

**TENURE AND PROMOTION CURRICULUM VITAE
OF
ROBERT JOSEPH BURGMAN
DEPARTMENT OF EARTH AND ENVIRONMENT**

EDUCATION

Ph. D.	George Mason University	Climate Dynamics	05/2006
B.S.	Coastal Carolina University	Marine Science	05/1997

FULL-TIME ACADEMIC EXPERIENCE

Florida International University	Assistant Professor	Earth and Environment	09/2011 - Present
University of Miami Rosenstiel School of Marine & Atmospheric Science	Associate Scientist	Meteorology and Physical Oceanography	07/2009 - 09/2011
University of Miami Rosenstiel School of Marine & Atmospheric Science	Assistant Scientist	Meteorology and Physical Oceanography	03/2008 - 06/2009
University of Miami Rosenstiel School of Marine & Atmospheric Science	Postdoctoral Research Associate	Meteorology and Physical Oceanography	03/2006 - 02/2008

PART-TIME ACADEMIC EXPERIENCE

N/A

NON-ACADEMIC EXPERIENCE

N/A

EMPLOYMENT RECORD AT FIU

Assistant Professor 09/2011 - Present

PUBLICATIONS IN DISCIPLINE

Books

N/A

Peer-reviewed Journal Articles:

IF= 2016 5 year impact factors obtained from ISI Web of Knowledge

NPR=not peer reviewed

1. **Burgman, R. J.**, B. P. Kirtman, A. C. Clement, and H. Vazquez, 2017: Model evidence for low-level cloud feedback driving persistent changes in atmospheric circulation and regional hydroclimate, *Geophys. Res. Lett.*, 44, 428–437, doi:10.1002/2016GL071978. IF=4.579
2. **Burgman, R. J.** and Y. Jang, 2015: Simulated U.S. Drought Response to Interannual and Decadal Pacific SST Variability. *J. Climate*, 28, 4688–4705. doi: 10.1175/JCLI-D-14-00247.1 IF=5.345
3. Meehl, G. A., L. Goddard, G. Boer, **R. Burgman**, G. Branstator, C. Cassou, S. Corti, G. Danabasoglu, F. Doblas-Reyes, E. Hawkins, A. Karspeck, M. Kimoto, A. Kumar, D. Matei, J. Mignot, R. Msadek, A. Navarra, H. Pohlmann, M. Rienecker, T. Rosati, E. Schneider, D. Smith, R. Sutton, H. Teng, G. J. van Oldenborgh, G. Vecchi, and S. Yeager, 2014: Decadal Climate Prediction: An Update from the Trenches. *Bull. Amer. Meteor. Soc.*, 95, 243-267, doi:10.1175/BAMS-D-12-00241.1. IF=10.757
4. Goddard, L., A. Kumar, A. Solomon, D. Smith, G. Boer, P. Gonzalez, V. Kharin, W. Merryfield, C. Deser, S. J. Mason, B. P. Kirtman, R. Msadek, R. Sutton, E. Hawkins, T. Fricker, G. Hegerl, C. A. T. Ferro, D. B. Stephenson, G. A. Meehl, T. Stockdale, **R. Burgman**, A. M. Greene, Y. Kushnir, M. Newman, J. Carton, I. Fukumori, and T. Delworth, 2013: A verification framework for interannual-to-decadal predictions experiments. *Clim. Dyn.*, 40, 245-272, doi:10.1007/s00382-012-1481-2. IF=4.744
5. Kirtman, B., E. Schneider, D. Straus, D. Min, and **R. Burgman**, 2011: How weather impacts the forced climate response. *Clim. Dyn.*, 37, 2389-2416, doi:10.1007/s00382-011-1084-3. IF=4.744
6. Seager, R. and **R. Burgman**, 2011: Medieval Hydroclimate Revisited. “Can the global pattern of Medieval hydroclimate be explained by a persistent La Niña-like state and a persistent positive North Atlantic Oscillation (NAO) and, if so, why did this happen?” *Past Global Changes*, 19, 10-12. “NPR”
7. **Burgman, R.**, R. Seager, A. Clement, and C. Herweijer, 2010: Role of tropical Pacific SSTs in global medieval hydroclimate: A modeling study. *Geophys. Res. Lett.*, 37, - L06705, doi:10.1029/2009GL042239. IF=4.579
8. Clement, A. C., **R. Burgman**, and J. R. Norris, 2010: Response to Comment on “Observational and Model Evidence for Positive Low-Level Cloud Feedback”. *Science*, 329, 277-277, doi:10.1126/science.1187667. IF=38.062
9. Clement, A. C., **R. Burgman**, and J. R. Norris, 2009: Observational and Model Evidence for Positive Low-Level Cloud Feedback. *Science*, 325, 460-464, doi:10.1126/science.1171255. IF=38.062

