-2016	Sidney Fulford – Eckerd College Undergraduate
2014-2015	Lisbet Finseth – Postgraduate Intern
2014	Christian Marr – Postgraduate Intern
2014	Dylan Kahn – Postgraduate Intern
2014	Carina Graham – Eckerd College Undergraduate
2014	Courtney Clark – USF Undergraduate, Senior Honors Thesis Advisor
2013-2014	Bethany Levenson – USF Undergraduate
2013	Jendryx Fernandez – Hillsborough Community College Undergraduate
2011-2013	Marco Padilla-Rodriguez – USF Undergraduate, Senior Honors Thesis Advisor (2012)
2011-2012	Allison Cohen – Columbia University Undergraduate
2011	Bingjie Xue – Virginia Commonwealth University Undergraduate
2011	Lauren Van Woudenberg - Eckerd College Undergraduate
2011	Laura Munoz – USF Undergraduate
2011	Kristen Viola – USF Undergraduate
2011	Rachael Trent – USF Undergraduate
2010-2012	Elizabeth Fahsbender – USF Undergraduate
2010	Kelly Vasbinder – Saint Petersburg High School Student
2010	Giuseppe Crosti – Duke University Undergraduate
2010	Inmaculada Garcia Heredia – International Intern from Spain

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2009	Sanela Svraka – International Intern from the Netherlands
2009	Shankar Alavandi – International Scientist from India
2009	Elizabeth Ranalli – Sonoma State University Undergraduate
2008	Clarke Jacobson – Middle-school Science Fair Student
2008	Amy Zeifman – Eckerd College Undergraduate
2007-2008	Elise Bixby – Washington University at Saint Louis Undergraduate
2007	Christopher Chung – Duke University Undergraduate
2007	Maria Luisa Rubio Teso – International Intern from Spain

Service on Additional Student Committees (at USF-CMS unless otherwise indicated)

Outside Chair: Brian Badgely (USF Integrative Biology), Shannon McQuaig (USF Integrative Biology)

Ph.D.: Kwasi Barnes, Kristina Confesor, Kristina Deak, April Ellis, Julia Galkiewicz, Javier Gallard (USF Integrative Biology), Adriana Gonzalez (USF Integrative Biology), Emma Graves, Lara Henry, Adrienne Hollister, Erica Hudson, Abdiel Laureano, Juliana Leonard (USF Integrative Biology), Jennifer Mobberley, Christin Murphy, Delfina Navarro-Estrada, Benjamin Ross, Alec Timpe, Robert Ulrich, Emma Underwood (USF Public Health), Matthew Verbyla (USF Engineering), Brayan Vilanova Cuevas (Cornell University), Ian Williams, Brian Zielinski.

M.S.: Christa Baranowski, Calyn Crawford, Jennifer Delaney, Adrienne George, Aubrey Hetzler (USF Conservation Biology), Adrienne Hollister, Ava Larson (UNF), Makenna Martin, Lydia Ruggles, Sarah Schmid, Adam Spear, Elizabeth Young.

Peer-Reviewed Publications (underline indicates my students or post-docs)

Total of 158 published journal articles (Google Scholar: 26,782 citations as of 4/19/2025, H-index 76)

- 2025 Keel, K, M Kerr, LY Liu, Y Liu, JP Kilborn, G Zapfe, EB Peebles, CD Stallings, **M Breitbart**. Spatial and temporal heterogeneity of fish spawning dynamics on the West Florida Shelf during Fall. Fisheries Oceanography. doi: 10.1111/fog.12731.
- 2025 Lim, SJ, A Rogers, K Rosario, M Kerr, M Garrett, J Koester, K Hubbard, **M Breitbart**. Diverse ssRNA viruses associated with *Karenia brevis* harmful algal blooms in Southwest Florida. mSphere. Doi: 10.1128/msphere.01090-24.
- 2025 Vilanova-Cuevas, B, K Philipp, A Altera, CC Becker, D Behringer, M Brandt, **M Breitbart**, K Budd, C DeRito, E Duermit-Moreau, J Evans, M Hopson-Fernandes, J Fleischer, S Gittens Jr, M Henson, A Hylkema, C Kellogg, A Maritan, A Apprill, JL Meyer, Z Pratte, IT Ritchie, M Sevier, M Souza, F Stewart, S Van Der Wal, S VonHoehne, I Hewson. Detection of the *Diadema antillarum* scuticociliatosis *Philaster* clade on sympatric metazoa, plankton and abiotic surfaces and assessment for its potential reemergence. Marine Ecology

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- Progress Series. 75: 19-35.
- 2025 Vilanova-Cuevas, B, CM DeRito, IT Ritchie, CA Kellogg, JS Evans, A Zimmerman, SM Williams, M Brandt, M Sevier, S Gittens Jr, KA Budd, M Warham, WC Sharp, GA Delgado, A Hylkema, K Kitson-Walters, J-P Quod, **M Breitbart**, I Hewson. Investigating the influence of Diadematidae scuticociliatosis on host microbiome composition. mSystems. doi: 10.1128/msystems.01418-24.
- 2025 Natarajan, O, SL Gibboney, MN Young, SJ Lim, N Pluta, CGF Atkinson, BA Leigh, A Liberti, E Kees, **M Breitbart**, J Gralnick, LJ Dishaw. Prophages regulate *Shewanella fidelis* 3313 motility and biofilm formation: implications for gut colonization dynamics in *Ciona robusta*. eLife reviewed preprint <https://elifesciences.org/reviewed-preprints/103107>.
- 2025 Alvarado-Marchena, L, BT Furman, **M Breitbart**. Construction and characterization of an infectious cDNA clone of turtle grass virus X from a naturally infected *Thalassia testudinum* plant. mBio. 16: 02828-24.
- 2024 Hewson, I, M Brandt, K Budd, **M Breitbart**, C DeRito, S Gittens Jr, M Henson, A Hylkema, M Sevier, M Souza, B Vilanova-Cuevas, S VonHoene. Viral metagenomic investigation of two common coral reef echinoderms, *Diadema antillarum* (Echinoidea) and *Holothuria floridana* (Holothuria) from the Caribbean Sea. PeerJ. 12:e18321.
- 2024 Kushner, DB, **M Breitbart**, KM Debbink, MC Ferran, DM Johnson, LL Newcomb, LA O'Donnell. Development of learning objectives to support undergraduate virology curriculum guidelines. Journal of Microbiology and Biology Education. e00100-24.
- 2024 Rede, JE, **M Breitbart**, C Lundquist, K Nagasaki, I Hewson. Diverse RNA viruses discovered in multiple seagrass species. PLoS One. 19: e0302314.
- 2024 Varsani, A, B Harrach, P Roumagnac, M Benkő, **M Breitbart**, E Delwart, G Franzo, D Kazlauskas, K Rosario, J Segalés, E Dunay, J Rukundo, TL Goldberg, Enikő Fehér, E Kaszab, K Bányai, M Krupovic. 2024 update for taxonomy of the family *Circoviridae*. Archives in Virology. 169: 176.
- 2024 Lim, SJ, K Rosario, ME Kernbach, AJ Gross, BT Furman, **M Breitbart**. Limited potexvirus diversity in eastern Gulf of Mexico seagrass meadows. Journal of General Virology. 105:002004
- 2024 Ritchie, IT, B Vilanova-Cuevas, A Altera, K Cornfield, C Evans, JS Evans, M Hopson-Fernandes, CA Kellogg, E Looker, O Taylor, I Hewson, **M Breitbart**. Transglobal spread of an ecologically significant sea urchin parasite. The ISME Journal. 18: wræ024.
- 2024 Evans, JS, JJ Voelschow, IT Ritchie, **M Breitbart**, I Hewson, CA Kellogg. Evaluation of in vitro treatments against the causative agent of *Diadema antillarum* scuticociliatosis (DaSc). Diseases of Aquatic Organisms. 157: 107-112.

