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Professional Registration

Professional Engineer, Commonwealth of Massachusetts, Civil Engineering, 1995-present
Board Certified Environ. Engineer, Specialization: Water Supply/Wastewater Engineering, 2012-present

Education

Humboldt State Univ., Arcata, CA	Environmental Engineering	B.S. 1988
University of California, Davis, CA	Civil Engineering,	M.S. 1990
University of California, Davis, CA	Civil and Environmental Engineering	Ph.D. 1993

Work Experience

2011-pres.	Professor	Civil & Environmental Engrg., Univ. South Florida
2015	Visiting Professor	Environ. Engr. & Water Technol., UNESCO-IHE, Netherlands
2016	Visiting Professor	Civil & Environmental Engrg. Technion Israel Institute of Technol.
2016	Visiting Professor	Zuckerberg Institute for Water Research, Ben Gurion Univ. Israel
2009-2011	Assoc. Professor	Civil & Environmental Engrg., Univ. South Florida
2009-2010	Professor	Civil & Environmental Engrg., Univ. Massachusetts, Amherst
2000-2009	Assoc. Professor	Civil & Environmental Engrg., Univ. Massachusetts, Amherst
2007-2008	Fulbright Fellow	Civil & Environmental Engrg. Technion Israel Institute of Technol.
1994-2000	Asst. Professor	Civil & Environmental Engrg., Univ. Massachusetts, Amherst

Research Interests: Biological treatment processes including wastewater treatment, nutrient removal, membrane bioreactors, bioremediation, anaerobic digestion, bioretention and algal biofuel systems.

Courses Taught: *At UMass Amherst:* Systems Analysis & Economics for Civil Engineers, Water & Wastewater Systems, Air Quality, Environmental Biological Processes. *At USF:* Environmental Engineering Systems, Biological Principles in Environmental Engineering, Capstone Water Resources/Environmental Engineering Design, Graduate Research Methods, Mentoring Undergraduate Researchers.

Administration: Graduate Program Coordinator, USF, 2010-present; Chief Undergraduate Advisor, UMass, 2004-2007; Honors Program Coordinator, UMass, 1995-2009.

Professional Societies

American Academy of Environmental Engineering, 2012-present
Association of Environmental Engineering & Science Professors 1994-present
Member, AEESP Board of Directors 2011-2014
Secretary 2012-2014
Board Member and Secretary AEESP Foundation 2014-present
Conference Co-Chair: 2011 Biannual Conference, Tampa FL, July 10-12.
Lectures Committee 2004-2012 (Chair 2007-2010)

Water Environment Federation 1992-present

Member; Stockholm Junior Water Prize Task Force 2014
Committee Member: Academic Committee: 2011-present; Algae Task Group: 2011-present;
Research Symposium Committee 2005-2011; Membrane committee 2009-present
Program Committee: Membrane Applications 2010, Anaheim, CA, June 6-9, 2010; Nutrient Recovery and Management Conferences: 2011 Miami, FL; 2013 Vancouver BC.

Florida Water Environment Association 2009-present; Faculty Advisor, USF Chapter 2011-present

International Water Association 2005-present

Board member: Membrane specialist committee, 2004-2011

Conference Chair: 2008 IWA Membrane Research Conference, Amherst MA, August 10-13, 2008.

Engineers Without Borders 2007- present; Advisor, UMass Student Section, Brazil Project 2008-2009

Awards, Honors, and Scholarships

Associate Editor: Journal of Sustainable Water in the Built Environment, 2016-present
Society for Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS)
Outstanding Mentor Award, 2016
USF Outstanding Graduate Mentor Award Runner Up, 2015
McKnight Doctoral Fellowship Program Outstanding Mentor Award, 2015
Water Environment Federation Fellow, 2015
AEESP Service Awards: 2011 Chair Lectures Committee, 2011 Co-chair Biannual Conference, 2014
Board Member and Secretary
2007/2008 Fulbright Fellow, Technion University, Haifa Israel
ASCE ExCEEEd (Excellence in Civil Engineering Education) Fellow, 2005
CEE Advisory Committee Service Award, 2004
College of Engineering Advising Award, 1999
Chi Epsilon, Chapter Honor Member, 1999
Switzer Environmental Fellowship, 1991
Research Mentorship, University of California, Davis, 1990
Graduate Opportunity Fellowship, University of California, Davis, 1988, 1989
Roscoe-Schenler Engineering Scholarship Award, Humboldt State University, 1987
Engineering Student of the Year, Humboldt State University, 1986