10. **Burgman, R.**, J., A. C. Clement, C. M. Mitas, J. Chen, and K. Esslinger, 2008: Evidence for atmospheric variability over the Pacific on decadal timescales. *Geophys.Res.Lett.*, 35, - L01704, doi:10.1029/2007GL031830. IF=4.579
11. Seager, R., **R. Burgman**, Y. Kushnir, A. Clement, E. Cook, N. Naik, and J. Miller, 2008: Tropical Pacific Forcing of North American Medieval Megadroughts: Testing the Concept with an Atmosphere Model Forced by Coral-Reconstructed SSTs*. *J.Climate*, 21, 6175-6190, doi:10.1175/2008JCLI2170.1. IF=5.345
12. **Burgman, R. J.**, P. S. Schopf, and B. P. Kirtman, 2008: Decadal Modulation of ENSO in a Hybrid Coupled Model. *J.Climate*, 21, 5482-5500, doi:10.1175/2008JCLI1933.1. IF=5.345
13. Schopf, P. S., **R. J. Burgman**, 2006: A Simple Mechanism for ENSO Residuals and Asymmetry. *J.Climate*, 19, 3167-3179, doi:10.1175/JCLI3765.1. IF=5.345

Proceedings

N/A

Peer Reviewed Chapters in Books

1. Kirtman B. P., **R. J. Burgman**, J. Infanti, V. Misra, 2017: Florida Climate Variability and Prediction. In *Florida's Climate: Changes, Variations & Impacts*. Florida Climate Institute
2. Kirtman B. P., T. Stockdale, **R. J. Burgman**, 2013: The oceans' role in modeling and predicting seasonal-to-interannual climate variations. *Ocean Circulation and Climate, A 21st century perspective*, Gerold Siedler, Stephen M. Griffies, John Gould, John A. Church, Ed., 2nd ed. Academic Press, 625.

Government Reports or Monographs

1. Pegion, K., S. Wang, E. Becker, **R. Burgman**, C. Castro, A. Clark, X. Liang, J. Nielson-Gammon, M. Patterson, A. Ray, K. Uhlenbrock, M. Wang, S. Weaver, 2017: 2016 US CLIVAR Predictability, Predictions, and Applications Interface Panel Report, Report 2017-5, 19pp., doi:10.5065/D69G5KH6.
2. **Burgman, R.** and Y. Jang, 2015: Simulated Great Plains drought response to interannual and decadal Pacific SST variability. *Science and Technology Infusion Climate Bulletin*, NOAA's National Weather Service, 40th NOAA Annual Climate Diagnostics and Prediction Workshop Denver, CO, 10/26/2015 – 10/29/2015

Dissertation and Thesis

1. **Burgman, R. J.**, 2008: ENSO Decadal Variability. Ph.D. Dissertation, George Mason University, Fairfax, Virginia, 09/2006

OTHER PUBLICATIONS

N/A

PRESENTED PAPERS AND LECTURES (Boldface type indicates invited talk)