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- 2023 Nguyen, BVV, Y Liu, CD Stallings, **M Breitbart**, SA Murawski, RH Weisberg, M Kerr, E-M Bønnelycke, EB Peebles. Retention and export of planktonic fish eggs in the northeastern Gulf of Mexico. *Fisheries Oceanography*. 33: e12655.
- 2023 **Breitbart, M**, M Kerr, MJ Schram, I Williams, G Koziol, E Peebles, CD Stallings. Evaluation of DNA metabarcoding for identifying fish eggs: a case study on the West Florida Shelf. *PeerJ*. 11: e15016.
- 2023 Hewson, I, IT Ritchie, JS Evans, A Altera, D Behringer, E Bowman, M Brandt, KA Budd, RA Camacho, TO Cornwell, PD Countway, A Croquer, GA Delgado, C DeRito, E Duermit-Moreau, R Francis-Floyd, S Gittens Jr, L Henderson, A Hylkema, CA Kellogg, Y Kiryu, KA Kitson-Walters, P Kramer, JC Lang, H Lessios, L Liddy, D Marancik, S Nimrod, JT Patterson, M Pistor, IC Romero, R Sellares-Blasco, MLB Sevier, WC Sharp, M Souza, A Valdez-Trinidad, M van der Laan, B Vilanova-Cuevas, M Villalpando, SD Von Hoene, M Warham, T Wijers, SM Williams, TM Work, RP Yanong, S Zambrano, A Zimmermann, **M Breitbart**. A scuticociliate causes mass mortality of *Diadema antillarum* in the Caribbean Sea. *Science Advances*. 9: eadg3200.
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Books and Book Chapters

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Patents

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Recent Popular Press and Other Products

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<https://www.wusf.org/environment/2024-04-05/pandemic-sea-urchins-could-be-on-rise-florida-researchers> ; <https://www.npr.org/2024/04/17/1245366879/a-parasitic-disease-is-killing-off-sea-urchins-in-the-caribbean-and-the-sea-of-o>;
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- 2024 NEA-Creative Pinellas, Beyond Placemaking Grant Project
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- 2024 Art & Science Collaborations and artistic products (“Findings”) created about our sea urchin project: <https://www.usf.edu/marine-science/news/2024/cms-researchers-use-art-as-dynamic-tool-for-science-communication.aspx>
https://www.youtube.com/watch?v=Vvx5Mt_788E
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- 2022 Research highlighted in several blog posts: <https://www.usf.edu/marine-science/news/2022/mya-breitbart-virus-hunter-at-the-cms-named-distinguished-university-professor.aspx>; <https://www.usf.edu/marine-science/news/2022/viruses-thrive-in-aquatic-plants-in-floridas-springs.aspx>;
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- 2021 Featured on This Week in Virology podcast (<https://www.microbe.tv/twiv/twiv-804/>)
- 2021 Research highlighted in Nature News Feature (<https://www.nature.com/articles/d41586-021-01749-7>)
- 2021 Research highlighted in several blog posts: <https://www.usf.edu/marine-science/news/2021/cms-team-uncovers-new-insights-about-viruses-and-bacteria-in-manatee-springs-florida.aspx>; <https://www.usf.edu/marine-science/news/2021/leveling-the-playing-field-for-grad-students.aspx>;
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- 2021 Trubl, G., K. Stedman, K. Bywaters, P.J. Boston, J. Kaelber, S. Roux, J.B. Emerson, **M. Breitbart**, J. Yin, A. Janjic, P. Sommers, E. Rodriguez-Roman. Astrovirology: expanding the search for life. White Paper for the Planetary Science and Astrobiology Decadal Survey 2023-2032. Bulletin of the American Astronomical Society
- 2020 Featured on Finding Genius podcast
(<https://www.findinggeniuspodcast.com/podcasts/ocean-overview-dr-mya-breitbart-professor-of-biological-oceanography-at-the-university-of-south-florida-marine-microbes-bacteria-viruses-and-the-diversity-of-life-in-our-ocean/>)
- 2020 Closek, C., A. Djurhuus, **M. Breitbart**. How can we track life in the ocean? Science Journal for Kids and Teens.
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- 2020 Research highlighted in several blog posts: <https://www.usf.edu/marine-science/news/2020/matchmaker-matchmaker-make-me-a-match.aspx>; <https://www.theatlantic.com/science/archive/2020/02/oh-look-ton-giant-viruses-inside-your-mouth/606763/>; <https://www.usf.edu/marine-science/news/2020/scientists-conduct-first-census-of-viruses-and-bacteria-living-in-florida-springs.aspx>; https://issuu.com/usfucm/docs/usf_magazine_summer_2020; https://www.nsf.gov/discoveries/disc_summ.jsp?cntn_id=300716&org=NSF&from=news; <https://www.usf.edu/marine-science/news/2020/a-savenger-egg-hunt-in-the-gulf-of-mexico.aspx>
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- 2019 Research highlighted in several blog posts: <https://www.usf.edu/marine-science/news/2019/15-year-study-will-collect-fish-eggs-across-the-entire-west-florida-shelf-for-dna-barcoding-analysis.aspx>; <https://www.marine.usf.edu/news-and-events/crap-thats-a-lot-of-curry/>; <https://www.marine.usf.edu/news-and-events/researchers-discover-first-case-of-a-vertically-transmitted-virus-in-spiders/>; <https://www.marine.usf.edu/news-and-events/mya-breitbart-decoding-marine-mysteries-with-the-virus-hunter/>
- 2019 Outreach activities highlighted in several blog posts: <https://www.marine.usf.edu/blogs/girls-go-gaga-over-science/>; <https://www.marine.usf.edu/blogs/great-american-teach-in-largo-high-school/>; <https://www.marine.usf.edu/blogs/the-great-american-teach-in-2019/>

