### Updated 1/20/12

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### Education

University of California San Diego	Cell and Molecular Biology	Ph.D. 2006
& San Diego State University		
Florida Institute of Technology	Biology	B.S. 2000

#### Appointments

Assistant Professor at the University of South Florida

January 2006-present

#### Awards

Kavli Frontiers Fellow. National Academy of Sciences. 2009 and 2010.
"Each One Teach One" Phenomenal Woman Award, University of South Florida Saint Petersburg. 2009.
Outstanding Research Achievement Award, University of South Florida. 2008.
Alfred P. Sloan Research Fellow. 2007.
Genome Technology Magazine's Young Investigator Award. 2006.
Achievement Rewards for College Scientists. 2005-2006.

### **Professional Activities**

USF Senate Research Council of Reviewers. 2012-present.

Elected Member of the Executive Committee of the International Committee on the Taxonomy of Viruses. 2011-present. (Member of the Anellovirus and Circoviridae Subgroups) President for the Florida Branch of the American Society for Microbiology. 2011-present.

Co-organizer of the 19<sup>th</sup> Evergreen International Phage Biology Meeting. 2011.

Presentation judge for the USF 9<sup>th</sup> Annual Undergraduate Research Symposium, 2011.

Organizing committee member for the National Academy of Science's Kavli Frontiers in Science Meeting. 2011.

Member of the USF Graduate School Recruitment Consortium. 2011-present.

Member of the USF Phytoplankton Ecologist Search Committee. 2011.

Mentor for the STREAMS (Supporting Talented and Remarkable Environmental and Marine Science Students) Scholarship Program. 2009-present.

Faculty Advisor to the CMS Postdoctoral Researcher Association. 2009-present.

Member of the USF College of Marine Science Dean Search Committee. 2009-present. Scientific Member of the USF/Mote Affiliation Committee. 2009-present. Proposal Enhancement Program (PEP) Expert for the USF Research Council. 2009-present. Co-organizer of the 18<sup>th</sup> Evergreen International Phage Biology Meeting. 2009. Vice-President for the Florida Branch of the American Society for Microbiology. 2008-2010. Member of initiating group for the Tampa Bay ARCS (Achievement Rewards for College Scientists) Foundation. 2007-present. Website development and maintenance for USF College of Marine Science. 2007-2009. Member of the USF University Laboratory and Field Safety Committee. 2007-present. Marine Science Advisory Committee (MSAC) Faculty Advisor. 2007-present. (MSAC was recognized with the USF 2008-2009 Outstanding Student Organization Award) Member of Florida Aquarium's Conservation and Research Advisory Committee. 2007-present. Member of the STREAMS (Supporting Talented and Remarkable Environmental and Marine Science Students) Scholarship Program Advisory Board. 2007 - present. Chair of Graduate Student Recruitment Weekend, USF College of Marine Science. 2006-present. Faculty advisory committee for the CMS Graduate Student Symposium. 2008 - 2009. Secretary for the Florida Branch of the American Society for Microbiology. 2006-2008. Member of the USF Strategic Planning Committee. 2007. Ad hoc reviewer for Trends in Microbiology, Limnology and Oceanography, Environmental Microbiology, Aquatic Microbial Ecology, Molecular Biology and Evolution, Reviews in Medical Virology, FEMS Microbiology Ecology, Journal of Virological Methods, Journal of General Virology, Marine Ecology Progress Series, ISME Journal, Applied and Environmental Microbiology, Research in Microbiology, Science, Journal of Virology, Clinical Microbiology and Infection, Diseases of Aquatic Organisms, Microbial Ecology, Water Research, Virology Journal, New Phytologist, PLoS One, Virology. Ad hoc grant reviewer for National Science Foundation (Biotic Surveys and Inventories, Microbial Interactions and Processes, Biological Oceanography, Antarctic Programs, Geobiology, Assembling the Tree of Life, Science and Technology Centers), National Institutes of Health (National Institutes of General Medical Sciences - Minority Biomedical Research program), Austrian Research Council, US-Israel Binational Science Foundation, National Geographic Society, Marsden Fund (New Zealand).

### **Significant Outreach Activities**

Leadership Team Member for Florida Girls Collaborative Project. 2010-present. Designed a fully functional Marine Science Laboratory for Girl Scout Camp Wai Lani. 2011. Designed and ran a Girl Scout Marine Science Workshop for an Girl Scout Encampment at Camp Wai Lani (150 Girls ranging from ages 5-13). 2009.

Co-organizer of a Girl Scout Marine Science and Technology Workshop at the College of Marine Science. 2008. http://www.marine.usf.edu/news/girlscouts.shtml

Faculty mentor for the USF Oceanography Camp for Girls. 2007-2011.

Created bilingual educational videos about microbialites in our field site of Cuatro Cienegas. Mexico. 2007. http://www.desertfishes.org/cuatroc/literature/pdf/Breitbart\_videos.php

## **Formal Courses Taught**

- Foundations of Biological and Fisheries Oceanography (2 credit graduate-level readings course (OCE6934). Co-instructor with Kendra Daly and Pam Hallock-Muller. Spring 2012.
- Professional Development (2-credit graduate-level professional development course; OCE6934), Fall 2011.
- Surviving Academia (2 credit graduate-level professional development course; OCE6934). Fall 2010.
- Marine Molecular Microbiology Laboratory (Undergraduate research course; OCE4930), Fall 2010.
- Biological Oceanography (3 credit graduate-level lecture and lab course; OCB6050; REF# 80585). Fall 2009.
- Foundations of Biological and Fisheries Oceanography (2 credit graduate-level readings course (OCE6934). Co-instructor with Kendra Daly and Pam Hallock-Muller. Spring 2009.
- Biological Oceanography (3 credit graduate-level lecture and lab course; OCB6050; REF# 80674). Co-instructor with David Mann. Fall 2008.
- Marine Molecular Methods (3 credit graduate-level lecture and lab course; OCE6934; REF# 12131). Spring 2007.
- Metagenomic Bioinformatics (2 credit graduate-level lecture and lab course; OCE6934; REF# 54522). Summer 2007.
- Micro-Macro Interactions (1 credit graduate-level readings course; OCE6934; REF# 89230). Fall 2007.
- Biological Oceanography (3 credit graduate-level lecture and lab course; OCB6050; REF# 80674). Co-instructor with David Mann. Fall 2007.

# **Current Graduate Students**

Darren Dunlap – M.S. student (Fall 2009 – present)

Dawn Goldsmith - Ph.D. student (Fall 2007 - present)

Max Hopkins - Ph.D. student (Summer 2011 - present)

Sheila O'Dea – M.S. student (Fall 2009 – present)

Erin Symonds – Ph.D. student (Fall 2011 – present)

Min Tan – M.S. student (Fall 2011 – present)

# Former Graduate Students

- Erin Symonds M.S. student, 2006 2008. M.S. received Spring 2008. After serving as a Peace Corps Volunteer in Guatemala, Erin has returned as a Ph.D. student.
- Terry Fei Fan Ng Ph.D. student, 2006 2010. Ph.D. received Fall 2010. Currently a postdoc at the Blood Systems Research Institute in San Francisco.
- Karyna Rosario Ph.D. student, 2006 2010. Ph.D. received Fall 2010. Currently a postdoc in my laboratory.

- Anthony Nitti M.S. student, 2007 2010. M.S. received Fall 2010. Co-advised by David Hollander. Currently working for a biotechnology company.
- Camille Daniels Ph.D. student, 2006-2011. Ph.D. received Fall 2011. Currently a postdoc at KAUST in Saudi Arabia.

# Post-doctoral Researchers

Kimberly Pause, 2007 – 2010. Currently an Assistant Professor at the College of Coastal Georgia.

Bhakti Dwivedi, 2009 - present.

Karyna Rosario, 2011 – present.

# **Undergraduate Students and Interns**

Marco Padilla-Rodriguez – Undergraduate (University of South Florida; Spring 2011 – present) Elizabeth Fahsbender – Undergraduate (University of South Florida; Fall 2010 - present) Bingjie Xue – Undergraduate (Virginia Commonwealth University; Summer 2011) Lauren Van Woudenberg - Undergraduate (Eckerd College; Summer 2011) Allison Cohen – Undergraduate (Columbia University; Summer 2011) Laura Munoz – Undergraduate (University of South Florida; Spring 2011) Kristen Viola – Undergraduate (University of South Florida; Spring 2011) Rachael Trent – Undergraduate (University of South Florida; Spring 2011) Giuseppe Crosti – Undergraduate (Duke University; Summer 2010) Elizabeth Ranalli - Undergraduate (REU summer intern with Mote Marine Lab from Sonoma State University, CA; Summer 2009) Amy Zeifman – Undergraduate (Eckerd College; Summer 2008) Elise Bixby – Undergraduate (Washington University at Saint Louis; Summer 2007 and 2008) Christopher Chung – Undergraduate (Duke University; Summer 2007) Maria Luisa Rubio Teso – Intern (Spring and Summer 2007) Clarke Jacobson – Middle-school Science Fair Student (Fall 2008)

# Visiting Scientists

Inmaculada Garcia Heredia – PhD student from the University Miguel Hernandez, Spain. Summer 2010.

- Sanela Svraka PhD student from the Netherlands National Institute for Public Health and the Environment. Summer 2009.
- Shankar Alavandi Visiting senior scientist from the Central Institute of Brackishwater Aquaculture in India Spring 2009.

# **Student Committees**

22 total: Brian Badgely (chair), Camille Daniels, Jennifer Delaney, Darren Dunlap, Terry Fei Fan Ng, Julia Galkiewicz, Adrienne George, Dawn Goldsmith, Lara Henry, Max Hopkins, Erica Hudson, Shannon McQuaig (chair), Jennifer Mobberley, Anthony Nitti, Sheila O'Dea, Karyna Rosario, Adam Spear, Erin Symonds, Min Tan, Robert Ulrich, Elizabeth Young, Brian Zielinski.

# Student Awards

Darren Dunlap (current graduate student)

- Gulf Oceanographic Charitable Trust Endowed Fellowship in Marine Science. 2011.
- 3<sup>rd</sup> place student presentation award; College of Marine Science Graduate Student Symposium; Saint Petersburg, FL. 2011.