Graduate Student & Postdoctoral-Scholar Advisor (*= current students, + = co-advised):

Postdocs (4): Kofi Dalrymple (Algonon), Qais Banihani (U. Jordan), Thomas Lynn (Tx A&M), Meng Wang (USF)*

PhD (19): Veronica Aponte-Morales (USF), Kathryn Bailey (Coskata, Inc.), Suzanne Boxman (Nat. Center Mariculture, Israel), Phillip Dixon (USF)*, Beatriz Cárdenas-González (Nat. Inst. Ecology, Mex), Matthew Cutter (unknown), Trina Halfhide (U. West Indies), Michelle Henderson (USF)*, Maureen Kinyua (UC Davis), Emma Lopez (USF)*, Erika Lopez-Luna (unknown), Thomas Lynn (Tx A&M), Nathan Manser (Michigan Tech), Kyung-Nan Min (U. S. Dakota), Karl Payne (USF)*, Md Yeasir Arif Rahman (USF)*, Laura Rodriguez-Gonzales (USF)*, Ashish Sahu (COWI, Inc.), Nadezhda Zalivina (USF)*.

MS (34): Adib Amini (USF), Maraida Balaguer Barbosa (USF)*, Amber Boles (Tighe & Bond), Benjamin Charcow (Amster Rothstein & Ebenstein LLP), Tracy Cook (unknown), Ayesha Dolasa (BEM Systems, Inc.), Michael Falk (HDR), Joseph Fermanian (City of Oakland), Jaime Harrison (Anchor QEA), Greg Hinds (Wildscape Engr.), Nicole Jannis (unknown), Yener Keskiner (unknown), Leslie Knapp (Brown & Caldwell), Alex Kruglick (Schlumberger), Ehoud Leshem (Aquanos, Inc.), Alex Lin (Osprey Biotechnics), Faith Malay*, Michelle Masi (USF SP), Brian McCarthy (FDOT), Michael McGrath (unknown), Mercedita Monserrate (MP Engin.), Laura Rankin (City of Cocoa FL)⁺, Paul Reyes (MA Dept. Res. Cons.), Laurel Rowse (AECOM), Ann Sager (Hazen & Sawyer)*, Mauricio Sanchez (Cemex), Ryan Seigel (Tighe & Bond), Leslee Shumway (Dept. Homeland Sec.), Justine Stocks*, Brian Therriault (ARCADIS), John Trimmer (Univ. IL), Meghan Wahlstrom (USEPA), Xin Yuan (Impact Environ.), Wen Zhao (USF).

Additional students and scholars: 11 high school student interns, 53 undergraduate researchers, 9 middle and high school teachers, 17 international visiting scholars.

Selected Publications (72 peer reviewed journal articles and book chapters, > 190 conference presentations and posters and > 45 invited presentations)

Hinds, G.R., Mussoline, W., Dick, G., Yeh, D.H., Ergas, S.J. (accepted) Enhanced methane production from yard waste in high-solids anaerobic digestion through bioaugmentation with pulp and paper mill anaerobic sludge, *Environ. Engin. Science*.