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Recent Presentations (underline indicates my graduate students, undergraduates, or post-docs)

- 2025 Lile-Delfino, M., M. Kerr, L. Alvarado-Marchena, **M. Breitbart**. “Let there be light: using agrobacterium-mediated transformation techniques to produce bioluminescence in plants. Poster presentation by Madeline Lile-Defino. 41st annual USF College of Marine Science Graduate Student Symposium. 1/25.
- 2025 Rodriguez, A., K. Keel, G. Zapfe, C. Stallings, **M. Breitbart**. “Evaluating fish egg community composition with respect to collection depth on the West Florida Shelf”. Poster presentation by Arianna Rodriguez. 41st annual USF College of Marine Science Graduate Student Symposium. 1/25.
- 2025 Baranowski, C., N. Sawaya, M. Kerr, G. Koziol, **M. Breitbart**, K. Buck, P.D. Chappell. “Using rDNA sequencing to identify changes in phytoplankton community composition and diversity in response to the Piney Point (Tampa Bay, Florida) emergency wastewater discharge in 2021. Poster presentation by Chrisa Baranowski. 41st annual USF College of Marine Science Graduate Student Symposium. 1/25.
- 2024 Lim, S.J., A. Rogers, K. Rosario, M. Kerr, M. Garrett, J. Koester, K.A. Hubbard, **M. Breitbart**. “Diversity of ssRNA viruses associated with *Karenia brevis* blooms in the coastal waters of southwest Florida.” Poster and lightning talk presentation by Jean Lim and Alexandra Rogers. ASM Microbe 2024. 6/24.
- 2024 Breitbart, M. “Viral discovery in the age of metagenomics”. University of South Florida Microbiomes Invited Seminar. 3/24.
- 2024 **Breitbart, M.** “A journey through the virosphere”. University of South Florida Distinguished University Professor Lecture. 2/24.
- 2024 Kerr, M. and **M. Breitbart**. “SEA to SEE: Exploring marine science through an artist’s eyes”. Poster presentation by Makenzie Kerr. 2024 Ocean Sciences Meeting. 2/24.
- 2024 Rodriguez, A., K. Keel, G. Zapfe, C. Stallings, **M. Breitbart**. “Evaluating fish egg community composition with respect to collection depth on the West Florida Shelf”. Poster presentation by Arianna Rodriguez. 2024 Ocean Sciences Meeting. 2/24.
- 2024 Keel, K., M. Kerr, L.Y. Liu, Y. Liu, J.P. Kilborn, G. Zapfe, E.B. Peebles, C.D. Stallings, **M. Breitbart**. “Exploring the dynamics of September fish spawning on the West Florida Shelf through the DNA barcoding of fish eggs”. Poster presentation by Keith Keel. 2024 Ocean Sciences Meeting. 2/24.
- 2024 Sawaya, N.A., S. Mahank, D. Lindell, **M. Breitbart**. “Quantification and diversity of a ubiquitous ssDNA phage group (*Gokushovirinae*) in the Red Sea”. Oral presentation by Natalie Sawaya. 2024 Ocean Sciences Meeting. 2/24.
- 2024 Caprara, S., **M. Breitbart**, C. Hu, K. Hubbard, C. Lembke, Y. Liu, R.H. Weisberg, J.P. Cannizzaro, M. Garrett, D. Navarro-Estrada, N. Murphy, K.N.

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- Buck. “Insights from repeat observations of trace metal concentrations in the eastern Gulf of Mexico”. Poster presentation by Salvo Caprara. 2024 Ocean Sciences Meeting. 2/24.
- 2024 Evans, J.S., I.T. Ritchie, J.J. Voelschow, **M. Breitbart**, I. Hewson, C. Kellogg. “Identifying treatments for use against *Philaster apodigitiformis*, the scuticociliate that caused mass mortality of *Diadema antillarum* in 2022”. Oral presentation by James Evans. 2024 Ocean Sciences Meeting. 2/24.
- 2024 Mitchem, A., K. Keel, M. Hopson-Fernandes, A. Rodriguez, M. Kerr, G. Zapfe, C. Stallings, **M. Breitbart**. “Analyzing spawning patterns of economically important fishes on the West Florida Shelf through DNA barcoding of fish eggs”. Poster presentation by Alexis Mitchem. 2024 Ocean Sciences Meeting. 2/24
- 2024 Alvarado, L., I.T. Ritchie, S.J. Lim, V.M. Congdon, B.T. Furman, K. Rosario, **M. Breitbart**. “Turtlegrass virus X: A novel potexvirus infecting the seagrass *Thalassia testudinum*”. Poster presentation by Luis Alvarado. 2024 Ocean Sciences Meeting. 2/24.
- 2024 Hewson, I., A.K. Altera, C.M. DeRito, J.S. Evans, M. Hopson-Fernandes, C. Kellogg, K.H. Philipp, I.T. Ritchie, S.J. Lim, B. Vilanova-Cuevas, **M. Breitbart**. “Environmental surveys and culture recruitment reveal sympatric reservoirs of *Philaster apodigitiformis*, the causative agent of *Diadema antillarum* mass mortality”. Oral presentation by Ian Hewson. 2024 Ocean Sciences Meeting. 2/24.
- 2024 Ritchie, I.T., B. Vilanova-Cuevas, A. Altera, K. Cornfield, C. Evans, J.S. Evans, M. Hopson-Fernandes, C.A. Kellogg, E. Looker, O. Taylor, I. Hewson, **M. Breitbart**. “The ciliate (*Philaster apodigitiformis*) responsible for the 2022 *Diadema antillarum* mass mortality event also induces scuticociliatosis in *Diadema setosum*”. 2024 Ocean Sciences Meeting. 2/24.
- 2024 Lim, S.J., A. Rogers, K. Rosario, M. Kerr, M. Garrett, J. Koester, K.A. Hubbard, **M. Breitbart**. “RNA viruses associated with *Karenia brevis* harmful algal blooms in the coastal waters of Southwest Florida”. Poster presentation by Jean Lim and Alexandra Rogers. Gulf of Mexico Conference. 2/24.
- 2024 Keel, K., M. Kerr, L.Y. Liu, Y. Liu, J.P. Kilborn, G. Zapfe, E.B. Peebles, C.D. Stallings, **M. Breitbart**. “Exploring the dynamics of September fish spawning on the West Florida Shelf through the DNA barcoding of fish eggs”. Poster presentation by Keith Keel. 40th annual USF College of Marine Science Graduate Student Symposium. 2/24.
- 2024 Sawaya, N.A., S. Mahank, D. Lindell, **M. Breitbart**. “Quantification and diversity of a ubiquitous ssDNA phage group (*Gokushovirinae*) in the Red Sea”. Oral presentation by Natalie Sawaya. 40th annual USF College of Marine Science Graduate Student Symposium. 2/24.