Elizabeth Fahsbender (current undergraduate student)

• 2<sup>nd</sup> place undergraduate student oral presentation; Florida Branch of the American Society for Microbiology Annual Meeting; Islamorada, FL. 2011.

Dawn Goldsmith (current graduate student)

- Presidential Fellow; University of South Florida. 2007-2012.
- 3<sup>rd</sup> place student presentation award; College of Marine Science Graduate Student Symposium; Saint Petersburg, FL. 2009.
- Outstanding Graduate Student Achievement Award; University of South Florida. 2009.
- Best presentation award; Florida Branch of the American Society for Microbiology; Jacksonville, FL. 2008

Max Hopkins (current graduate student)

• Presidential Fellow; University of South Florida. 2011-2016.

Erin Symonds (current graduate student)

- Environmental Protection Agency STAR Graduate Fellowship. 2011-2014.
- 2<sup>nd</sup> place student poster presentation award; 21<sup>st</sup> Annual Southwest Florida Water Resources Conference; Naples, FL. 2011.

Allison Cohen (undergraduate student, Summer 2011)

• 3<sup>rd</sup> place undergraduate student oral presentation; Florida Branch of the American Society for Microbiology Annual Meeting; Islamorada, FL. 2011.

Camille Daniels (graduated Fall 2011)

- 1<sup>st</sup> place graduate student oral presentation; Florida Branch of the American Society for Microbiology Annual Meeting; Islamorada, FL. 2010.
- Bridge to the Doctorate Endowed Fellowship; University of South Florida. 2006-2009.
- McKnight Doctoral Fellowship; Florida Education Fund. 2006-2010.
- Gulf Oceanographic Trust Fellowship; University of South Florida. 2006-2007.

Terry Fei Fan Ng (graduated Fall 2010)

- 2<sup>nd</sup> place graduate student oral presentation; Florida Branch of the American Society for Microbiology Annual Meeting; Islamorada, FL. 2010.
- 1<sup>st</sup> place student presentation award at the 6<sup>th</sup> International Symposium on Aquatic Animal Health; Tampa, FL. 2010.
- Honorable Mention (2<sup>nd</sup> place) for the Terry Amundson Student Presentation Award at the Wildlife Disease Association Conference; Argentina. 2010.
- Elsie and William Knight, Jr. Endowed Fellowship; University of South Florida. 2008 present.
- 2<sup>nd</sup> place student presentation award; College of Marine Science Graduate Student Symposium; Saint Petersburg, FL. 2009.

- Best student presentation award; 40<sup>th</sup> International Association for Aquatic Animal Medicine Conference; San Antonio, TX. 2009.
- Outstanding Graduate Student Achievement Award; University of South Florida. 2009.
- Best student presentation award; 39th International Association for Aquatic Animal Medicine Conference; Rome, Italy. 2008.
- 2nd place student presentation award; College of Marine Science Graduate Student Symposium; Saint Petersburg, FL. 2008.
- Distinct Graduate Student Achievement Award; University of South Florida. 2008.
- Gulf Oceanographic Trust Endowed Fellowship; University of South Florida. 2007-2008.
- Best student poster award; 38th International Association for Aquatic Animal Medicine Conference; Orlando, FL. 2007.
- 2nd place student presentation award; College of Marine Science Graduate Student Symposium; Saint Petersburg, FL. 2007.
- Library Graduate Scholarship; University of South Florida. 2007.

Anthony Nitti (graduated Fall 2010)

- Gulf Oceanographic Trust Endowed Fellowship; University of South Florida. 2008.
- United States Geological Survey Fellowship. 2008.
- Von Rosenstiel Fellowship for Most Outstanding Incoming Chemical Oceanography Student; University of South Florida. 2007.

Karyna Rosario (graduated Fall 2010; currently a postdoc in my lab)

- Outstanding Student Poster Award; 110<sup>th</sup> General Meeting of the American Society for Microbiology; San Diego, CA. 2010.
- Outstanding Graduate Student Award; University of South Florida. 2010.
- National Science Foundation EAPSI (East Asia and Pacific Summer Institutes for Graduate Students) Recipient for study in New Zealand. 2010.
- Elsie and William Knight, Jr. Endowed Fellowship; University of South Florida. 2009 present.
- 1<sup>st</sup> place student presentation award; College of Marine Science Graduate Student Symposium; Saint Petersburg, FL. 2009.
- Best oral presentation award in Microbiology at the 2009 SACNAS (Advancing Hispanics/Chicanos & Native Americans in Science) National Conference in Dallas, TX.
- Honorable mention, ASM Robert D. Watkins Graduate Research Fellowship 2009.
- 1st place student presentation award; College of Marine Science Graduate Student Symposium; Saint Petersburg, FL. 2008.
- 3rd place outstanding student presentation award; Florida Branch of the American Society for Microbiology Annual Meeting; Saint Petersburg, FL. 2007.
- Successful Latina Student Award; University of South Florida. 2007.
- Saint Petersburg Progress Endowed Fellowship; University of South Florida. 2007-2008.
- Alfred P. Sloan Minority Ph.D. Fellowship. 2007.
- NSF Bridge to the Doctorate Fellowship. 2006-2008.

• Latin American/Caribbean Scholarship. 2006-2010.

Lauren Van Woudenberg (undergraduate student, Summer 2011)

• 1<sup>st</sup> place undergraduate student oral presentation; Florida Branch of the American Society for Microbiology Annual Meeting; Islamorada, FL. 2011.

# **Chief Scientist**

R/V Atlantic Explorer, Bermuda Institute of Ocean Sciences. Bermuda. 9/2/08 - 9/4/08. R/V Bellows, Florida Institute of Oceanography. Dry Tortugas. 5/29/07 - 6/3/07.

# **Funded Research Grants**

University of South Florida Internal Awards Program – Proposal Enhancement Grant. "Exploring the diversity and ecology of marine single-stranded DNA phages" 11/01/11 – 10/31/12. \$24,913.

- 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)" 6/1/10 – 5/31/12. \$50,000; co-PI with Larry Dishaw.
- National Science Foundation EAGER. "Discovery of Viruses Infecting Marine Copepoda" 10/01/10 09/30/12. \$298,528.
- National Science Foundation Systematic Biology and Biodiversity Inventories. "Collaborative Research: Vector-enabled discovery: Exploiting whiteflies to investigate the diversity, evolution, and biogeography of begomoviruses" 09/01/10 08/31/13. \$322,502.
- Mote Marine Laboratory Protect Our Reefs Grant. "Spatial Variability in Coral-Associated Bacteria: Implications for Coral Restoration" 05/01/09 04/30/10. \$30,827.
- National Science Foundation Advances in Bioinformatics. "Collaborative Research: PHANTOME: PHage ANnotation TOols and MEthods" 04/01/09 – 03/31/12. \$460,142.
- Department of Energy Genomes to Life. "Development of Proteogenomic Approaches to Analyze the Role of Virus-Microbe Interactions in Shaping Natural Microbial Communities" 10/01/07 – 09/30/10. \$1,703,000 total; co-PI with Drs. Jillian Banfield and Nathan Verberkmoes; my portion of the award is \$401,259.
- National Science Foundation Microbial Interactions and Processes. "Abundance, Dynamics, and Diversity of Viruses in the Northwestern Sargasso Sea". 09/15/07 09/14/10. \$474,929.
- Alfred P. Sloan Foundation Research Fellowship. 10/01/07 9/30/09. \$45,000.
- Florida Sea Turtle Grants Program. "Shotgun Sequencing of Viruses Associated with Sea Turtle Fibropapillomatosis". 05/01/08 04/30/09. \$29,867.
- American Association of University Women Community Action Grant. "Girl Scouts Marine Science and Technology Workshop". 07/01/08 06/31/10. \$5,120.
- Florida Institute of Oceanography. 5 days of shiptime to Dry Tortugas, Florida Keys. 5/27/08 6/2/08.
- National Geographic Society. Impact of human activity on microbes and viruses associated with living stromatolites in Cuatrocienegas, Mexico. 06/01/07 06/01/08. \$19,973.
- Project AWARE Foundation. "The Microbiology of Coral Restoration". 3/01/07 9/01/07. \$3,500.

- 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". 1/01/07 - 12/31/07. \$ 49,989. co-PI with Dr. Pam Hallock-Muller; my portion of the award is approximately \$10,000.
- Environmental Protection Agency: Region 4 Special Studies. "Diversity and Distribution of Pathogenic Viruses in the Florida Keys". 10/1/06 9/30/07. \$25,000.
- University of South Florida: Internal New Investigator Award. "Diversity and Dynamics of Viruses Associated with Stromatolites in Cuatrociengas, Mexico". 5/01/06 4/30/07. \$10,000.

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

- **Breitbart, M** (2012). Marine viruses: truth or dare. Annual Review in Marine Science. 4: 425-448.
- Parsons, RJ, **M Breitbart**, MW Lomas, CA Carlson (2012). Ocean time-series reveals recurring seasonal patterns of virioplankton dynamics in the northwestern Sargasso Sea. ISME Journal, 6: 273-284.
- <u>Goldsmith, DB</u>, <u>G Crosti</u>, <u>B Dwivedi</u>, LD McDaniel, A Varsani, CA Suttle, MG Weinbauer, RA Sandaa, **M Breitbart** (2011). Development of *phoH* as a novel signature gene for assessing marine phage diversity. Applied and Environmental Microbiology. 77: 7730-7739.
- <u>Rosario, K</u> and **M Breitbart** (2011). Exploring the viral world through metagenomics. Current Opinion in Virology. 1: 289-297.
- Skennerton, CT, FE Angly, M Breitbart, L Bragg, S He, KD McMahon, P Hugenholtz, GW Tyson (2011). Phage encoded H-NS: A potential Achilles heel in the bacterial defence system. PLoS ONE. 6: e20095.
- Ng, TFF, D Willner, YW Lim, R Schmieder, B Chau, C Nilsson, S Anthony, Y Ruan, F Rohwer, **M Breitbart** (2011). Broad surveys of DNA viral diversity obtained through viral metagenomics of mosquitoes. PLoS ONE. 6: e20579.
- <u>Ng, TFF</u>, S Duffy, JE Polston, <u>E Bixby</u>, GE Vallad, **M Breitbart** (2011). Exploring the diversity of DNA plant viruses and their satellites using vector-enabled metagenomics on whiteflies. PLoS ONE. 6: e19050
- Rosario, K, M Marinov, D Stainton, S Kraberger, EJ Wiltshire, DA Collings, M Walters, DP Martin, **M Breitbart**, A Varsani (2011). Dragonfly cyclovirus, a novel single-stranded DNA virus discovered in dragonflies (Odonata: Anisoptera). Journal of General Virology. 92: 1302-1308.
- <u>Ng, TFF</u>, E Wheeler, D Greig, TB Waltzek, F Gulland, **M Breitbart** (2011). Metagenomic identification of a novel anellovirus in harbor seal (*Phoca vitulina richardsii*) lung samples and its detection in samples from multiple years. Journal of General Virology. 92: 1318-1323.
- Daniels, CA, A Zeifman, K Heym, KB Ritchie, CA Watson, I Berzins, **M Breitbart** (2011). Spatial heterogeneity in bacterial communities in the mucus of *Montastraea annularis*. Marine Ecology Progress Series. 426: 29-40.