- Hinds, G.R., Lens, P., Zhang, Q., Ergas, S.J. (2016) Microbial biomethane production from municipal solid waste using high-solids anaerobic digestion, In *Microbial Fuels: Technologies and Applications*, Serge Hiligsmann (Ed), Taylor & Francis, Oxford, UK, in press.
- Manser, N., Cunningham, J.A., Ergas, S.J., Mihelcic, J.M. (in press) Modeling Inactivation of Highly Persistent Pathogens in Household-Scale Semi-Continuous ADs, *Environ. Engin. Science*.
- Wang, M., Lee, E., Zhang, Q., Ergas, S.J. (accepted) Anaerobic co-digestion of swine manure and microalgae *Chlorella* sp.: experimental studies and energy analysis, *Bioenergy Research*.
- Trimmer, J.T., Nakyanja, N., Ssekubugu, R., Sklar, M., Mihelcic, J.M., Ergas, S.J. (in press) Assessing the promotion of Urine-Diverting Dry Toilets through school-based demonstration facilities in Kalisizo, Uganda, *J. Water, Sanitation & Hygiene for Development*.
- Trimmer J.T., Nakyanjo, N., Ssekubugu, R., Sklar, M., Mihelcic, J.R., Ergas, S.J. (in press) *Ascaris* Egg Inactivation by Free Ammonia Treatment of Collected Feces Using Stored Urine, *J. Water, Sanitation & Hygiene for Development*.
- Kinyua, M.N., Wald, I., Camacho-Céspedes, F., Haas, C., Ergas, S.J. (in press) Does the use of tubular digesters to treat livestock waste lower the risk of infection from *Cryptosporidium parvum* and *Giardia lamblia*?, *J. Water and Health*.
- Wang, M., Lee, E., Dilbeck, M.P., Liebelt, M., Zhang, Q., Ergas, S.J. (in press) Thermal Pretreatment of Microalgae for Biomethane Production: Experimental Studies, Kinetics and Energy Analysis, *J. Chemical Technol. & Biotechnol.*
- Aponte-Morales, V., Tong, S., Ergas, S.J. (2016) Nitrogen removal from anaerobically digested swine waste centrate using a chabazite - sequencing batch reactor (chabazite-SBR), *Environ. Engin. Science*, 33(5):324-332.
- Boxman, S., Nystrom, M., Capodice, J.C., Ergas, S.J., Main, K.L., Trotz, M.A. (in press) Effect of support medium, hydraulic loading rate, and plant density on water quality and growth of halophytes in marine aquaponic systems, *Aquaculture Research*.
- Lynn, T.J., Ergas, S.J., Nachabe, M.H. (in press) Effect of Hydrodynamic Dispersion in Denitrifying Wood-Chip Stormwater Biofilters, *J. of Sustainable Water in the Built Environment – ASCE*.
- Manser, N., Wang, M., Mihelcic, J.R., Mulder, A., van de Vossenberg, J., van Lier, J.B., van der Steen, P. (2016) Biological Nitrogen Removal in a Photo-Sequencing Batch Reactor with an Algal-Nitrifying Bacterial Consortium and Anammox Granules, *ES&T Letters*, 3(4):175-179.
- Kinyua, M.N., Trimmer, J., Izurieta, R., Cunningham, J., Ergas, S.J. (2016) Viability and Fate of *Cryptosporidium parvum* and *Giardia lamblia* in Tubular Anaerobic Digesters, *Science of the Total Environment*, 554–555 (2016): 167–177.
- Kinyua, M.N., Zhang, J., Camacho-Céspedes, F., Tejada-Martinez, A., Ergas, S.J. (2016) Physical and Biological Process Modeling of Tubular Anaerobic Digesters Treating Swine Waste in Rural Costa Rica, *Biochemical Engin. J.* 107(2016):35-44.
- Kinyua, M.N., Rowse, L., Ergas, S.J. (2016) Review of Small-Scale Tubular Anaerobic Digesters Treating Livestock Waste in the Developing World, *Renewable Sus. Energy Reviews*, 58: 896–910.
- Zhao, W., Zhang, Y., Rodriguez-Gonzalez, L.C., Zhong, F., Ergas, S.J., Alcantar, N.A. (2015) Removal of Off-Flavor Compounds in Aquaculture Water by Spray-Coated TiO₂ Photocatalysis, *Chemical Engin. & Process Technol.*, 6(3): 237.
- Wang, M., Yang, H., Ergas, S.J. van der Steen, P (2015) A novel shortcut nitrogen removal process using an algal-bacterial consortium in a photo-sequencing batch reactor (PSBR), *Water Research*, 87:38-48.
- Boxman, S., Kruglick, A., McCarthy, B., Main, K.L., Brennan, N. P., Nystrom, M., Hanson, T., Ergas, S.J., Trotz, M.A. (2015) Performance evaluation of a commercial land-based IMTA system using constructed wetlands and geotextile bags for solids treatment, *Aquac. Eng.*, 69:23-36.
- Lynn, T.J., Yeh, D., Ergas, S.J. (2015) Performance of Denitrifying Stormwater Biofilters Under Intermittent Conditions, *Environ. Engin. Science*, 32(9): 796-805.
- Manser, N., Mihelcic, M., Ergas, S.J. (2015) Semi-continuous mesophilic anaerobic digester performance under variations in solids retention time and feeding frequency, *Bioresource Technol.*, 190: 359-366.