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- 2024 Ritchie, I.T., B. Vilanova-Cuevas, A. Altera, K. Cornfield, C. Evans, J.S. Evans, M. Hopson-Fernandes, C.A. Kellogg, E. Looker, O. Taylor, I. Hewson, **M. Breitbart**. “The ciliate (*Philaster apodigitiformis*) responsible for the 2022 *Diadema antillarum* mass mortality event also induces scuticociliatosis in *Diadema setosum*”. Oral presentation by Isabella Ritchie. 40th annual USF College of Marine Science Graduate Student Symposium. 2/24.
- 2024 Mitchem, A.B., A. Rodriguez, K. Keel, M. Hopson-Fernandes, M. Kerr, G. Zapfe, C.D. Stallings, **M. Breitbart**. “Analyzing spawning patterns of economically important fishes on the West Florida Shelf using DNA barcoding”. Oral presentation by Alexis Mitchem. 40th annual USF College of Marine Science Graduate Student Symposium. 2/24.
- 2024 Stallings, C., **M. Breitbart**, E. Peebles. “Spawning Habitat and Early-life Linkages to Fisheries (SHELF III)”. Oral presentation by Chris Stallings. Florida RESTORE Act Centers of Excellence Meeting. 1/24.
- 2024 Mitchem, A.B., A. Rodriguez, K. Keel, M. Hopson-Fernandes, M. Kerr, G. Zapfe, C.D. Stallings, **M. Breitbart**. “Analyzing Spawning Patterns of Economically Important Fishes on the West Florida Shelf using DNA barcoding”. Oral presentation by Alexis Mitchem and Arianna Rodriguez. Florida RESTORE Act Centers of Excellence Meeting. 1/24
- 2023 **Breitbart, M.** “Deciphering the dissolved: discovery, diversity, and dynamics of aquatic viruses”. Invited keynote speaker. Hillsborough Community College SEA-PHAGES Symposium. 11/23.
- 2023 **Breitbart, M.** and C. Ross. “Seagrass-associated microbes”. Invited oral presentation. Tampa Bay Estuary Program Technical Advisory Committee Meeting. 10/23.
- 2023 Kushner, D.B., **M. Breitbart**, T.D. Cline, K.M. Debbink, M.C. Ferran, D.M. Johnson, M.S. Maginnis, S. Mukhopadhyaya, L.L. Newcomb, L.A. O’Donnell, J.S.L. Parker, R. Visalli. “Lab curriculum guidelines, and lower- and higher-order learning outcomes, for virology courses”. Poster presentation by David Kushner. American Society for Virology. 6/23.
- 2023 Hewson, I., **M. Breitbart**, C. DeRito, J.S. Evans, C.A. Kellogg, Y. Kiryu, J. Patterson, I.T. Ritchie, B. Vilanova Cuevas. “Identification of *Philaster apodigitiformis* (Protozoa, Ciliophora) as the causative agent of the Caribbean-wide 2022 *Diadema antillarum* mass mortality”. Oral presentation by Ian Hewson. American Society for Microbiology Annual Meeting. 6/23.
- 2023 Evans, J.S., **M. Breitbart**, I. Hewson, I.T. Ritchie, J.J. Voelschow, C.A. Kellogg. “Efficacy of in vitro treatments for the scuticociliate responsible for mass mortality of the long-spined sea urchin *Diadema antillarum*”. Oral presentation by James Evans. American Society for Microbiology Annual Meeting. 6/23.

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- 2023 **Breitbart, M.**, K. Rosario, I.T. Ritchie, N. Van Bogaert. “Eukaryotic viruses associated with aquatic plants”. Aquatic Virus Workshop. 5/23.
- 2023 Keel, K., M. Kerr, G. Zapfe, C. Stallings, E. Peebles, **M. Breitbart**. “Assessing fall spawning dynamics of fishes on the West Florida Shelf using DNA Barcoding”. Oral presentation by Keith Keel. Florida Chapter of the American Fisheries Society 43rd Annual Meeting. 5/23. Oral presentation by Keith Keel, earned Power Tie Award.
- 2023 Parente, C., S. Caprara, K. Buck, **M. Breitbart**. “Vibrio natriegens as a model host for examining marine virus-trace metal interactions”. Oral presentation by Caitlyn Parente. Vnat2023 Virtual Conference. 3/23.
- 2023 Ritchie, I.T., I. Hewson, J.S. Evans, Y. Kiryu, C.A. Kellogg, **M. Breitbart**. “Investigation into the causative agent of the 2022 *Diadema antillarum* mass mortality event”. Oral presentation by Isabella Ritchie. 39th Annual USF College of Marine Science Graduate Student Symposium. 1/23.
- 2023 Parente, C., S. Caprara, K. Buck, **M. Breitbart**. “Investigating marine phage as a potential form of dissolved iron in the ocean”. Oral presentation by Caitlyn Parente. 39th Annual USF College of Marine Science Graduate Student Symposium. 1/23.
- 2023 Keel, K., M. Kerr, G. Zapfe, C. Stallings, E. Peebles, **M. Breitbart**. “Assessing fall spawning dynamics of fishes on the West Florida Shelf using DNA barcoding”. Oral presentation by Keith Keel. 39th Annual USF College of Marine Science Graduate Student Symposium. 1/23.
- 2023 Keel, K., M. Kerr, G. Zapfe, C. Stallings, E. Peebles, **M. Breitbart**. “Assessing fall spawning dynamics of fishes on the West Florida Shelf using DNA barcoding”. Oral presentation by Keith Keel. Florida RESTORE Act Centers of Excellence Meeting. 1/23.
- 2023 Stallings, C., **M. Breitbart**, S. Murawski, E. Peebles. “SHELF: Spawning Habitat and Early-life Linkages to Fisheries”. Oral presentation by Chris Stallings. Florida RESTORE Act Centers of Excellence Meeting. 1/23.
- 2022 **Breitbart, M.** “Viral discovery in the age of metagenomics”. Invited speaker, Rice University Department of Biosciences. 5/22.
- 2022 **Breitbart, M.** “Uncovering the hidden curriculum: a professional development course for first year graduate students”. Invited speaker, USF Geosciences Symposium. 1/22.
- 2021 **Breitbart, M.** “Marine virus hunting”. Invited speaker, Florida SouthWestern State College, National Academy of Biology Teachers Club Seminar. 11/21.
- 2021 Sawaya, N.A., N. Baran, S. Mahank, A. Varsani, D. Lindell, **M. Breitbart**. “Application of the polony technique to quantify *Gokushovirinae*, a diverse group of single-stranded DNA phages”. Oral presentation by Natalie Sawaya. Evergreen

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Phage Meeting. 8/21.