- Sime-Ngando, T, S Lucas, A Robin, <u>KP Tucker</u>, J Colombet, Y Bettarel, E Desmond, S Gribaldo, P Forterre, **M Breitbart**, D Prangishvili (2011). Diversity of virus-host systems in hypersaline Lake Retba, Senegal. Environmental Microbiology. 13: 1956-1972.
- <u>Tucker, KP</u>, R Parsons, <u>EM Symonds</u>, **M Breitbart** (2011). Diversity and distribution of singlestranded DNA phages in the North Atlantic Ocean. The ISME Journal. 5: 822-830.
- Sharon, I, N Battchikova, E-M Aro, C Giglione, T Meinnel, F Glaser, RY Pinter, M Breitbart, F Rohwer, O Beja (2011). Comparative metagenomics of microbial traits within oceanic viral communities. The ISME Journal. 5: 1178-1190.
- Svraka, S, <u>K Rosario</u>, E Duizer, H van der Avoort, **M Breitbart**, M Koopmans (2010). Metagenomic sequencing for virus identification in a public health setting. Journal of General Virology. 91: 2846-2856.
- Aziz, RK, **M Breitbart**, RA Edwards (2010). Transposases are the most abundant, most ubiquitous genes in nature. Nucleic Acids Research. 38: 4207-4217. \*featured cover article, and evaluated by Faculty of 1000, placing the work in the top 2% of published articles in biology and medicine.
- Rodriguez-Brito, B, L Li, L Wegley, M Furlan, F Angly, M Breitbart, J Buchanan, C Desnues, E Dinsdale, R Edwards, B Felts, D Willner, M Haynes, H Liu, D Lipson, J Mahaffy, A Martin-Cuadrado, A Mira, J Nulton, L Pasic, S Rayhawk, J Rodriguez-Mueller, F Rodriguez-Valera, P Salamon, S Srinagesh, TF Thingstad, T Tran, RV Thurber, M Youle, F Rohwer (2010). Viral and microbial community dynamics in four aquatic environments. ISME Journal. 4: 739-751.
- <u>Rosario, K</u>, <u>EM Symonds</u>, C Sinigalliano, J Stewart, **M Breitbart** (2009). *Pepper mild mottle virus* as an indicator of fecal pollution. Applied and Environmental Microbiology. 75: 7261-7267.
- Blinkova, O, <u>K Rosario</u>, L Li, A Kapoor, B Slikas, F Bernardin, **M Breitbart**, E Delwart (2009). Frequent detection of highly diverse *Cardiovirus*, *Cosavirus*, *Bocavirus*, and *Circovirus* in sewage samples collected in the United States. Journal of Clinical Microbiology. 47: 3507-3513.
- Angly, F, M Youle, B Nosrat, S Srinagesh, B Rodriguez-Brito, P McNairnie, G Deeyanat-Yzadi, M Breitbart, F Rohwer (2009). Genomic analysis of multiple Roseophage SIO1 strains. Environmental Microbiology. 11: 2863-2873.
- <u>Rosario, K</u>, S Duffy, **M Breitbart** (2009). Diverse circovirus-like genome architectures revealed by environmental metagenomics. Journal of General Virology. 90: 2418 2424.
- Rosario, K, C Nilsson, YW Lim, Y Ruan, M Breitbart (2009). Metagenomic analysis of viruses in reclaimed water. Environmental Microbiology. 11: 2806-2820.
- <u>Ng, TFF</u>, W Suedmeyer, E Wheeler, F Gulland, **M Breitbart** (2009) Novel anellovirus discovered from a mortality event of captive California sea lions. Journal of General Virology. 90: 1256-1261.
- Thurber, RV, M Haynes, **M Breitbart**, L Wegley, F Rohwer (2009). Laboratory procedures to generate viral metagenomes. Nature Protocols. 4: 470-483.
- <u>Ng, TFF</u>, C Manire, K Borrowman, T Langer, L Ehrhart, **M Breitbart** (2009). Discovery of a novel single-stranded DNA virus from a sea turtle fibropapilloma by using viral metagenomics. Journal of Virology. 83: 2500-2509.

- Symonds, EM, DW Griffin, **M Breitbart** (2009). Eukaryotic viruses in wastewater samples from the United States. Applied and Environmental Microbiology. 75: 1402-1409.
- Breitbart, M, A Hoare, <u>A Nitti</u>, M Haynes, E Dinsdale, R Edwards, J Siefert, V Souza, F Rohwer, D Hollander (2009). Metagenomic and stable isotopic analyses of modern freshwater microbialites in Cuatro Cienegas, Mexico. Environmental Microbiology. 11: 16-34.
- McDaniel, L, **M Breitbart**, J Mobberley, A Long, M Haynes, F Rohwer, J Paul (2008). Metagenomic analysis of lysogeny in Tampa Bay: implications for prophage gene expression. PLoS ONE. 3: e3263.
- **Breitbart, M**, M Haynes, S Kelley, F Angly, RA Edwards, B Felts, JM Mahaffy, J Mueller, J Nulton, S Rayhawk, B Rodriguez-Brito, P Salamon, F Rohwer (2008). Viral diversity and dynamics in an infant's gut. Research in Microbiology. 159: 367-373.
- **Breitbart, M,** M Middelboe, F Rohwer (2008). Marine viruses: Community dynamics, diversity, and impact on microbial processes. In: Kirchman, D [ed]. Microbial Ecology of the Oceans, 2nd edition. John Wiley and Sons, Inc. Hoboken, New Jersey. pp. 443-479.
- Dinsdale, EA, RA Edwards, D Hall, F Angly, M Breitbart, JM Brulc, M Furlan, C Desnues, M Haynes, L Li, L McDaniel, MA Moran, KE Nelson, C Nilsson, R Olson, J Paul, B Rodriguez-Brito, Y Ruan, BK Swan, R Stevens, DL Valentine, R Vega-Thurber, L Wegley, BA White, F Rohwer (2008). Functional metagenomic profiling of nine biomes. Nature. 452: 629-633.
- Desnues, C, B Rodriguez-Brito, S Rayhawk, S Kelley, T Tran, M Haynes, H Liu, M Furlan, L
  Wegley, B Chau, Y Ruan, D Hall, FE Angly, RA Edwards, L Li, R Vega Thurber, RP
  Reid, J Siefert, V Souza, DL Valentine, BK Swan, M Breitbart, F Rohwer (2008).
  Biodiversity and biogeography of phages in modern stromatolites and thrombolites.
  Nature. 452: 340-343.
- Kunin, V, S He, F Warnecke, SB Peterson, H Garcia Martin, M Haynes, N Ivanova, LL Blackall, M Breitbart, F Rohwer, KD McMahon, P Hugenholtz (2008). A bacterial metapopulation adapts locally to phage predation despite global dispersal. Genome Research. 18: 293-297.
- Fierer, N, M Breitbart, J Nulton, P Salamon, C Lozupone, R Jones, M Robeson, RA Edwards, B Felts, S Rayhawk, R Knight, F Rohwer, RB Jackson (2007). Metagenomic and smallsubunit rRNA analyses reveal the genetic diversity of bacteria, archaea, fungi, and viruses in soil. Applied and Environmental Microbiology. 73: 7059-7066.
- Heinz Hoffmann, K, B Rodriguez-Brito, M Breitbart, D Bangor, F Angly, B Felts, J Nulton, F Rohwer, P Salamon (2007). Power law rank-abundance models for marine phage communities. FEMS Microbiology Letters. 273: 224-228.
- Breitbart, M, LR Thompson, CA Suttle, MB Sullivan (2007). Exploring the vast diversity of marine viruses. Oceanography. 20: 135-139.
- Angly, FE, B Felts, M Breitbart, P Salamon, RA Edwards, C Carlson, AM Chan, M Haynes, S Kelley, H Liu, J Mahaffy, JE Mueller, J Nulton, R Olson, R Parsons, S Rayhawk, CA Suttle, F Rohwer (2006). The marine viromes of four oceanic regions. PLoS Biology. 4:e368.