- Manser, N., Wald, I., Ergas, S.J., Izurieta, R., Mihelcic, J. (2015) Assessing the Fate of *Ascaris suum* Ova during Mesophilic Anaerobic Digestion, *Environ. Science & Technol.*, 49(5): 3128-3135.
- Lynn, T.J., Yeh, D., Ergas, S.J. (2015) Performance and Longevity of Denitrifying Wood Chip Biofilters for Stormwater Treatment - a Microcosm Study, *Environ. Engin. Science*, 32(4): 321-330.
- Halfhide, T., Dalrymple, O.K., Wilkie, A.C., Trimmer, J., Gillie, B., Udom, I., Zhang, Q., Ergas, S.J. (2015) Growth of an Indigenous Algal Consortium on Anaerobically Digested Municipal Sludge Centrate: Photobioreactor Performance and Modeling, *Bioenergy Research*, 8(1):249-258.
- Halfhide, T., Åkerström, A.M., Lekang, O-I, Gíslérød, H.R.R., Ergas, S.J. (2014) Production of algal biomass, chlorophyll, starch and lipids using aquaculture wastewater under axenic and non-axenic conditions, *Algal Research*, 6(B):152-159.
- Krayzelova, L., Lynn, T.J., Banihani, Q., Bartacek, J., Jenicek, P., Ergas, S.J. (2014) A Tire-Sulfur Hybrid Adsorption Denitrification Process for Decentral. Wastewater Tmt., *Water Res.*, 61:191-199.
- Pettit, S.L., Rodriguez-Gonzalez, L., Michaels, J.T., Norma A. Alcantar, N.A., Ergas, S.J., Kuhn, J.N. (2014) Parameters influencing the photocatalytic degradation of geosmin and 2-methylisoborneol utilizing immobilized TiO₂, *Catalysis Letters*, 144(8): 1460-1465.
- Kinyua, M.N., Cunningham, J., Ergas, S.J. (2014) Effect of Solids Retention Time on the Bioavailability of Organic Carbon in Anaerobically Digested Swine Waste, *Bioresource Technol.*, 162(2014):14-20.
- Ergas, S.J., Aponte-Morales, V. (2013) Biological Nitrogen Removal, in *Comprehensive Water Quality and Purification: Vol. 3 Remediation of Polluted Waters*, S. Sengupta Ed., Elsevier.
- Lynn, T.J., Wanjugi, P., Harwood, V.J., Ergas, S.J. (2013) Dynamic Performance of Biosand Filters, *J. American Water Works Assoc.* 105(10): 587-595.
- Udom, I., Zaribaf, B.H.; Halfhide, T.; Gillie, B.; Dalrymple, O.; Zhang, Q.; Ergas, S.J. (2013) Harvesting Microalgae Grown on Wastewater, *Bioresource Technol.*, 139: 101-106.
- Dalrymple, O.K., Halfhide, T., Udom, I., Gilles, B., Wolan, J., Zhang, Q., Ergas, S.J. (2013) Wastewater use in algae production for generation of renewable resources, *J. Aquatic Biosystems*, 9(2): 1-11.