- 2021 Sawaya, N.A., N. Baran, S. Mahank, A. Varsani, D. Lindell, **M. Breitbart**. “Application of the polony technique to quantify Gokushovirinae, a diverse group of single-stranded DNA phages”. Oral presentation by Natalie Sawaya. Aquatic Virology Workshop, Japan. 7/21.
- 2021 **Breitbart, M.** “Viral discovery in the age of metagenomics”. Invited speaker, University of Pennsylvania. 5/21.
- 2021 Harwood, V.J., **M. Breitbart**, M.R. Cairns, E.M. Symonds, J. Gallard-Góngora, A. González-Fernández, D. Mora-Alvarado, P. Rivera-Navarro, J.O. Lukasik, B. Mull, G. Ulmer, M. Brown. “MERA – an integrated, transdisciplinary study of water quality and human health at a tropical beach”. National Recreational Water Quality Workshop. 4/21.
- 2021 **Breitbart, M.** “Environmental microbiomes”. Invited speaker, USF Corporate Forum on Microbiomes and the Environment. 3/21.
- 2021 **Breitbart, M.**, N. Yonas, P. Boleman, Y. Nguyen, M. Kerr, K. Malki, A.M. Greco, K.N. Buck. “Isolation, characterization, and genome sequencing of *Vibrio natriegens* phage aquatic killer 99 (vB_VnaS-AQKL99)”. Invited speaker, Vnat 2021. 2/21.
- 2021 **Breitbart, M.** “Viral discovery in the age of metagenomics”. Invited speaker, University of Michigan. 1/21.
- 2021 **Breitbart, M.** “Viral discovery in the age of metagenomics”. Invited speaker, University of Alabama at Birmingham. 1/21.
- 2021 **Breitbart, M.** “Viral discovery in the age of metagenomics”. Invited speaker, University of Michigan. 1/21.
- 2021 **Breitbart, M.** “Deciphering the dissolved: discovery, diversity, and dynamics of marine viruses”. Invited speaker, Marine Biological Laboratory. 1/21.
- 2021 **Breitbart, M.** “Marine virus hunting”. Invited talk for West Port High School. Ocala, FL. 1/21.
- 2020 **Breitbart, M.**, K.N. Buck, C. Chase, S. Caprara, Y. Nguyen. “Deciphering the “Dissolved”: Virus-iron interactions in the oceans “. Invited speaker, AGU Fall Meeting. 12/20.
- 2020 Cooke, M.L., C.J. Bell, **M. Breitbart**, E. Cooperdock, N.E. Levin, A.M.S. Marshall, N.A. Niemi, L.M. Stevens. “Making the hidden curriculum transparent through 1st year courses for geosciences graduate students”. Geological Society of America. 10/20.
- 2020 Yonas, N. and **M. Breitbart**. “Analysis & report of the complete genome sequences of *Vibrio* phage Aquatic Killer and *Bdellovibrio* phage VAMYR & WEREWLF.” NSURP poster presentation. *Awarded Honorable Mention.

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- 2020 **Breitbart, M., K. Malki, N. Sawaya, K. Buck, S. Caprara, Y. Nguyen, C. Chase.** “Deciphering the “dissolved”: ecological roles of aquatic viruses”. Invited talk at the Keystone Symposium on the Global Virome in Health and Disease. Tahoe City, CA. 3/20.
- 2020 **Rosario, K., N. Lopez, N. Van Bogaert, M. Breitbart.** “Eukaryotic viruses associated with aquatic plants”. Poster presentation by K. Rosario. Keystone Symposium on the Global Virome in Health and Disease. Tahoe City, CA. 3/20.
- 2019 **Mahank, S., N.A. Sawaya, N. Baran, D. Lindell, M. Breitbart.** “Perfecting the Polony Method: A way of quantifying single-stranded DNA (ssDNA) bacteriophage (*Gokushovirinae*) to better understand their ecological roles”. Oral presentation by S. Mahank. Annual Meeting of the Florida Branch of the American Society for Microbiology. Clearwater, Florida. 10/19.
- 2019 **Boleman, P., Y. Nguyen, A. Greco, M. Breitbart.** “Isolation and complete genome sequencing of a novel marine phage infecting *Vibrio natriegens*”. Poster presentation by P. Boleman. Annual Meeting of the Florida Branch of the American Society for Microbiology. Clearwater, Florida. 10/19.
- 2019 **Willett, E., S. Goldsmith, K. Rosario, A.M. Greco, M. Breitbart.** “Comparison of polyethylene glycol and iron chloride precipitation for concentrating single- and double-stranded DNA viruses from environmental waters”. Poster presentation by E. Willett and S. Goldsmith. Annual Meeting of the Florida Branch of the American Society for Microbiology. Clearwater, Florida. 10/19.
- 2019 **Koziol, G., K. Malki, A.M. Greco, B.A. Fane, M.O. Martin, M. Breitbart.** “Complete genome sequences of vB_BdbM-Alien and vB_BdbM-Predator: dwarf myoviruses infecting *Bdellovibrio bacteriovorus*”. Poster presentation by G. Koziol. Annual Meeting of the Florida Branch of the American Society for Microbiology. Clearwater, Florida. 10/19.
- 2019 **Symonds, E.M., P.N. Rivera, G. Ulmer, A.F. González., J. Gallard, M. Brown, B. Mull, J.O. Lukasik, D. Mora A., V.J. Harwood, M. Breitbart, M.R. Cairns.** “The MERA Investigation: A transdisciplinary approach to tropical beach management”. Poster presentation by E.M. Symonds. 20th International Symposium on Health Related Water Microbiology. Vienna, Austria. 9/19.
- 2019 **Lopez-Figueroa, N.B., K. Rosario, H. Paliogiannis, N. Van Bogaert, M. Kerr, M. Breitbart.** “Exploring viral diversity in submerged aquatic vegetation in Florida’s springs”. Oral presentation by N. Lopez-Figueroa. Ecological Society of America Annual Meeting. Louisville, KY. 8/19.
- 2019 **Malki, K., K. Rosario, N. Sawaya, M. Tisza, A. Szekely, M. Breitbart.** “Exploring the viral and microbial communities of Florida’s freshwater springs”. Oral presentation by K. Malki. 23rd Biennial Evergreen International Phage Meeting. Olympia, WA. 8/19.