- Casas, V, J Miyake, H Balsley, J Roark, S Telles, S Leeds, I Zurita, M Breitbart, D Bartlett, F Azam, F Rohwer (2006) Widespread occurrence of phage-encoded exotoxin genes in terrestrial and aquatic environments in Southern California. FEMS Microbiology Letters. 261: 141-149.
- Edwards, RA, B Rodriguez-Brito, L Wegley, M Haynes, **M Breitbart**, DM Peterson, MO Saar, S Alexander, EC Alexander Jr., F Rohwer (2006) Using pyrosequencing to shed light on deep mine microbial ecology under extreme hydrogeologic conditions. BMC Genomics. 7: 57.
- Zhang, T, M Breitbart, WH Lee, J-Q Run, CL Wei, SWL Soh, ML Hibberd, E Liu, F Rohwer, Y Ruan (2006) RNA viral community in human feces: Prevalence of plant pathogenic viruses. PLoS Biology. 4: e3.
- Yu, Y, **M Breitbart**, P McNairnie, F Rohwer (2006) FastGroupII: A web-based bioinformatics platform for analyses of large 16S rDNA libraries. BMC Bioinformatics. 7:57.
- Kline, D, NM Kuntz, **M Breitbart**, N Knowlton, F Rohwer (2006) Role of elevated organic carbon levels and microbial activity in coral mortality. Marine Ecology Progress Series. 314: 119-125.
- **Breitbart, M**, and F Rohwer (2005) Method for discovering novel DNA viruses in blood using viral particle selection and shotgun sequencing. Biotechniques. 39: 729-736.
- **Breitbart, M**, and F Rohwer (2005) Here a virus, there a virus, everywhere the same virus? Trends in Microbiology. 13: 278-284.
- Breitbart, M, F Rohwer, ST Abedon (2005) Phage Ecology and Bacterial Pathogenesis. In: M Waldor, D Freedman, S Adhya (eds). Phages: Their Role in Bacterial Pathogenesis and Biotechnology. ASM Press. Washington D.C. pp. 66-91.
- Angly, F, B Rodriguez-Brito, D Bangor, P McNairnie, M Breitbart, P Salamon, B Felts, J Nulton, J Mahaffy, F Rohwer (2005) PHACCS, an online tool for estimating the structure and diversity of uncultured viral communities using metagenomic information. BMC Bioinformatics. 6:41.
- **Breitbart, M**, R Bhagooli, S Griffin, I Johnston, F Rohwer (2005) Microbial communities associated with skeletal tumors on *Porites compressa*. FEMS Microbiology Letters. 243: 431-436.
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- **Breitbart, M**, B Felts, S Kelley, JM Mahaffy, J Nulton, P Salamon, F Rohwer (2004) Diversity and population structure of a nearshore marine sediment viral community. Proceedings of the Royal Society B. 271: 565-574.
- **Breitbart, M**, L Wegley, S Leeds, T Schoenfeld, F Rohwer (2004) Phage community dynamics in hot springs. Applied and Environmental Microbiology. 70: 1633-1640.
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- Breitbart, M, I Hewson, B Felts, JM Mahaffy, J Nulton, P Salamon, F Rohwer. (2003) Metagenomic analyses of an uncultured viral community from human feces. Journal of Bacteriology. 185: 6220-6223.
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- Rohwer, F, **M Breitbart**, J Jara, F Azam, N Knowlton (2001) Diversity of bacteria associated with the Caribbean coral *Montastraea franksi*. Coral Reefs. 20: 85-91.
- Rohwer, F, AM Segall, G Steward, V Seguritan, **M Breitbart**, F Wolven, F Azam (2000) The complete genomic sequence of the marine phage Roseophage SIO1 shares homology with non-marine phages. Limnology and Oceanography. 45: 408-418.

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

- Symonds, E.M., K. Rosario, D.W. Griffin, C. Sinigalliano, J. Stewart, M. Breitbart. "Viruses found in sewage and their potential to indicate fecal pollution in coastal waters". Poster presentation by E. Symonds. 21<sup>st</sup> Annual Southwest Florida Water Resources Conference; Naples, FL. 11/11.
- Symonds, E.M., K. Rosario, D.W. Griffin, C. Sinigalliano, J. Stewart, M. Breitbart. "Viruses found in sewage and their potential to indicate fecal pollution in coastal waters". Poster presentation by E. Symonds. Aquatic Virus Workshop; The Netherlands. 11/11.
- <u>Dunlap, D.</u>, I. Hewson, **M. Breitbart**. "Evidence for virus infection in the calanoid copepod *Acartia tonsa* from Tampa Bay, Florida". Oral presentation by D. Dunlap. Annual Meeting of the Florida Branch of the American Society for Microbiology; Islamorada, FL. 9/11.
- <u>Padilla-Rodriguez, M., K. Rosario</u>, **M. Breitbart**. "Novel single-stranded DNA viruses identified in insects". Oral presentation by M. Padilla-Rodriguez. Annual Meeting of the Florida Branch of the American Society for Microbiology; Islamorada, FL. 9/11.
- <u>Cohen, A., K. Rosario</u>, **M. Breitbart**. "Rolling circle amplification as a tool for hunting novel single-stranded DNA viruses". Oral presentation by A. Cohen. Annual Meeting of the Florida Branch of the American Society for Microbiology; Islamorada, FL. 9/11.
- <u>Hopkins, M., B. Dwivedi, K.P. Tucker</u>, **M. Breitbart**. "Single-stranded DNA phages in the marine environment". Oral presentation by M. Hopkins. Annual Meeting of the Florida Branch of the American Society for Microbiology; Islamorada, FL. 9/11.
- <u>Van Woudenberg, L., C. Daniels</u>, S. Burghart, R. Kitzmiller, E. Peebles, M. Breitbart. "Genetic identification of single fish eggs for a community analysis of Terra Ceia Bay, Florida". Oral presentation by L. Van Woudenberg. Annual Meeting of the Florida Branch of the American Society for Microbiology; Islamorada, FL. 9/11.
- <u>Fahsbender, E., C. Daniels</u>, R. Cunning, A. Baker, **M. Breitbart**. "Bacterial profiling of the scleractinian coral Pocillopora damicornis". Oral presentation by E. Fahsbender. Annual

Meeting of the Florida Branch of the American Society for Microbiology; Islamorada, FL. 9/11.

- Cook, M.M., <u>K. Rosario</u>, S. McQuaig, H. Adkison, **M. Breitbart**, E. Van Vleet.
   "Electrocoagulation technology for removal of microbiological contaminants and estrogenic endocrine disruptors". Oral presentation by M. Cook. Annual Meeting of the Florida Branch of the American Society for Microbiology; Islamorada, FL. 9/11.
- **Breitbart, M.** "How diverse is the global marine virome?" Invited plenary talk. 19<sup>th</sup> Evergreen International Phage Biology Meeting: Olympia, WA. 8/11.
- Aziz, R., <u>B. Dwivedi</u>, M. Breitbart, R.A. Edwards. "Phages without borders: a global survey of phage nucleic acids in metagenomes and microbiomes". Oral presentation by R. Aziz. 19<sup>th</sup> Evergreen International Phage Biology Meeting: Olympia, WA. 8/11.
- Hopkins, M., B. Dwivedi, K. Tucker, M. Breitbart. "Single-stranded DNA phages in the marine environment". Oral presentation by M. Hopkins. 19<sup>th</sup> Evergreen International Phage Biology Meeting: Olympia, WA. 8/11.
- <u>Dwivedi, B.</u>, R. Schmieder, <u>D. Goldsmith</u>, R.A. Edwards, **M. Breitbart**. "PhiSiGns: an online tool to identify signature genes in phages and design PCR primers for examining phage diversity". Poster presentation by B. Dwivedi. 19<sup>th</sup> Evergreen International Phage Biology Meeting: Olympia, WA. 8/11.
- **Breitbart, M.** "Spatial and temporal variability in the distribution of marine viruses". Invited plenary talk. American Society for Microbiology 111<sup>th</sup> General Meeting: New Orleans, LA. 5/11.
- <u>Fahsbender, E., C. Daniels</u>, R. Cunning, A. Baker, **M. Breitbart**. "Bacterial profiling of the scleractinian coral *Pocillopora damicornis*". USF 9<sup>th</sup> Annual Undergraduate Research Symposium; Tampa, FL. 4/11.
- **Breitbart, M.** "Viral discovery in the age of metagenomics". Invited oral presentation. Cornell University; Ithaca, NY. 4/11.
- **Breitbart, M.** "Viral discovery in the age of metagenomics". Invited oral presentation. University of South Carolina; Columbia, SC. 4/11.
- **Breitbart, M.** "Viral discovery in the age of metagenomics: Exploration of active infections, environmental reservoirs, and transmission mechanisms". Invited oral presentation. Blood Systems Research Institute: San Francisco, CA. 3/11.
- Breitbart, M., <u>T.F.F. Ng</u>, K. Suedmeyer, F. Gulland, E. Wheeler, <u>K. Rosario</u>, <u>E. Symonds</u>, Y. Ruan, C. Nilsson, Y.W. Lim, C. Sinigalliano, J. Stewart, <u>E. Bixby</u>, J. Polston, G. Vallad, S. Duffy. "Virus hunting in the age of metagenomics". Invited poster presentation. NSF Ecology of Marine Infectious Diseases Workshop. San Juan, Puerto Rico. 2/11.
- Hewson, I., J. Barbosa, M. Breitbart, J. Brown, C. Couch, D. Dunalp, N. Hairston, D. Harvell, C. Kearns, B. LaBarre, M. Mouchka, <u>T. Ng</u>. "Metaviromic-enabled ecological investigations of aquatic invertebrate disease". Oral presentation by I. Hewson. ASLO Aquatic Sciences Meeting; San Juan, Puerto Rico. 2/11.
- <u>Goldsmith, D.B., G. Crosti</u>, L. McDaniel, B. Dwivedi, R. Parsons, C. Carlson, C.A. Suttle, M.G. Weinbauer, R.A. Sandaa, **M. Breitbart**. "Biogeography of marine viruses as revealed through sequencing of PhoH, a novel signature gene involved in phosphate metabolism".

Oral presentation by D. Goldsmith. 29<sup>th</sup> Annual USF College of Marine Science Graduate Student Symposium; St. Petersburg, FL. 1/11.