1. "Climate Variability and Change", Miami, FL. 2018 First Year Undergraduate Seminar Series. 03/18/2018
2. "Decadal Prediction aspects of CMIP6", Baltimore, MD. 2017 USCLIVAR Summit meeting PPAI Breakout session CMIP6 horizon. 08/09/2017
3. "Decadal Climate Prediction in CMIP6", Baltimore, MD. 2017 USCLIVAR Summit meeting PPAI/PSMI breakout session on Decadal Variability: 5-year-ahead scale for water and other sectors. 08/08/2017
4. "USCLIVAR, Predictability, Prediction, and Applications Interface", Palisades, NY. NOAA MAPP Subseasonal to Seasonal Prediction Taskforce meeting. 12/05/2016
5. "Simulated U.S. Drought Response to Interannual and Decadal Pacific SST Variability", Homestead, FL. South Florida and Caribbean Cooperative Ecosystems Studies Unit (SFC CESU) Annual Meeting. 10/21/2016
6. "Subseasonal to Seasonal Applications to Drought in the SE Region", Washington, D.C. USCLIVAR PPAI panel meeting. 07/27/2016
7. "Partner Institution Presentations: FIU, Drought research at FIU", Miami, FL. 2016 CIMAS Fellows Meeting. 04/18/2016
8. "Simulated U.S. Drought Response to Interannual and Decadal Pacific SST Variability", Denver CO. NOAA's 40th Climate Diagnostics and Prediction Workshop. 10/26/2015
9. "Simulated U.S. Drought Response to Interannual and Decadal Pacific SST Variability", Estes Park, CO. 2015 Long term Ecological Research All Scientist Meeting. 09/01/2015
10. "The Role of Low Cloud Feedback in the Recent Global Warming Hiatus", Prague, Czech Republic. 26th International Union of Geodesy and Geophysics General Assembly 2015. 06/25/2015
11. "Assessing the Role of Low Cloud Feedback in the Recent Global Warming Hiatus: A model study", Monterey, CA. CFMIP Meeting on Cloud Processes and Climate Feedbacks. 06/11/2015
12. **"Variability of the Vertical Overturning Circulation over the Past Century", Davos, CH. Davos Atmosphere and Cryosphere Assembly DACA-13. 07/12/2013**
13. "Predicting Climate Change on Decadal Timescales", Miami, FL. Florida International University. 09/02/2011
14. **"Investigating the Potential Predictability of North American Hydroclimate in CCSM3 Decadal Prediction Simulations", Aspen, CO. Aspen Global Change Institute: Making Sense of the multi-model decadal prediction experiments from CMIP5". 06/30/2011**
15. **"Climate Variability and Predictability on Decadal Timescales", Miami, FL. Florida International University. 03/21/2011**

16. **"Decadal Variability, Predictability, and Prediction", Tucson, AZ. University of Arizona. 05/03/2010**
17. **"Using Coupled Climate Models to Understand Decadal Variability in Sea Surface Temperatures", Warnambool, Victoria, AU. Deakin University. 04/16/2010**
18. "Observational and Model Evidence for Positive Low-Level Cloud Feedback", Vancouver, BC. CFMIP / GCSS Boundary Layer Workshop on evaluation and understanding of cloud processes in GCMs. 06/08/2009
19. **"Decadal Variability, Predictability and Prediction", Miami, FL. Atlantic Oceanographic and Meteorological Laboratory. 05/26/2009**
20. "The Influence of Persistent SSTs on US Precipitation", Griffin, GA. Southeast Climate Consortium. 05/06/2009
21. "Observed Decadal Variability in Low-Level Clouds, An Analogue to Global Warming?", Miami, FL. CLIVAR Working Group on Seasonal-to-Interannual Prediction 12th session. 01/14/2009
22. "The Role of Topical Pacific SSTs in Global Medieval Hydroclimate. A Model Study", Lincoln, Nebraska. NOAA's 33rd Climate Diagnostics and Prediction Workshop/CLIVAR Drought Workshop. 10/23/2008
23. "The Influence of Persistent SST Forcing in CCSM3", Breckenridge, CO. 13th Annual CCSM Workshop. 06/17/2008
24. **"Atmospheric Variability over the Pacific on Decadal Time-scales", Fort Lauderdale, FL. AGU Joint Assembly. 05/27/2008**
25. "Atmospheric Variability over the Pacific on Decadal Time-Scales", Orlando, FL. Ocean Sciences Meeting. 03/02/2008
26. **"Impacts of tropical Pacific Mean State Changes on Climate Variability", Princeton, NJ. Princeton/ Geophysical Fluid Dynamics Laboratory. 02/19/2008**
27. "Evidence for Atmospheric Feedbacks in the Subtropical Pacific on Decadal Time-Scales", Langley, VA. NASA CERES Science team meeting. 04/25/2007
28. "Decadal Modulation of ENSO", Oahu, HI. US CLIVAR Workshop on Multidecadal to Centennial Global Climate Variability. 11/16/2006
29. "Decadal Variability of ENSO in a Hybrid Coupled Model", Warrenton, VA. The CRCES Workshop on decadal Climate Variability. 11/15/2005
30. "Model Studies of ENSO Self-Regulation" Kona, Hawaii. CRCER-IPRC Workshop on Decadal Climate Variability. 02/23/2004