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- 2019 Sawaya, N.A., N. Baran, S. Mahank, D. Lindell, **M. Breitbart**. “Quantification and diversity of a ubiquitous ssDNA phage group (*Gokushovirinae*) in the Red Sea”. Poster presentation by N.A. Sawaya. 23rd Biennial Evergreen International Phage Meeting. Olympia, WA. 8/19.
- 2019 Rosario, K., K.A. Mettel, A.M. Greco, **M. Breitbart**. “Prevalence of a vertically transmitted single-stranded DNA virus in spinybacked orbweavers (*Gasteracantha cancriformis*) from Florida, USA”. Poster presentation by K. Rosario. Gordon Conference on Animal-Microbe Symbioses. West Dover, VT. 6/19.
- 2019 Rosario, K., N. Fierer, S. Miller, J. Luongo, **M. Breitbart**. “Metagenomic analysis of DNA and RNA viruses in indoor air “. Invited oral presentation by K. Rosario. Viruses in the Built Environment (VIBE) workshop. Virginia Tech, VA. 5/19.
- 2019 **Breitbart, M.** “The Marvels of Marine Phage”. Invited oral presentation. 5th Annual Florida Regional SEA PHAGES Symposium. Tampa, Florida. 4/19.
- 2019 Mahank, S., N. Sawaya, N. Baran, D. Lindell, **M. Breitbart**. “Perfecting the polony method to quantify marine viruses”. Poster presentation by S. Mahank. USFSP 16th Annual Student Research Symposium. St Petersburg, Florida. 4/19.
- 2019 Sawaya, N.A., N. Baran, M. Carlson, D. Lindell, **M. Breitbart**. "Optimization of the polony technique for quantification of ssDNA gokushoviruses in the Red Sea". Poster presentation by N. Sawaya. USF Genomics Symposium. Tampa, Florida. 3/19.
- 2019 López Figueroa, N., K. Rosario, N. Van Bogaert, M. Kerr, H. Paliogiannis, **M. Breitbart**. "Exploring viral diversity in submerged aquatic vegetation in Florida's springs". Poster presentation by N. Lopez Figueroa. USF Genomics Symposium. Tampa, Florida. 3/19.
- 2018 Burrows, M., J. Browning, M. Armenteros, S. Murawski, **M. Breitbart**. “DNA barcoding of fish eggs collected off northwest Cuba and across the Florida straits during May 2017”. Oral presentation by M. Burrows. MarCuba. Havana, Cuba. 10/18.
- 2018 **Breitbart, M.** “Short stories in marine viral ecology”. Invited plenary speaker. American Society for Virology Annual Meeting. College Park, Maryland. 7/18.
- 2018 **Breitbart, M.** “Welcome to the jungle: Wild viruses bend the bars of taxonomic cages”. Invited symposium speaker. American Society for Virology Annual Meeting. College Park, Maryland. 7/18.
- 2018 Malki, K., K. Rosario, N. Sawaya, A. Djurhuus, A. Szekely, **M. Breitbart**. "Exploring the viral and bacterial communities in Florida’s freshwater springs". Oral presentation by K. Malki. Aquatic Virus Workshop 9. Lincoln, Nebraska. 6/18.

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- 2018 Djurhuus, A., B. Leigh, M. Kavanaugh, **M. Breitbart**. "Biogeography of viral communities trace seascapes with time". Oral presentation by A. Djurhuus. Aquatic Virus Workshop 9. Lincoln, Nebraska. 6/18.
- 2018 Sawaya, N.A., N. Baran, M. Carlson, D. Lindell, **M. Breitbart**. "Optimization of the polony technique for quantification of ssDNA gokushoviruses in the Red Sea". Poster presentation by N. Sawaya. Aquatic Virus Workshop 9. Lincoln, Nebraska. 6/18.
- 2018 López Figueroa, N., K. Rosario, N. Van Bogaert, M. Kerr, H. Paliogiannis, M. Breitbart. "Exploring viral diversity in submerged aquatic vegetation in Florida's springs". Poster presentation by N. Lopez Figueroa. Aquatic Virus Workshop 9. Lincoln, Nebraska. 6/18.
- 2018 Gallard-Gongora, J., A. Gonzalez-Fernandez, D. Mora-Alvarado, P. Rivera-Navarro, J. Lukasik, B. Mull, J. Peraud, E.M. Symonds, G. Ulmer, M. Brown, M. Breitbart, M. Cairns, and V.J. Harwood. "Fecal indicator and pathogen analysis to inform an interdisciplinary study of water quality and human health risk in Costa Rica". Water Microbiology Conference. Chapel Hill, North Carolina, USA. Oral presentation by J. Gallard-Gongora. 5/18.
- 2018 Van Bogaert, N., K. Rosario, B.T. Furman, M.O. Hall, A.M. Greco, M. Breitbart. "Discovery, prevalence and biogeographical distribution of viruses in the seagrass *Thalassia testudinum*". Poster presentation by N. Van Bogaert. 2018 Ocean Sciences Meeting. Portland, Oregon. 2/18.
- 2018 Djurhuus, A., K. Pitz, N.A. Sawaya, J. Rojas-Marquez, B. Michaud, E. Montes, F. Muller-Karger, M. Breitbart. "Evaluation of marine zooplankton community structure through environmental DNA metabarcoding". Poster presentation by A. Djurhuus. 2018 Ocean Sciences Meeting. Portland, Oregon. 2/18.
- 2018 Burrows, M., J. Browning, E. Peebles, M. Breitbart. "Fish egg DNA barcoding to support Gulf reef-fish stock assessments". Oral presentation by M. Burrows. 2018 USF College of Marine Science Graduate Student Symposium. Saint Petersburg, Florida. 1/18.
- 2017 Kerr, M., K. Rosario, M. Breitbart. "Discovery of single-stranded DNA viruses in fungus-farming termites". Oral presentation by M. Kerr. The 103rd Annual Southeastern Branch American Society for Microbiology Meeting. Saint Petersburg, Florida. 11/17.
- 2017 Mettel, K., K. Rosario, C. Baker, M. Breitbart. "Discovery and prevalence of single-stranded DNA viruses associated with spinybacked orbweavers (*Gasteracantha cancriformis*) from Florida, USA. The 103rd Annual Southeastern Branch American Society for Microbiology Meeting. Saint Petersburg, Florida. 11/17.