- <u>Dunlap, D., T.F.F. Ng</u>, I. Hewson, M. Breitbart. "Novel circovirus identified in the calanoid copepod *Labidocera aestiva* from Tampa Bay, Florida". Oral presentation by D. Dunlap. 29<sup>th</sup> Annual USF College of Marine Science Graduate Student Symposium; St. Petersburg, FL. 1/11.
- **Breitbart, M.** "The global marine viriome". Invited oral presentation. Uppsala University; Uppsala, Sweden. 12/10.
- **Breitbart, M.** "The global marine viriome". Invited oral presentation. Stockholm University; Stockholm, Sweden. 12/10.
- **Breitbart, M.** "The global marine viriome". Invited oral presentation. University of Bergen; Bergen, Norway. 12/10.
- Breitbart, M., <u>T.F.F. Ng</u>, D. Willner, Y.W. Lim, <u>E. Bixby</u>, R. Schmieder, B. Chau, C. Nilsson, S. Anthony, G.E. Vallad, Y. Ruan, F. Rohwer, S. Duffy, J.E. Polston. "Vector-enabled metagenomics on whiteflies and mosquitoes leads to the discovery of novel plant and animal viruses". Invited plenary talk. 6<sup>th</sup> International Symposium on Geminiviruses; Guanajuanto, Mexico. 11/10.
- <u>Rosario, K</u>., M. Marinov, D. Stainton, S. Kraberger, D. Martin, **M. Breitbart**, A. Varsani. "Discovery of a novel ssDNA virus in dragonflies". Talk by K. Rosario. 6<sup>th</sup> International Symposium on Geminiviruses; Guanajuanto, Mexico. 11/10.
- **Breitbart, M.** "Virus hunting in the age of metagenomics". Invited oral presentation. 22<sup>nd</sup> Annual Kavli Frontiers of Science Symposium; Irvine, CA. 11/10.
- **Breitbart, M.** "Viral discovery in the age of metagenomics: Exploring infections, environmental reservoirs, and transmission mechanisms". Invited oral presentation as a UA ADVANCE Junior Scientist Speaker. University of Arizona; Tucson, AZ. 11/10.
- **Breitbart, M**. "The ocean and human health: The good, the bad, and the ugly". Invited oral presentation. The Pier Aquarium's SciCafe; St. Petersburg, FL. 10/10.
- **Breitbart**, M. "Viral discovery in the age of metagenomics: Stories of sewage and sick sea creatures". Invited oral presentation, Hillsborough Community College; Tampa, FL. 9/10.
- <u>Ng, T.F.F.</u>, S. Alavandi, **M. Breitbart**. "Metagenomic studies reveal novel viruses in shrimp". Oral presentation by T. Ng, Sixth International Symposium on Aquatic Animal Health; Tampa, FL. 9/10.
- <u>Ng, T.F.F.</u>, C. Driscoll, *B. Dwivedi*, D. Limpe, S. Lamere, S. Head, K. Feldman, D. Salomon, M.
   **Breitbart**. "High diversity of novel RNA viruses found in big brown bats using high-throughput metagenomic sequencing". Oral presentation by T. Ng. Annual Meeting of the Florida Branch of the American Society for Microbiology; Islamorada, FL. 10/10.
- Daniels, C., P. Turner, M.B. Decker, M. Breitbart. "Bacterial communities associated with *Mnemiopsis leidyi*". Oral presentation by C. Daniels. Annual Meeting of the Florida Branch of the American Society for Microbiology; Islamorada, FL. 10/10.
- Dunlap, D., T.F.F. Ng, I. Hewson, M. Breitbart. "Novel circovirus identified in the calanoid copepod *Labidocera aestiva* from Tampa Bay, Florida". Oral presentation by D. Dunlap. Annual Meeting of the Florida Branch of the American Society for Microbiology; Islamorada, FL. 10/10.

- <u>Dwivedi, B</u>., R.K. Aziz, R. Edwards, M. Breitbart. "Phage Eco-Locator: A systematic survey of known phage genomes in environmental metagenomes". Oral presentation by B. Dwivedi. Annual Meeting of the Florida Branch of the American Society for Microbiology; Islamorada, FL. 10/10.
- **Breitbart, M.** "Viral discovery in the age of metagenomics". Invited oral presentation. 13<sup>th</sup> International Symposium on Microbial Ecology: Seattle, WA. 8/10.
- Daniels, C., P. Turner, M.B. Decker, M. Breitbart. "Bacterial communities associated with *Mnemiopsis leidyi*". Poster presentation by C. Daniels. 13<sup>th</sup> International Symposium on Microbial Ecology: Seattle, WA. 8/10.
- <u>Goldsmith, D.B.</u>, R. Parsons, <u>K.P. Tucker</u>, C.A. Carlson, **M. Breitbart**. "Abundance and Diversity of viruses throughout the water column in the Northwestern Sargasso Sea." Poster presentation. 13<sup>th</sup> International Symposium on Microbial Ecology: Seattle, WA. 8/10.
- <u>Dunlap, D.S., T.F.F. Ng</u>, I. Hewson, **M. Breitbart**. "Novel circovirus identified in the calanoid copepod *Labidocera aestiva* from Tampa Bay, Florida. Poster presentation by D. Dunlap. 13<sup>th</sup> International Symposium on Microbial Ecology: Seattle, WA. 8/10.
- Parsons, R.J., M. Breitbart, M.W. Lomas, C.A. Carlson. "Time series study reveals regular temporal and vertical variability of viral abundance in the subtropical North Atlantic". Poster presentation by R. Parsons. 13<sup>th</sup> International Symposium on Microbial Ecology: Seattle, WA. 8/10.
- Sun, C.L., B.C. Thomas, V.J. Denef, <u>K.P. Tucker</u>, P. Wilmes, C. Pan, R.L. Hettich, N.C. VerBerkmoes, **M. Breitbart**, J.F. Banfield. "Analysis of virus-CRISPR interactions in a natural system". Poster presentation by C. Sun. 13<sup>th</sup> International Symposium on Microbial Ecology: Seattle, WA. 8/10.
- <u>Ng, T.F.F.</u>, C. Driscoll, B. Dwivedi, D. Limpet, S. Lamere, S. Head, K. Feldman, D. Salomon,
   <u>M. Breitbart</u>. "High diversity of novel RNA viruses found in big brown bats using viral metagenomics". Oral presentation by T. Ng. 59<sup>th</sup> Annual Wildlife Disease Association International Meeting: Iguazu, Argentina. 6/10.
- <u>Goldsmith, D.B.</u>, R. Parsons, M. Lomas, C. Carlson, **M. Breitbart**. "Abundance and diversity of viruses throughout the water column in the northwestern Sargasso Sea". Poster presentation by D. Goldsmith. Viruses of Microbes Conference: Paris, France. 6/10.
- <u>Ng, T.F.F.</u>, S. Alavandi, E. Wheeler, <u>D. Dunlap</u>, W.K. Suedmeyer, F. Gulland, I. Hewson, M.
   **Breitbart**. "Metagenomic studies reveal novel single-stranded DNA viruses in aquatic animals". Oral presentation by T. Ng. 41<sup>st</sup> Annual International Association for Aquatic Animal Medicine Conference: Vancouver, Canada. 5/10.
- Aziz, R.K., M. Breitbart, R.A. Edwards. "Phage Eco-locator: Mapping phage nucleic acids in 310 metagenomes". Poster presentation by R. Aziz. San Diego Microbiology Group Annual Meeting: San Diego, CA. 5/10.
- Aziz, R.K., <u>B. Dwivedi</u>, J. Anderson, B. Hurwitz, J.P. Massar, M. Sullivan, J. Elhai, M.
  Breitbart, R. Edwards. "PhAnToMe (Phage Annotation Tools and Methods): A platform for phage annotation and comparative genomics". Poster presentation by R. Aziz. San Diego Microbiology Group Annual Meeting: San Diego, CA. 5/10.

- <u>Rosario, K.</u>, S. Svraka, E. Duizer, **M. Breitbart**, M. Koopmans. "Metagenomics for virus identification in a public health setting". Poster presentation by K. Rosario. American Society for Microbiology 110<sup>th</sup> General Meeting: San Diego, CA. 5/10.
- Angly, F.E., M. Youle, B. Nostrat, S. Srinagesh, B. Rodriguez-Brito, P. McNairnie, G. Deyanat-Yazdi, M. Breitbart, G. Tyson, F. Rohwer. "Evolution and distribution of Roseobacter SIO phage strains in the ocean". Poster presentation by F. Angly. American Society for Microbiology 110<sup>th</sup> General Meeting: San Diego, CA. 5/10.
- Aziz, R.K., M. Breitbart, R.A. Edwards. "Phages without borders: distribution of phage nucleic acids in 310 metagenomes". Poster presentation by R. Aziz. American Society for Microbiology 110<sup>th</sup> General Meeting: San Diego, CA. 5/10.
- Aziz, R.K., <u>B. Dwivedi</u>, J. Anderson, B. Hull, B. Hurwitz, J. Massar, M. Sullivan, J. Elhai, M. Breitbart, R.A. Edwards. "PhAnToMe (Phage annotation tools and methods): A platform for phage annotation and comparative genomics". Poster presentation by R. Edwards. American Society for Microbiology 110<sup>th</sup> General Meeting: San Diego, CA. 5/10.
- **Breitbart, M**. "Virus hunting in the age of metagenomics: expect the unexpected". Invited oral presentation. American Society for Microbiology 110<sup>th</sup> General Meeting: San Diego, CA. 5/10.
- Breitbart, M., D. Hollander, <u>A. Nitti</u>, B. Van Mooy, J. Siefert, V. Souza. "Modern freshwater microbialites of Cuatro Cienegas, Mexico. I: Metagenomic and stable isotopic analyses to assess microbial community structure and function". Astrobiology Science Conference; League City, TX. 4/10.
- Hollander, D., M. Breitbart, <u>A. Nitti</u>, B. Van Mooy, J. Siefert, V. Souza. "Modern freshwater microbialites, Cuatro Cienegas, Mexico. II. Detailed spatial analysis of geochemical signals linked to microbial activity and carbonate precipitation". Oral presentation by D. Hollander. Astrobiology Science Conference; League City, TX. 4/10.
- Souza, V., **M. Breitbart**, D. Hollander, J. Elser, V. Meadows, J. Siefert. "Cuatro Cienegas, a desert oasis with active stromatolites: an astrobiological project". Oral presentation by V. Souza. Astrobiology Science Conference; League City, TX. 4/10.
- Ng, T.F.F., D. Willner, C. Nilsson, Y.W. Lim, R. Schmieder, B. Chau, Y. Ruan, F. Rohwer, M. Breitbart. "Vector-based metagenomics for animal virus surveillance". Poster presentation by T. Ng. 14<sup>th</sup> International Congress on Infectious Diseases (ICID): Miami, FL. 3/10.
- Hewson, I., M. Breitbart, J. Brown, D. Doud, L. McDaniel, <u>T.F. Ng</u>, E. Webb. "Genomic and transcriptomic insights into microbial and viral roles in ocean biogeochemistry". Oral presentation by I. Hewson. 2010 Ocean Sciences Meeting; Portland, OR. 2/10.
- <u>Tucker, K.P.</u>, C.L. Sun, B.D. Dill, P. Wilmes, R. Hettich, B.C. Thomas, V. Denef, N. VerBerkmoes, L. Comolli, B. Luef, J.F. Banfield, **M. Breitbart**. "Metagenomic and metaproteomic analysis of viruses from an acid mine drainage system". Poster presentation by K.P. Tucker. Department of Energy Genomic Science Awardee Workshop 2010; Arlington, VA. 2/10.
- Sun, C., B. Thomas, V. Denef, <u>K.P. Tucker</u>, P. Wilmes, R. Barrangou, C. Pan, M.P. Thelen, R. Hettich, N. VerBerkmoes, **M. Breitbart**, J. Banfield. "Community proteogenomic Page 16 of 24

analysis of virus-host interactions in a natural system". Poster presentation by C. Sun. Department of Energy Genomic Science Awardee Workshop 2010; Arlington, VA. 2/10.