CREATIVE WORK

N/A

WORKS IN PROGRESS

Manuscripts for Refereed Journals (* indicates that the author is my student or postdoc)

Manuscripts in revision

1. Cherubin, L. and **R. Burgman**, 2018: Effects of climate change and water management on West Florida Shelf's oceanography. PLOS ONE. Under review
2. *Jang, Y. and **R. Burgman**, 2018: PDO-ENSO interactions on US Drought in simulation and observation. Clim.Dyn. In revision by Y. Jang
3. **Burgman, R.** and B. Kirtman, 2018: A novel approach for simulating the coupled response to Pacific Decadal Variability Clim.Dyn. In revision by Burgman

Manuscripts in preparation

1. *Vazquez, H., and **R. Burgman**, 2018: Understanding changes in the Global Mean surface temperature, Past and Future. Clim.Dyn. In preparation.
2. *Vazquez, H., and **R. Burgman**, 2018: Examining the Interactions between natural variability and climate change in observations and CMIP5 simulations. Clim.Dyn. In preparation.
3. *Vazquez, H., and **R. Burgman**, 2018: Changes in simulated climate variability in General Circulation Models and Earth System Models . Clim.Dyn. In preparation.
4. **Burgman, R.** 2018: Simulated impacts of AMO and PDV on North American droughts and pluvials. Geophys.Res.Lett. In preparation
5. **Burgman, R.** 2018: Periods of opportunity in prediction: Changes in prediction skill associated with shifting PDV. Clim.Dyn. In preparation
6. *Jang, Y. and **R. Burgman**, 2018: Changes in Global hydroclimate under future warming scenarios. Geophys.Res.Lett. In preparation

Pending Grant Proposals (Total \$9M, Burgman \$929K)

1. "Mechanisms for persistence in Sea Surface Temperatures and implications for Predictability". National Science Foundation. 05/19/2019-05/18/2022. **Burgman, R.** PI. Project total \$300,000, to Burgman \$300,000.
2. "LTER: Drivers of Abrupt Change in the Florida Coastal Everglades". National Science Foundation. 12/1/2018-11/30/2024. Gaiser, E. E., S. L. Malone, E. Castaneda, T. G. Troxler, J. W. Fourqurean, R. M. Price, **R. Burgman**, S. Wdowinski, D. Gann, J. S. Kominoski, R. Jaffe, J. S. Rehage, J. C. Trexler, M. R. Heithaus, K. Grove. Multi-institutional proposal, FIU Co-I. Project total \$6,762,000, to Burgman \$152,758.
3. "Florida Bay Salinity and Water Quality Modeling System." National Oceanic and Atmospheric Administration. 09/01/2018 – 08/31/2021. Cherubin, L., M. Jiang, J. Dorton, **R. Burgman**, K. Wilcox. Subaward from Florida Atlantic University.

Project total \$796,327 total to Burgman \$150,000.

4. "Sensitivity of NMME Seasonal Predictions to Ocean Eddy Resolving Coupled Models. National Oceanic and Atmospheric Administration." 07/01/2018 – 06/30/2020. **Burgman, R.**, B. Kirtman, L. Siqueira, D. DeWitt. Multi-institutional proposal, FIU PI.
Project total \$169,589, to Burgman \$38,890.
5. "Decadal Prediction and Predictability of Extremes in Ocean Eddy Resolving Coupled Models," Department of Energy. 09/01/2018 – 08/31/2021. Kirtman, B., **R. Burgman**, K. Pegion, L. Siqueira. Subaward from University of Miami.
Project total \$1,050,000, total to Burgman \$287,500.