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- 2017 Rosario, K., N. Fierer, S. Miller, J. Luongo, **M. Breitbart**. “Diversity of viruses circulating in indoor air as assessed via metagenomic sequencing”. The 103rd Annual Southeastern Branch American Society for Microbiology Meeting. Saint Petersburg, Florida. 11/17.
- 2017 Koziol, G., K. Malki, **M. Breitbart**. “Culturing and identifying bacteria from Florida’s freshwater springs”. Florida Branch Meeting of the American Society for Microbiology Meeting. Saint Petersburg, FL. 10/17.
- 2017 Sawaya, N., A. Djurhuus, C. Closek, M. Hepner, E. Olesin, L. Visser, C. Kelble, K. Hubbard, **M. Breitbart**. “Assessing biodiversity in the Florida Keys National Marine Sanctuary through environmental DNA metabarcoding”. International Council for the Exploration of the Sea (ICES) Conference. Fort Lauderdale, FL. 10/17.
- 2017 Burrows, M., J.S. Browning, **M. Breitbart**, E.B. Peebles. “Egg and Larval DNA Barcoding to Support Gulf Reef-Fish Stock Assessments”. Oral presentation by M. Burrows. 147th Annual Meeting of the American Fisheries Society. Tampa, Florida. 8/17.
- 2017 Malki, K., M. Martin, B. Fane, **M. Breitbart**. “Characterization of *Bdellovibrio bacteriovorus* phage”. Poster presentation by K. Malki. 22nd Biennial Evergreen International Phage Meeting. Olympia, WA. 8/17.
- 2017 Leigh, B.A., Z. Graham, A. Liberti, **M. Breitbart**, L.J. Dishaw. “Unraveling a role for prophages in shaping gut microbiomes”. Oral presentation by B. Leigh. 22nd Biennial Evergreen International Phage Meeting. Olympia, WA. 8/17.
- 2017 Bonnain, C., S. Caprara, K.N. Buck, **M. Breitbart**. “Testing the ferrojan horse hypothesis: Iron-virus interactions in the oceans”. Oral presentation by C. Bonnain. 22nd Biennial Evergreen International Phage Meeting. Olympia, WA. 8/17.
- 2017 Leigh, B.A., Z. Graham, A. Liberti, J.P. Cannon, **M. Breitbart**, L.J. Dishaw. “*Ciona intestinalis*: a model system for dissecting the roles of prophages in modulating host-associated microbial communities”. Animal-Microbe Symbiosis Gordon Research Conference. West Dover, VT. 6/17.
- 2017 Symonds, E.M., S. Young, M.E. Verbyla, S.M. McQuaig-Ulrich, E. Ross, J.A. Jimenez, V.J. Harwood, and **M. Breitbart**. “Fecal Pollution and Microbial Source Tracking in Shellfish Harvesting Waters in the Gulf of Nicoya, Costa Rica”. Oral presentation by E. Symonds. Water Microbiology Conference, Chapel Hill, NC.
- 2017 **Breitbart, M.** “Virus hunting in the age of metagenomics”. Invited plenary speaker, University of Tampa Undergraduate Research Symposium. Tampa, FL. 4/17.

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- 2017 **Breitbart, M.** “Small but significant: single-stranded DNA viruses in the environment”. Oral presentation. Ninth workshop on Virus Evolution. State College, PA. 3/17.
- 2017 Rosario, K. and **Breitbart, M.** “Exploring the diversity of circular single-stranded DNA viruses in insects”. Oral presentation by K. Rosario. Ninth workshop on Virus Evolution. State College, PA. 3/17.
- 2017 Djurhuus, A., B. Leigh, M. Kavanaugh, **M. Breitbart**. “Seascape-informed analysis of viral communities on the west Florida shelf” Poster presentation by A. Djurhuus. ASLO Ocean Sciences Meeting. Honolulu, HI. 2/17.
- 2017 Sosnowski, A., **M. Breitbart**, H. Judkins, M. Vecchione. “Genetic identification and population characteristics of deep-sea cephalopod species in the Gulf of Mexico and northwestern Atlantic Ocean. Poster presentation by A. Sosnowski. GOMOSSES Conference. New Orleans, LA. 2/17.
- 2016 Burrows, M., E. Fahsbender, **M. Breitbart**. “Genomic variation of the chelonid fibropapillomatosis-associated herpesvirus”. Oral presentation by M. Burrows. Florida Branch Meeting of the American Society for Microbiology Meeting. Miami, FL. 10/16.
- 2016 Fahsbender, E., K. Rosario, **M. Breitbart**. “The use of vector-enabled metagenomics (VEM) for surveillance of animal and plant viruses”. Oral presentation by E. Fahsbender. Florida Branch Meeting of the American Society for Microbiology Meeting. Miami, FL. 10/16.
- 2016 Leigh, B., Z. Graham, A. Creasy, A. Liberti, J. P. Cannon, G. W. Litman, **M. Breitbart**, and L. J. Dishaw. Exploring phage roles in the gut of a marine protochordate, *Ciona intestinalis*. Oral presentation by B. Leigh. American Society of Microbiology Conference on Beneficial Microbes. Seattle, WA. 9/16.
- 2016 Creasy, A. B. Leigh, A. Liberti, Z. Graham, J. Cannon, G. Litman, **M. Breitbart**, L.J. Dishaw. “Dissecting ecological principles of gut bacteria in *Ciona intestinalis*”. Poster presentation by A. Creasy. American Society of Microbiology Conference on Beneficial Microbes. Seattle, WA. 9/16.
- 2016 Verbyla, M.E. E.M. Symonds, R.C. Kafle, M.R. Cairns, M. Iriarte, A. Mercado, O. Coronado, **M. Breitbart**, C. Ledo, and J.R. Mihelcic. Managing microbial risks from indirect wastewater reuse for irrigation using riverbank filtration. Oral presentation by E. Symonds. Aerobic Spores and Other Microbial Indicators to Determine Ground Water Under the Direct Influence of Surface Water (GWUDI), Riverside, California, USA. 2016.
- 2016 Leigh, B., Z. Graham, A. Creasy, A. Liberti, J. P. Cannon, G. W. Litman, **M. Breitbart**, and L. J. Dishaw. Exploring prophage roles at the onset of gut colonization in a marine protochordate, *Ciona intestinalis*. Oral presentation by B. Leigh. 8th Aquatic Virus Workshop. Plymouth, UK. 7/16.