- VerBerkmoes, N., B. Dill, J. Young, <u>K.P. Tucker</u>, C. Sun, B. Thomas, V. Denef, P. Wilmes, P. Carey, M. Shah, C. Pan, R. Hettich, R. Barrangou, **M. Breitbart**, J. Banfield. "Advanced proteomics methods to identify low level viral signatures in isolate and environmental samples". Poster presentation by N. VerBerkmoes. Department of Energy Genomic Science Awardee Workshop 2010; Arlington, VA. 2/10.
- **Breitbart, M**. "Viruses in sewage and reclaimed water". Invited oral presentation. Special Seminar: The Impending Water Crisis of Tampa Bay: Waste, Reuse, and Environmental Protection; Tampa, FL. 1/10.
- <u>Dwivedi, B.</u>, R. Aziz, R. Edwards, **M. Breitbart**. "A computational tool for the identification of signature genes among phages". Poster presentation by B. Dwivedi. 7<sup>th</sup> Annual Rocky Mountain Bioinformatics Conference; Snowmass, CO. 12/09.
- Aziz, R.K., M. Breitbart, R. Edwards. "Can we accurately determine the fittest genes in nature?" Oral presentation by R.K. Aziz. 7<sup>th</sup> Annual Rocky Mountain Bioinformatics Conference; Snowmass, CO. 12/09.
- Aziz, R.K., <u>B. Dwivedi</u>, J. Anderson, B. Hurwitz, J.P. Massar, M. Sullivan, J. Elhai, M.
   Breitbart, R. Edwards. "PhAnToMe (Phage Annotation Tools and Methods): A platform for phage annotation and comparative genomics". Poster presentation by R.K. Aziz. 7<sup>th</sup> Annual Rocky Mountain Bioinformatics Conference; Snowmass, CO. 12/09.
- Rosario, K., C. Nilsson, E. Symonds, Y. Ruan, **M. Breitbart**. "Viruses in Reclaimed Water". Oral presentation by K. Rosario. 28<sup>th</sup> Annual USF College of Marine Science Graduate Student Symposium; St. Petersburg, FL. 11/09.
- <u>Ng, T.F.F.</u>, S. Alavandi, **M. Breitbart**. "Novel DNA and RNA viruses characterized from wild shrimp in Florida". Oral presentation by T.F.F. Ng. 28<sup>th</sup> Annual USF College of Marine Science Graduate Student Symposium; St. Petersburg, FL. 11/09.
- <u>Nitti, A.</u>, D. Hollander, **M. Breitbart**. "A genomic, stable isotopic, and organic geochemical analysis of freshwater microbialites". Oral presentation by A. Nitti. 28<sup>th</sup> Annual USF College of Marine Science Graduate Student Symposium; St. Petersburg, FL. 11/09.
- <u>Goldsmith, D.B.</u>, R. Parsons, M. Lomas, C. Carlson, **M. Breitbart**. "Abundance and diversity of viruses throughout the water column in the northwestern Sargasso Sea". Oral presentation by D. Goldsmith. 28<sup>th</sup> Annual USF College of Marine Science Graduate Student Symposium; St. Petersburg, FL. 11/09.
- Dunlap, D., T.F.F. Ng, I. Hewson, M. Breitbart. "Metagenomic analysis of RNA viruses in copepods and the sea". Oral presentation by D. Dunlap. 28<sup>th</sup> Annual USF College of Marine Science Graduate Student Symposium; St. Petersburg, FL. 11/09.
- **Breitbart, M**. "Examination of reservoirs and transmission mechanisms for plant viruses using metagenomic sequencing". Invited oral presentation. University of Florida Gulf Coast Research and Education Center; Wimauma, FL. 10/09.
- <u>Ng, T.F.F.</u>, S. Alavandi, **M. Breitbart**. "Novel DNA and RNA viruses characterized from wild shrimp in Florida". Oral presentation by T.F.F. Ng. Annual Meeting of the Florida Branch of the American Society for Microbiology; Islamorada, FL. 10/09.

- Rosario, K., K.P. Tucker, M. Breitbart. "Novel single-stranded DNA viruses in the marine environment". Oral presentation by K. Rosario. Annual Meeting of the Florida Branch of the American Society for Microbiology; Islamorada, FL. 10/09.
- **Breitbart, M.** "Metagenomics for viral discovery". Invited oral presentation for "Science Fridays". Bermuda Institute for Ocean Science; Bermuda. 7/09.
- **Breitbart, M.** "Marine viral diversity and ecology". Invited guest lecture for summer course in Microbial Oceanography at the Bermuda Institute for Ocean Science; Bermuda. 7/09.
- <u>Goldsmith, D.B.</u>, R. Parsons, <u>K. Pause Tucker</u>, C. Carlson, M. Breitbart. "Abundance and diversity of viruses throughout the water column in the northwestern Sargasso Sea". Oral presentation by D. Goldsmith. 18<sup>th</sup> Biennial Evergreen International Phage Biology Meeting; Olympia, WA. 8/09.
- Pause Tucker, K. R. Parsons, **M. Breitbart**. "Diversity and distribution of a novel group of marine ssDNA phage". Oral presentation by K. Pause Tucker. 18<sup>th</sup> Biennial Evergreen International Phage Biology Meeting; Olympia, WA. 8/09.
- <u>Dwivedi, B.</u>, M. Breitbart, J. Anderson, J.P. Massar, M. Sullivan, J. Elhai, R. Edwards.
   "PHANTOME: Phage Annotation Tools and Methods". Poster presentation. 18<sup>th</sup> Biennial Evergreen International Phage Biology Meeting; Olympia, WA. 8/09.
- Sun, C., B. Thomas, <u>K. Pause Tucker</u>, P. Wilmes, R. Hettich, N. VerBerkmoes, M. Breitbart, J.F. Banfield. "Community proteogenomic analysis of virus-host interactions in a natural system. Oral presentation by C. Sun. 18<sup>th</sup> Biennial Evergreen International Phage Biology Meeting; Olympia, WA. 8/09.
- **Breitbart, M.** "Metagenomics for viral discovery". Invited poster presentation. 15<sup>th</sup> Annual German-American Kavli Frontiers of Science Symposium; Irvine, CA. 6/09.
- **Breitbart, M**. "Abundance and diversity of viruses throughout the water column in the Northwestern Sargasso Sea." Poster presentation. 109<sup>th</sup> General Meeting of the American Society for Microbiology; Philadelphia, PA. 5/09.
- <u>Rosario, K.</u>, C. Nilsson, <u>E. Symonds</u>, Y. Ruan, **M. Breitbart**. "Viruses in reclaimed water". Poster presentation by K. Rosario. 109<sup>th</sup> General Meeting of the American Society for Microbiology; Philadelphia, PA. 5/09.
- <u>Ng, T.</u>, C. Manire, W.K. Suedmeyer, **M. Breitbart**. "Discovering novel animal viruses using metagenomic sequencing". Poster presentation by T. Ng. 109<sup>th</sup> General Meeting of the American Society for Microbiology; Philadelphia, PA. 5/09.
- **Breitbart, M**. "The surprisingly (high/low) diversity of marine viruses? Can we decide which?". Invited oral presentation. SCOR Viral Ecology Meeting; Newark, DE. 5/09.
- Ng, T.F.F., M. Breitbart. "Discovering novel marine animal viruses using viral metagenomics". Oral presentation by T. Ng. SCOR Viral Ecology Meeting; Newark, DE. 5/09.
- <u>Rosario, K.</u>, **M. Breitbart**. "Novel single-stranded DNA viruses in the marine environment". Oral presentation by K. Rosario. SCOR Viral Ecology Meeting; Newark, DE. 5/09.
- <u>Goldsmith, D.</u>, R. Parsons, <u>K. Pause</u>, C. Carlson, **M. Breitbart**. "Abundance and diversity of viruses throughout the water column in the Northwestern Sargasso Sea". Poster presentation by D. Goldsmith. SCOR Viral Ecology Meeting: Newark, DE. 5/09.
- <u>Ng, T.F.F.</u>, C. Manire, W.K. Suedmeyer, K. Borrowman, T. Langer, E. Wheeler, F. Gulland, L. Ehrhart, **M. Breitbart**. "Discovering novel animal viruses using viral metagenomics".

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Oral presentation by T. Ng. 40th Annual International Association for Aquatic Animal Medicine (IAAAM) Conference; San Antonio, TX. 5/09.