Pending FIU funding

1. **Burgman R.**, D. Pirie, FIU MMC Weather Station with Media Platform and Data. FIU Tech Fee Proposal 03/30/2018 \$11,349 Co-PI

FUNDED RESEARCH (Burgman \$285K)

1. "Developing a Real-Time Multi-Model Sub-Seasonal Predictive Capability." National Oceanic and Atmospheric Administration. 07/1/2016 - 06/30/2018. Kirtman, B., R. Burgman, K. Pegion, T. DelSole, A. Robertson, M. Tippet, H. Lin, J. Gottschalck, D. Collins. Multi-institutional proposal, FIU PI.
Project total \$1,196,290, total to Burgman \$40,000.
2. "Decadal Prediction over North America vs. Pacific Processes." National Oceanic and Atmospheric Administration. 06/15/2013 - 07/31/2014, Burgman R., University of Miami subcontract (formerly UM PI).
Project total \$76,650, total to Burgman \$76,650.
3. "Decadal Prediction over North America vs. Pacific Processes." National Oceanic and Atmospheric Administration. 06/15/2012 - 06/14/2013, Burgman R., University of Miami subcontract (formerly UM PI).
Project total \$56,259, total to Burgman \$56,259
4. "An Investigation into feedbacks between low-level cloud, atmospheric circulation and temperature on decadal timescales and in anthropogenic climate." National Science Foundation. 05/15/2012 - 05/14/2013, Burgman R., University of Miami subcontract (formerly UM Co-PI).
Project total \$31,571, total to Burgman \$31,571.
5. Integrated Models for Evaluating Climate Change, Population Growth, & Water Management (i.e. CERP) Effects on South Florida Coastal Marine and Estuarine Ecosystems. National Oceanic and Atmospheric Administration. 04/01/2012 - 03/30/2013. Criales M., L. Cherubin , R. Burgman , J. Browder, C Kelble. University of Miami subcontract.
Project total \$299,920, total to Burgman \$33,704.

FIU funding

1. **Burgman, R.**, D. Pirie, Providing Technology for the new atmospheric science-teaching lab. FIU Tech Fee Proposal 04/18/2014 \$47,059 Co-PI

PROPOSALS SUBMITTED BUT NOT FUNDED (Total \$39.79M; Burgman \$3.16M)

1. "PREEVENTS Track2: "Collaborative Research: Coastal flooding hazard along the Florida coast due to sea level rise, severe rain, and extreme events" National Science Foundation, 07/01/2017 - 06/30/2021. Multi-institutional, FIU Co-I.
Project total \$3,000,000, \$260,000 to Burgman.
2. "Assessing the key physical mechanisms for skillful prediction of U.S. drought in the NMME prediction system" National Oceanic and Atmospheric Administration 07/01/2017 - 06/30/2020. PI.
Project total \$358,076, \$358,076 to Burgman.
3. "Identifying the 'perfect storm' for extreme event prediction in North America" National Oceanic and Atmospheric Administration 07/01/2016 - 06/30/2019. PI.
Project total \$216,697, total to Burgman \$216,697.
4. GP-IMPACT: FIU-SANDS Skills Assessed, Nurtured and Developed for Recruitment of Geoscientists National Science Foundation 05/01/2016 - 04/30/2019. FIU Co-I.
Project total \$434,256, total to Burgman \$29,234.
5. NOAA Center for Atmospheric Sciences and Meteorology Education and Research (CASMER) National Oceanic and Atmospheric Administration. 09/01/2016-08/31/2021. Multi-institutional, FIU PI
Project total \$15,491,376, total to Burgman \$135,023.
6. CyberSEES: Type2: Collaborative Research: Cyber-enabled Decision-support and Sustainability under Extreme Climatic Conditions in complex Coastal Urban Watersheds. National Science Foundation. 08/01/2015 - 07/31/2018. FIU Co-PI.
Project total \$1,211,817, total to Burgman \$52,551.
7. CC*IIE Integration: PantherNet - Integrating FIU Campus Cyber-Infrastructure for Multi-Disciplinary Science and Education National Science Foundation 10/01/2014 - 09/30/2016. FIU CO-I.
Project total \$966,421, total to Burgman \$56,662.
8. Hazard SEES: Integrating advances in Sea Level Rise (SLR) understanding, engineering options, and decision maker preferences in South Florida (SLRinSF) National Science Foundation. 06/01/2015 - 05/31/2019. University of Miami subcontract.
Project total \$2,998,588, total to Burgman \$131,130.
9. Predictability of the Oil Spill Dispersion in the Gulf of Mexico. Gulf of Mexico Research Initiative. 01/01/2016 - 12/31/2018. Florida State University subcontract.
Project total \$2,287,441, total to Burgman \$54,123.
10. Projecting the Coupled Effects of Eutrophication and Ocean Acidification on Florida Bay and the Florida Reef Tract: Science for Management" National Oceanic and Atmospheric Administration. 09/01/2015 - 8/31/2018. University of Miami subcontract.
Project total \$1,410,330, total to Burgman \$100,000.
11. Assessing predictability and prediction of California drought in the NMME National Oceanic and Atmospheric Administration 08/01/2015 - 07/31/2016. PI.