- Baek, K., McKeever, K., Rieber, K., Sheppard, D., Park, C., Ergas, S.J., Nüsslein, K. (2012) Molecular approach to evaluate of biostimulation of 1,2-dibromoethane in contaminated groundwater, *Bioresource Technol.*, 123:207-213..
- Bailey, K.L., Tilton, F., Jansik, D.P., Ergas, S.J., Marshall, M.J., Miracle, A.L., Wellman, D.M. (2012) Growth Inhibition and Stimulation of *Shewanella oneidensis* MR-1 by Surfactants and Calcium 1 Polysulfide, *J. Ecotoxicology Environ. Safety*, 80: 195-202.
- McKeever, R., Sheppard, D., Nüsslein, K., Baek, K-H, Rieber, K., Ergas, S.J., Forbes, R., Hilyard, M., Park, C. (2012) Biodegradation of Ethylene Dibromide (1,2-Dibromoethane [EDB]) in Microcosms Simulating *In Situ* and Biostimulated Conditions, *J. Hazardous Materials*, 209:92-98.
- Yuan, X., Wang, M., Park, C., Sahu, A.K., Ergas, S.J. (2012) Microalgae Growth Using High Strength Wastewater Followed by Anaerobic Co-digestion, *Water Environ. Research*, 84(5):396-404.
- Coggon, M., Becerra, C.A., Nusslein, K., Miller, K., Yuretich, R., Ergas, S.J. (2012) Bioavailability of jarosite to iron reducing bacteria from an acid mine drainage site, *Geochimica et Cos Acta*, 78: 65-76.
- Boles, A., Conneely, T., McKeever, R., Nixon, P., Nüsslein, K., Ergas, S.J. (2012) Performance of a Pilot-Scale Packed Bed Reactor for Perchlorate Reduction Using a Sulfur Oxidizing Bacterial Consortium, *Biotechnology & Bioengineering*, 109(3): 637-646.
- Kumar, A., Lens, P., Ergas, S.J., Van Langenhove, H. (2011) Bioreactors for Waste Gas Treatment: Principles, Process Engineering, Performance and Development Requirements, in *Encyclopedia of Environmental Management*, S.E. Jorgenson (ed.), Taylor & Francis, New York.
- Yuan, X., Kumar, A., Sahu, A.K., Ergas, S.J. (2011) Impact of Ammonia Concentration on *Spirulina platensis* Growth in an Airlift Photobioreactor, *Bioresource Technol.*, 102(3): 3234-3239.
- Ergas, S.J., Sengupta, S., Siegel, R., Yao, Y., Pandit, A., Yuan, X. (2010) Denitrifying bioretention systems for control of non-point nitrogen sources, *J. Environ. Engin.-ASCE*, 136(10):1105-1112.
- Kumar, A., Chilongo, T. Dewulf, J., Ergas, S.J., van Langenhove, H. (2010) Gaseous dimethyl sulphide removal in a membrane biofilm reactor, *Bioresource Technol.*, 101 (23): 8955-8959.