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- 2016 Bonnain, C., K.N. Buck, **M. Breitbart**. “The ferrojan horse hypothesis: iron-virus interactions in the ocean”. Poster presentation by C. Bonnain. 8th Aquatic Virus Workshop. Plymouth, UK. 7/16.
- 2016 **Breitbart, M.** “Short stories in marine viral ecology”. Invited oral presentation. 8th Aquatic Virus Workshop. Plymouth, UK. 7/16.
- 2016 **Breitbart, M.** “Virus hunting in the age of metagenomics”. Invited oral presentation. University of Liverpool. 7/16.
- 2016 **Breitbart, M.** “Marine viral diversity and spatiotemporal variability”. Invited oral presentation. Viruses of Microbes. Liverpool, UK. 7/16.
- 2016 Leigh, B., Z. Graham, A. Creasy, A. Liberti, J. P. Cannon, G. W. Litman, **M. Breitbart**, and L. J. Dishaw. “*Ciona intestinalis*: a new model system for dissecting the roles of phages in modulating host-associated microbial communities”. Oral presentation by B. Leigh. Viruses of Microbes. Liverpool, UK. 7/16.
- 2016 Bonnain, C., K.N. Buck, **M. Breitbart**. “The ferrojan horse hypothesis: iron-virus interactions in the ocean”. Poster presentation by C. Bonnain. Viruses of Microbes. Liverpool, UK. 7/16.
- 2016 Fahsbender, E.M., P. Jernigan, B. Stacy, J. Keene, L. Byrd, T. Norton, A. Page-Karjian, L. Iwanowicz, D. Iwanowicz, R.S. Cornman, T.M. Work, L. Sanders, J. Casey, C. Adams, M. Ackermann, C. Morrison, **M. Breitbart**. “Genomic variation of chelonid fibropapillomatosis-associated herpesvirus CFPHV among three different Florida sea turtle species”. International Sea Turtle Society Symposium, Lima, Peru. 2016.
- 2016 Symonds, E.M., E. Ross Salazar, J.A. Jimenez, V.J. Harwood, **M. Breitbart**. Conjunto de herramientas para el rastreo de fuentes de contaminación microbiana para la identificación de contaminación fecal en la costa del Pacífico de Costa Rica (Microbial source tracking toolbox for the identification of fecal pollution for the Pacific coast of Costa Rica). Oral presentation by E. Symonds. 59^o Congreso Internacional Asociación Colombiana de Ingeniería Sanitaria y Ambiental & Asociación Interamericana de Ingeniería Sanitaria y Ambiental XXXV Congreso Interamericano de Ingeniería Sanitaria y Ambiental, Cartagena, Colombia 2016.
- 2016 **Breitbart, M.** “Sequences without particles: virus taxonomy in the age of metagenomics”. ICTV Conference on Metagenomics and Taxonomy. Boston, MA. 5/16.
- 2016 Symonds, E.M. C. Sinigalliano, M. Gidley, W. Ahmed, S.M. McQuaig-Ulrich, **M. Breitbart**. Performance of a pepper mild mottle virus RT-qPCR method in coastal waters exposed to untreated wastewater pollution and its simulated risk of

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- gastrointestinal illness. Poster presentation by E. Symonds. Annual American Society of Microbiology Microbes Meeting, Massachusetts, USA. 5/16.
- 2016 **Breitbart, M.** “Ctenophore-associated bacteria and viruses”. Ctenopalooza. St. Augustine, FL. 3/16.
- 2016 Djurhuus, A., D. Goldsmith, N. Sawaya, **M. Breitbart**. “Estimating diversity of Florida Keys zooplankton using new environmental DNA methods”. Oral presentation by A. Djurhuus. 2016 Ocean Sciences Meeting. New Orleans, LA. 2/16.
- 2016 Chavez, F., J. Port, **M. Breitbart**, K. Yamahara. “From microbes to whales: using genomics to track changing marine biodiversity”. Poster presentation by F. Chavez. 2016 Ocean Sciences Meeting. New Orleans, LA. 2/16.
- 2016 Bonnain, C., K. Buck, **M. Breitbart**. “Iron-virus interactions in the oceans”. Poster presentation by C. Bonnain. 2016 Ocean Sciences Meeting. New Orleans, LA. 2/16.
- 2016 Muller-Karger, F., F. Chavez, S. Gittings, S. Doney, M. Kavanaugh, E. Montes, **M. Breitbart**, B. Kirkpatrick, D. Anderson, M. Tartt. “National marine sanctuaries as sentinel sites for a demonstration marine biodiversity observation network (MBON). Poster by F. Muller-Karger. 2016 Ocean Sciences Meeting. New Orleans, LA. 2/16.
- 2016 **Breitbart, M.** “Bright ideas STEM from today’s youth”. Invited plenary talk. Bright House Networks Bright Ideas Semi-Finalist Competition. Tampa, FL. 1/16.
- 2015 **Breitbart, M.** “Human beings or microbial masses?” Invited talk. Pint of Science US. Tampa, FL. 10/15.
- 2015 **Breitbart, M.** “Exploiting insect vectors and predators for virus discovery”. Invited plenary talk. American Society for Virology Meeting. London, Canada. 7/15.
- 2015 **Breitbart, M.** “Overlooked partners: Viruses and Fungi”. Invited talk. Gordon Research Conference on Animal-Microbe Symbioses. Waterville Valley, NH. 7/15.
- 2015 **Breitbart, M.** “Marine viral diversity and spatiotemporal variability”. Invited Division M Lecturer at the American Society for Microbiology General Meeting. New Orleans, LA. 6/15.
- 2015 **Breitbart, M.** “We are outnumbered: microbial puppeteers of the universe”. Invited talk. Pint of Science US. Saint Petersburg, FL. 5/15.
- 2015 **Breitbart, M.** “Marine viral diversity and spatiotemporal variability”. Invited seminar. New College. Sarasota, FL. 5/15.

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- 2015 **Breitbart, M.** “Marine viral diversity and spatiotemporal variability”. Invited keynote lecture. Investigations of Host-Microbe Interactions XXVII. Cape Canaveral, FL. 3/15.
- 2015 **Breitbart, M.** “Phage Phutures”. Year of the Phage Meeting. San Diego, CA. 1/15.