- Zeifman, A., C. Daniels, M Breitbart. "Spatial variability of coral-associated bacteria". Oral presentation by A. Zeifman. 2<sup>nd</sup> Annual Eckerd College Student Research Symposium: Saint Petersburg, FL. 4/09.
- <u>Pause, K.C.</u>, C. L. Sun, P. Wilmes, R. Hettich, N. VerBerkmoes, L. Comolli, J.F. Banfield, M
   **Breitbart**. "Characterization of viruses from an acid mine drainage system". Poster presentation by K. Pause. Department of Energy: Genomics: GTL Awardee Meeting: Bethesda, MD. 2/09.
- **Breitbart, M**. "Metagenomic sequencing for viral discovery". Invited oral presentation. University of Tampa. 1/09.
- <u>Nitti, A., C. Daniels</u>, A. Hoare, J. Siefert, V. Souza, M. Breitbart, D. Hollander. "A molecular, isotopic, and organic geochemical analysis of freshwater microbialites from Cuatro Cienegas, Mexcio". Oral presentation by A. Nitti. ASLO Aquatic Sciences Meeting: Nice, France. 1/09.
- <u>Daniels, C.</u>, I. Berzins, C. Watson, K. Heym-Kilgore, **M. Breitbart**. "Bacterial community profiling for coral restoration". Oral presentation by C. Daniels. ASLO Aquatic Sciences Meeting: Nice, France. 1/09.
- Breitbart, M., <u>T.F.F. Ng</u>, C. Manire, K. Borrowman, T. Langer, L. Ehrhart. "Discovery of a novel single-stranded DNA virus from a sea turtle fibropapilloma using viral metagenomics". Invited oral presentation. 12<sup>th</sup> Annual Florida Marine Turtle Permit Holder Meeting: Tampa, Florida. 1/09.
- Breitbart, M, K. Rosario, E. Symonds, C. Nilsson, Y. Ruan. "Metagenomics for viral discovery". Invited oral presentation. 44th Annual Meeting of the Argentine Society for Biochemistry and Molecular Biology Research (SAIB); Cordoba, Argentina. 11/08.
- <u>Goldsmith, DB</u>, R. Parsons, <u>K.C. Pause</u>, C. Carlson, **M. Breitbart**. "Abundance and diversity of viruses throughout the water column in the Northwestern Sargasso Sea". Oral presentation by D. Goldsmith. Joint Annual Meeting Southeastern Branch and Florida Branch of the American Society for Microbiology; Jacksonville, FL. 11/08.
- Ng, TFF, E. Bixby, F. Akad, J. Polston, **M. Breitbart**. "New molecular surveillance scheme for emerging pathogenic plant viruses". Oral presentation by T. Ng. Joint Annual Meeting -Southeastern Branch and Florida Branch of the American Society for Microbiology; Jacksonville, FL. 11/08.
- <u>Nitti, A</u>, <u>C. Daniels</u>, J. Siefert, V. Souza, **M. Breitbart**, D. Hollander. "A molecular, isotopic, and organic geochemical analysis of freshwater microbialites". Oral presentation by A. Nitti. Joint Annual Meeting - Southeastern Branch and Florida Branch of the American Society for Microbiology; Jacksonville, FL. 11/08.
- Zeifman, A, C. Daniels, M. Breitbart. "Spatial variability of coral-associated bacteria". Oral presentation by A. Zeifman. Joint Annual Meeting Southeastern Branch and Florida Branch of the American Society for Microbiology; Jacksonville, FL. 11/08.
- **Breitbart, M**. "Viral metagenomics". Tulane Department of Biochemistry; New Orleans, LA. 10/08. Invited talk.

- Rosario, K, R. Rodriguez, V.L. Lougheed, **M. Breitbart**. "Antarctic polyketide synthase Type 1 Genes" Society for Advancement of Chicanos and Native Americans in Science; Salt Lake City, UT. 10/08.
- Daniels, C, M. Breitbart, I. Berzins, C. Watson. "Microbial profiling for coral restoration". Oral presentation by C. Daniels. 11th International Coral Reef Symposium; Fort Lauderdale, FL. 7/08.
- <u>Rosario, K</u> and **M. Breitbart**. "Metagenomic sequencing for viral discovery". Invited oral presentation given by K. Rosario. American Society for Microbiology 108th General Meeting; Boston, MA. 6/08.
- <u>Pause, KC</u>, C. Sun, P. Wilmes, J.F. Banfield, M. Breitbart. "Characterization of viruses from an acid mine drainage system using microscopy and metagenomic sequencing". Poster presentation by K. Pause. American Society for Microbiology 108th General Meeting; Boston, MA. 6/08.
- <u>Rosario, K</u>, C. Nilsson, Y. Ruan, **M. Breitbart**. "Viruses in reclaimed water". Poster presentation by K. Rosario. American Society for Microbiology 108th General Meeting; Boston, MA. 6/08.
- Symonds, EM, K. Rosario, M. Breitbart. "Viruses found in sewage and their potential to indicate fecal pollution in coastal waters". Poster presentation by E. Symonds. American Society for Microbiology 108th General Meeting; Boston, MA. 6/08.
- <u>Ng, TFF</u>, C. Manire, **M. Breitbart**. "Discovery and prevalence of a novel sea turtle circovirus using metagenomic sequencing". Poster presentation by T. Ng. American Society for Microbiology 108th General Meeting; Boston, MA. 6/08.
- <u>Ng, TFF</u>, W.K. Suedmeyer, **M. Breitbart**. "Discovery of a novel anellovirus from a mortality event of four captive California sea lions using viral metagenomics". Oral presentation by T. Ng. 39th Annual International Association for Aquatic Animal Medicine (IAAAM) Conference; Rome, Italy. 5/08. TFF Ng was awarded best oral presentation.
- **Breitbart, M.** "Microbiology and coral restoration". Coral Restoration Workshop; Key West, FL. 4/08.
- **Breitbart, M.** "Viruses in sewage and reclaimed water implications for human and environmental health". Invited seminar. ERIC symposium; Tampa, FL. 4/08.
- Daniels, C, M. Breitbart, I. Berzins, C. Watson. "Microbial profiling for coral restoration". Oral presentation by C. Daniels. USF College of Marine Science Graduate Student Symposium; Saint Petersburg, FL. 4/08.
- Ng, TFF, C. Manire, K. Borrowman, T. Langer, L. Ehrhart, **M. Breitbart**. "A novel virus discovered from a sea turtle fibropapilloma using viral metagenomics and the characterization of its quasispecies". Oral presentation by T. Ng. USF College of Marine Science Graduate Student Symposium; Saint Petersburg, FL. 4/08. TFF Ng was awarded 2nd best oral presentation.
- <u>Nitti, A</u>, **M. Breitbart**, D. Hollander. "The origin of freshwater microbialites: an in situ chemical, genomic, and stable isotope approach". Oral presentation by A. Nitti. USF College of Marine Science Graduate Student Symposium; Saint Petersburg, FL. 4/08.

- <u>Rosario, K</u>, C. Nilsson, Y. Ruan, **M. Breitbart**. "Viruses in reclaimed water". Oral presentation by K. Rosario. USF College of Marine Science Graduate Student Symposium; Saint Petersburg, FL. 4/08. K. Rosario was awarded best oral presentation.
- Symonds, E, K. Rosario, M. Breitbart. "Viruses found in sewage and their potential to indicate fecal pollution in coastal waters". Oral presentation by E. Symonds. USF College of Marine Science Graduate Student Symposium; Saint Petersburg, FL. 4/08.
- <u>Goldsmith, D</u>, R. Parsons, C. Carlson, **M Breitbart**. "Abundance, dynamics, and diversity of viruses in the northwestern Sargasso Sea". Poster presentation by D. Goldsmith. USF College of Marine Science Graduate Student Symposium; Saint Petersburg, FL. 4/08.
- **Breitbart, M.** "Environmental microbes: the good, the bad, and the ugly". Invited seminar. Ave Maria University; Ave Maria, FL. 4/08
- **Breitbart, M.** "Discovery of reservoirs and transmission mechanisms for plant viruses using metagenomic sequencing". Invited seminar. NanoFocus and Oklahoma EPSCoR Annual State Conference; Oklahoma City, OK. 3/08.
- <u>Daniels, C</u>, I. Berzins, C. Watson, M. Breitbart. "Coral mucus, microbes, and memory". Oral presentation by C. Daniels. Biomedical and Comparative Immunology Symposium; Miami, FL. 3/08.
- McDaniel, L, M. Breitbart, J.H. Paul. "Occurrence of phage integrase-like gene expression in Tampa Bay, FL. Oral presentation by L. McDaniel. 2008 Ocean Sciences Meeting; Orlando, FL. 2/08.
- <u>Pause, K., C. Sun, P. Wilmes, B. Baker, L.R. Comolli, C. Pan, R. Hettich, N. VerBerkmoes, J.F. Banfield, M. Breitbart</u>. "Purification and characterization of viruses from an acid mine drainage system". Poster presentation by K. Pause. Genomics: GTL Contractor-Grantee Workshop VI; Bethesda, MD. 2/08.
- **Breitbart, M.** "Viral Metagenomics". Invited seminar. Florida Institute of Technology Biological Sciences Reunion and Symposium; Melbourne, FL. 1/08.
- Breitbart, M. "Viral Metagenomics". Invited seminar. Northern Arizona University; Flagstaff, AZ. 11/07.
- <u>Symonds, E.M.</u> and **M. Breitbart**. "Viruses found in sewage and their potential to indicate fecal pollution in coastal waters". Oral presentation by E. Symonds. Florida Branch of the American Society for Microbiology Annual Meeting; St. Petersburg, FL. 10/07.
- <u>Rosario, K</u>. and **M. Breitbart**. "Viruses in reclaimed water". Oral presentation by K. Rosario. Florida Branch of the American Society for Microbiology Annual Meeting; St. Petersburg, FL. 10/07. K. Rosario was awarded 3<sup>rd</sup> place best graduate student presentation.
- <u>Daniels, C.</u>, I. Berzins, C. Watson, M. Breitbart. "Microbial profiling for coral restoration".
   Oral presentation by C. Daniels. Florida Branch of the American Society for Microbiology Annual Meeting; St. Petersburg, FL. 10/07.
- <u>Ng, F.F.</u>, C. Manire, W.K. Suedmeyer, **M. Breitbart**. "Novel viruses discovered in sea turtle fibropapilloma and sea lion lung tissue using virus purification and shotgun sequencing". Oral presentation by F.F. Ng. Florida Branch of the American Society for Microbiology Annual Meeting; St. Petersburg, FL. 10/07.