- Kumar, A., Yuan, X., Sahu, A.K., Zhang, Q., Ergas, S.J., Malcata, F. X., Van Langenhove, H. (2010) Strategies for CO₂ sequestration using microalgae and cyanobacteria: Recent developments and future directions, *Trends in Biotechnology*, 28(7): 371-380.
- Kumar, A., Yuan, X., Sahu, A.K., Ergas, S.J., Van Langenhove, H. (2010) Hollow fiber membrane photobioreactor for CO₂ sequestration from combustion gas coupled with wastewater treatment: A process engineering approach, *J. Chemical Technol. and Biotechnology*, 85(3): 387-394.
- Kumar, A., Yuan, X., Ergas, S., Dewulf, J., Van Langenhove, H. (2010) Model of a polyethylene microporous hollow-fiber membrane biofilm reactor inoculated with *Pseudomonas putida* strain To1 1A for gaseous toluene removal, *Bioresource Technol.*, 101 (7): 2180-2184.
- Kumar, A., Ergas, S.J., Yuan, X., Fitch, M., Min, K-N., Van Langenhove, H. (2010) Modeling of a hollow fiber membrane biofilm reactor for nitric oxide removal: Model development and experimental validation, *J. Chemical Technol. and Biotechnology*, 85(3): 423-428.
- Sahu, A.K., Conneely, T., Nüsslein, K., Ergas, S.J. (2009) Hydrogenotrophic denitrification and perchlorate reduction in ion exchange brines using membrane biofilm reactors, *Biotechnology & Bioengineering*, 104(3): 483-491.
- Sahu, A.K., Sengupta, S., Ergas, S.J. (2009) Onsite hydrogenotrophic wastewater denitrification using a hollow fiber membrane biofilm reactor, *Water Environment Research*, 81(7): 680-686.
- Sahu, A.K., Conneely, T., Nüsslein, K., Ergas, S.J. (2009) Biological perchlorate reduction in packed bed reactors using elemental sulfur, *Environ. Science & Technol.*, 43(12):4466-4471.
- Becerra, C.A., López-Luna, E.L., Ergas, S.J., Nüsslein, K. (2009) Microcosm-based study of the attenuation of an acid mine drainage-impacted site through biological sulfate and iron reduction, *Geomicrobiology J.*, 26(1):9-20.
- Min, K-N, Ergas, S.J., Mermelstein, A. (2008) Impact of dissolved oxygen concentration on membrane filtering resistance and soluble organic compound characteristics in MBRs, *Water Science & Technol.*, 57(2):161-165.
- Sengupta, S., Ergas, S.J., Lopez-Luna, E. (2007) Investigation of solid-phase buffers for sulfur-oxidizing autotrophic denitrification, *Water Environment Research*, 79(13): 2519-2526.
- Min, K., Ergas, S.J. (2006) Volatilization and biodegradation of VOCs in membrane bioreactors, *J. Water, Air and Soil Pollution*, 6:83-96.
- Sengupta, S., Ergas, S.J., Lopez-Luna, E., Wood, J., Sahu, A.K., Palaniswamy, K. (2006) Autotrophic biological denitrification for complete removal of nitrogen from septic system wastewater, *J. Water, Air, Soil Pollution*, 6(1-2):111-126.
- Ergas, S.J., Therriault, B.M., Reckhow, D.A. (2006) Evaluation of water reuse technologies for the textile industry, *J. Environ. Engin., ASCE*, 132(3):315-323.
- Leshem, E.N., Pines, D.S., Ergas, S.J., Reckhow, D.A. (2006) Electrochemical oxidation and ozonation for textile wastewater reuse, *J. Environ. Engin., ASCE*, 132(3):324-330.
- Pines, D.S., Min, K-N, Reckhow, D.A., Ergas, S.J. (2004) Investigation of an ozone membrane contactor, *Ozone Science & Engin.*, 27:209-217.
- Ergas, S.J., Rheinheimer, D.E. (2004) Drinking water denitrification using a membrane bioreactor, *Water Research*, 38(14-15): 3225-3232.
- Morgan-Sagastume, J.M., Noyola, A., Revah, S., Ergas, S.J. (2002) Changes in physical structure of a compost biofilter treating H₂S, *J. Air & Waste Management Assoc.*, 53(8):1011-1021.
- Min, K-N., Ergas, S.J., Harrison, J.M. (2002) Hollow fiber membrane bioreactor for nitric oxide removal, *Environ. Engin. Science*, 19(6):575-583.
- Ergas, S.J., Reuss, A. (2001) Hydrogenotrophic denitrification of drinking water using a hollow fiber membrane bioreactor, *J. Water Supply: Research and Technol.-Aqua*, 50(3):161-171.
- Ergas, S.J. (2001) Chapter 6: Membrane bioreactors, In: *Bioreactors for Waste gas Treatment* (C. Kennes and M.C. Veiga, eds.), pp. 163-178, Kluwer Academic Publishers, Dordrecht, The Netherlands.
- Dolasa, A.R., Ergas, S.J. (2000) Membrane bioreactor for cometabolism of trichloroethene air emissions, *J. Environ. Engin., ASCE*, (126)10: 969-973.

Selected Grant Activity as PI (of >\$2.6 Million)

Date	Title	Funding source	Co-PIs	Amount
9/15-8/18	A novel algal-bacterial shortcut nitrogen removal process for wastewater treatment	NSF	Q. Zhang, K. Scott	\$330,000
9/15-12/16	Hybrid Adsorption Biological Treatment Systems (HABiTS) for Decentralized Wastewater Treatment	FL Space Grant Consortium	L. Rodriguez-Gonzalez	\$5,000
6/14-6/15	Alternative Energy Sources for Florida Aquaculture Systems	FL Aquaculture Research Council	Q. Zhang	\$71,848
8/14-7/14	Bioenergy Production from MSW by Solid-State Anaerobic Digestion	Hinkley Cntr. Solid and Haz Waste Mgmt	D. Yeh	\$59,621
8/13-8/15	Reducing Nitrogen Loads to Tampa Bay Using Bioretention Systems	Nat. Fish & Wildlife Fund	M. Trotz, J. Mihelcic	\$103,000
9/10-8/13	A Novel Physical-Chemical-Biological Treatment Process for Swine Wastes	US-Israel Binational Ag Res & Develop. Fund	J. Cunningham, O. Lahav & M. Green (Technion Israel)	\$300,000 (\$145,000 to USF)
9/08-8/12	A Sustainable Process to Capture and Store CO ₂ to Increase Production of Renewable Bioenergy	Norwegian Research Council	C. Park (UMass)	\$286,000 (\$129,230 to USF)

Selected Grant Activity as Co-Principal Investigator or Faculty Participant (of >\$14.7 Million total)

Date	Title	Funding source	Collaborators	Amount
6/15-6/16	Implementing, Optimizing and Evaluating a hybrid-design recirculation aquaculture systems for Off-Flavor Removal	FL Aquaculture Review Council	N. Alcantar (PI), J. Kuhn, Y. Goswami	\$201,120
2/14-2/16	Sustainable Production of Marine Fish and Sea Vegetables in Marine Aquaponics	Florida Sea Grant	Kevan Main (PI), Maya Trotz	\$179,989
11/13-10/17	Center for Reinventing Aging Infrastructure for Nutrient Management (RAINMgmt)	EPA	J. Mihelcic (PI), M. Trotz, D. Yeh, J. Cunningham, Q. Zhang, T. Boyer, A. Davis,	\$2.5M
1/13-12/15	REU Site: Tampa Environmental Interdisciplinary Research	NSF	M. Trotz (PI)	\$392,816
1/13-12/16	REU Site: Globalization and Community Health: Combining Social Science and Engineering	NSF	N. Romero-Daza (PI), D. Himmelgreen, J. Mihelcic	\$418,611
1/13-12/17	PIRE: Context Sensitive Implementation of Synergistic Water-Energy Systems	NSF	J. Mihelcic (PI), M. Trotz, E.C. Wells, C. McKayle	\$3.9M
8/10-7/14	Graduate Scholarships to Achieve Sustainable Infrastructure at the Water-Energy-Global Nexus	NSF	J. Mihelcic (PI), A. Stuart, Q. Zhang, Y. Zhang	\$600,000,
12/10-11/12	Performance of pilot and commercial wastewater systems associated with inland production of high value marine fish	NOAA	K. Main (PI), M. Trotz, C. Weirich, G. Sharell	\$400,000