- **Breitbart, M.** "Metagenomic Sequencing of Environmental Viral Communities". Invited seminar. University of Central Florida, Biology Department; Orlando, FL. 9/07.
- **Breitbart, M.** "Viral metagenomics Exploring the diversity of the most abundant biological entities on the planet". Invited seminar. University of Florida, Microbiology and Cell Science; Gainesville, FL. 9/07.
- **Breitbart, M.** "Viruses in human feces". Invited guest lecture for Plant Virology Course; University of Florida Department of Plant Pathology; Gainesville, FL. 9/07.
- **Breitbart, M.** "Viral metagenomics insights into ecology". Society for General Microbiology: 161<sup>st</sup> Meeting; Edinburgh, Scotland. 9/07.
- **Breitbart, M**, D Hollander, A Hoare, J Siefert, M Haynes, R Edwards, F Rohwer, V Souza. "The role of microbes in the precipitation of microbialites in Cuatro Cienegas, Mexico: A genomic and stable isotopic perspective". Second meeting of Cuatrocienegas Researchers; Cuatro Cienegas, Mexico. 8/07.
- **Breitbart, M.** "Environmental single-stranded DNA phage". 17<sup>th</sup> Evergreen International Phage Biology Meeting; Evergreen, Washington. 8/07.
- **Breitbart, M.** "Metagenomics and its applications". 17<sup>th</sup> Evergreen International Phage Biology Meeting; Evergreen, Washington. 8/07.
- **Breitbart, M.** "Metagenomics of soil viruses". Invited speaker. Delaware Biotechnology Institute Soil Metagenome Annotation Jamboree; Newark, DE. 8/07.
- **Breitbart, M.** "Marine viral diversity and ecology". Invited guest lecture for summer course in Microbial Oceanography at the Bermuda Institute for Ocean Science; Bermuda. 7/07.
- <u>Ng, FF</u>, C Manire, **M Breitbart**. "Identification of novel pathogenic viruses by shotgun sequencing". Poster presentation by FF Ng. International Association for Aquatic Animal Medicine; Orlando, Florida. 5/07. (1<sup>st</sup> place in poster competition)
- **Breitbart, M.** "Diversity and biogeography of marine viruses". Invited oral presentation. Small matters: microbes and their role in conservation. The American Museum of Natural History Center for Biodiversity and Conservation's Twelfth Annual Symposium; New York, NY. 4/07.
- <u>Daniels, C.</u>, I. Berzins, M. Breitbart. "From culture to transplantation: microbial profiling for coral reef restoration". Poster presentation by C. Daniels. The American Museum of Natural History Center for Biodiversity and Conservation's Twelfth Annual Symposium; New York, NY. 4/07.
- Breitbart, M. "Metagenomic analyses of uncultured viral communities insights into ecology". Invited seminar. University of Miami Rosentiel School of Marine and Atmospheric Science; Miami, FL. 4/07.
- **Breitbart, M.** "Marine viral diversity and ecology". Invited guest lecture for Marine Microbiology Course; University of Miami Rosentiel School of Marine and Atmospheric Science; Miami, FL. 4/07.
- **Breitbart, M.** "Molecular approaches to understanding bacteria and viruses in the environment". Bridge to the Doctorate Invited Seminar; Saint Petersburg, Florida. 3/07.
- <u>Symonds, E</u>. and **M. Breitbart**. "The diversity and distribution of pathogenic viruses in the Florida Keys". Poster presentation by E Symonds. 3<sup>rd</sup> Annual USF Interdisciplinary Graduate Research Symposium; Tampa, FL. 3/07.

- <u>Daniels, C</u>. and **M. Breitbart**. "From culture to transplantation: microbial profiling for coral reef restoration". Poster presentation by C. Daniels. 3<sup>rd</sup> Annual USF Interdisciplinary Graduate Research Symposium; Tampa, FL. 3/07.
- <u>Rosario, K</u>. and **M. Breitbart**. "Characterization of viruses in reclaimed water". Poster presentation by K. Roasrio. 3<sup>rd</sup> Annual USF Interdisciplinary Graduate Research Symposium; Tampa, FL. 3/07.
- <u>Ng, FF</u>, C Manire, J St Leger, **M Breitbart**. "Identification of novel pathogenic viruses by shotgun sequencing: experiments on the fibropapilloma-associated turtle herpesvirus and a novel eel virus". Poster presentation by FF Ng. 3<sup>rd</sup> Annual USF Interdisciplinary Graduate Research Symposium; Tampa, FL. 3/07.
- **Breitbart, M.** "Molecular approaches to understanding the role of viruses in the oceans and their effect on ocean life". Tampa Bay Technology Forum; St. Petersburg, FL. 3/07.
- **Breitbart, M.** "From beautiful beaches to baby butts metagenomic analyses of viral communities". Invited oral presentation. Les Treilles meeting on "The evolution, diversity and ecology of the dark matter of the biosphere: bacteriophages"; Les Treilles, France. 3/07.
- McDaniel, L, JH Paul, **M Breitbart.** "Occurrence of phage integrase-like genes in Tampa Bay". Oral presentation by L. McDaniel. Aquatic Sciences Meeting - American Society for Limnology and Oceanography; Santa Fe, NM. 2/07.
- Angly, FE, B Felts, M Breitbart, P Salamon, RA Edwards, C Carlson, AM Chan, M Haynes, S Kelley, H Liu, J Mahaffy, JE Mueller, J Nulton, R Olson, R Parsons, S Rayhawk, CA Suttle, F Rohwer. "The marine virome of four oceanic regions". Oral presentation by F. Angly. Aquatic Sciences Meeting - American Society for Limnology and Oceanography; Santa Fe, NM. 2/07.
- **Breitbart, M.** "Metagenomic analysis of bacteria and viruses associated with living microbialites". Invited oral presentation. Cuatrocienegas, Mexico. 2/07.
- <u>Rosario, K</u> and **M. Breitbart.** "Characterization of viruses in reclaimed water". Oral presentation by K. Rosario. 14<sup>th</sup> Annual Florida-Georgia Louis Stokes Alliance for Minority Participation (FGLSAMP) Expo; Tampa, FL. 2/07.
- **Breitbart, M**. "Metagenomics of uncultured viral communities". Invited seminar. Florida Institute of Technology Biology Department; Melbourne, FL. 10/06.
- **Breitbart, M**. "Metagenomics of uncultured viral communities". Invited seminar. Florida International University Biology Department; Miami, FL. 10/06.
- Symonds, EM, M Breitbart. "Diversity and distribution of pathogenic viruses in the Florida Keys". Oral presentation by EM Symonds. University of South Florida College of Marine Science Graduate Student Symposium; Saint Petersburg, FL. 10/06.
- <u>Ng, FF</u>, **M Breitbart**. "Identification of novel pathogenic viruses by shotgun sequencing". Oral presentation by FF Ng. University of South Florida College of Marine Science Graduate Student Symposium; Saint Petersburg, FL. 10/06.
- **Breitbart, M.** "Viruses and lil' tummies". ASM Microbe World radio interview. 9/06. http://www.flpradio.com/microbeworld/audio/060904-060929/060915.mp3
- **Breitbart, M.** "Diversity and distribution of uncultured viruses". Invited seminar. University of Florida Department of Plant Pathology; Gainesville, FL. 9/06.

- **Breitbart, M.** "Plant viruses in human feces". Invited guest lecture for Plant Virology Course; University of Florida Department of Plant Pathology; Gainesville, FL. 9/06.
- **Breitbart, M.** "Metagenomics of human fecal viruses". Invited seminar. University of Florida Archie Carr Sea Turtle Center; Gainesville, FL. 9/06.
- Breitbart, M, M Haynes, R Edwards, V Souza, J Siefert, F Rohwer. "Metagenomic analysis of viruses associated with living stromatolites from the Cuatrocienegas basin; Coahuila, Mexico". Oral presentation. 11<sup>th</sup> International Symposium on Microbial Ecology; Vienna, Austria. 8/06.
- **Breitbart, M**. "Microbial ecology of Cuatro Cienegas". Invited oral presentation. Cuatro Cienegas, Mexico Town Meeting. 8/06.
- **Breitbart, M.** "The global marine virome exploring the largest reservoir of unknown sequence space on the planet". Invited oral presentation. Origin of Life Gordon Research Conference. Lewiston, ME. 7/06.
- Breitbart, M, V Casas, B Felts, J Mahaffy, J Miyake, J Nulton, P Salamon, E Sano, T Zhang, Y Ruan, F Rohwer. "Metagenomic analyses of uncultured environmental viral communities". Invited oral presentation. 8<sup>th</sup> Annual Biodetection Technologies Meeting. Washington, DC. 6/06.
- **Breitbart, M**, M Haynes, R Edwards, B Felts, J Mahaffy, J Nulton, P Salamon, F Rohwer. "Viral diversity and dynamics in a newborn's gut". Poster presentation. American Society for Microbiology General Meeting; Orlando, FL. 5/06.
- Casas, V, J Miyake, H Balsley, J Roark, S Leeds, S Telles, I Zurita, M Breitbart, D Bartlett, F Azam, F Rohwer. "Widespread occurrence of phage-encoded exotoxin genes in terrestrial and aquatic environments". Poster presentation by V Casas. American Society for Microbiology General Meeting; Orlando, FL. 5/06.
- Breitbart, M, R Edwards, B Felts, P Salamon, F Angly, C Carlson, A Chan, M Haynes, S Kelley, J Mahaffy, J Mueller, J Nulton, R Olson, R Parsons, S Rayhawk, C Suttle, F Rohwer. "The global marine virome". Oral presentation. Florida Branch of the American Society for Microbiology; Cocoa Beach, FL. 4/06.
- **Breitbart, M.** "Metagenomic analyses of uncultured viral communities insights into ecology". Invited seminar. University of South Florida Biology Department; Tampa, FL. 3/06.
- Breitbart, M, R Edwards, F Rohwer. "Ecological insights from marine viral sequences". Poster presentation. Ocean Sciences Meeting American Society for Limnology and Oceanography; Honolulu, HI. 2/06.