Project total \$70,000, total to Burgman \$70,000.

12. The role of natural variability in future climate change. National Science Foundation – Graduate Research Fellowship for H.Vazquez, H. 08/15/2015 - 07/14/2018. Research Supervisor. Project total \$132,000, total to Burgman \$0. (*Not included in totals above*)
13. OCE-RIG: The role of feedbacks between low-level clouds, sea surface temperatures, and atmospheric circulation on decadal timescales. National Science Foundation. 08/01/2014 - 07/31/2016. PI. Project total \$99,969, total to Burgman \$99,969.
14. Sensitivity of NMME Seasonal Prediction to Ocean Model Formulation. National Oceanic and Atmospheric Administration. 08/01/2014 - 07/31/2017. Multi-institutional, FIU PI. Project total \$565,698, total to Burgman \$74,926.
15. Predictability and Prediction of North American Hydroclimate. National Oceanic and Atmospheric Administration. 08/01/2014 - 07/31/2017. PI. Project total \$375,251, total to Burgman \$268,108.
16. Linking Climate Change to Coastal Ecosystems and Economic Sustainability. National Oceanic and Atmospheric Administration. 05/14/2014 - 05/13/2016. Multi-institutional, FIU-PI. Project total \$200,000, total to Burgman \$42,552.
17. Understanding and Modeling the Role of Air-Sea Interaction in the MJO Initiation in the India Ocean National Oceanic and Atmospheric Administration. 05/01/2013 - 04/30/2016. Multi-institutional, FIU PI. Project total \$546,390, total to Burgman \$134,723.
18. EaSM-2: Collaborative Research: Actionable Decadal Prediction for the Southeast US. National Science Foundation 05/01/2012 - 04/30/17. Multi-institutional, FIU-PI. Project total \$2,391,557, total to Burgman \$422,441.
19. "Toward developing predictive capabilities for distribution of pollutants in the Gulf of Mexico under varying atmospheric conditions" Gulf of Mexico Research Initiative 09/01/2012 - 08/31/2015. Multi-institutional, FIU PI. Project total \$2,177,205, total to Burgman \$244,382.
20. Collaborative Research: SI2-SSI: Sustainable Software for Simulating Climate Variation and Thermo-Fluids Energy Systems National Science Foundation 03/01/2012 - 02/28/2017. Multi-institutional, FIU PI. FIU total \$4,991,391, total to Burgman \$409,993.

FIU proposals unfunded

1. Providing Student Access to Large Geophysical Data Sets, FIU Tech Fee Proposal 04/15/2012 \$8,875 PI

Funded Research Before FIU (Projects \$2.45M)

1. "Decadal Prediction over North America: Atlantic vs Pacific Processes". National Oceanic and Atmospheric Administration. 08/01/2010 - 07/31/2013. **Burgman R.** and B. Kirtman. UM PI.

Project total \$427,050.

2. "Mechanisms of low-frequency variability of the atmospheric circulation over the 20th century". National Oceanic and Atmospheric Administration. 02/01/2010 - 01/31/2013. Soden B., A. Clement, and **R. Burgman**. UM Co-I.
Project total \$555,390.
3. "ISI predictability over the Americas: The influence of stochastic forcing". National Oceanic and Atmospheric Administration. 08/01/2010 - 07/31/2013. Kirtman B., R. Burgman, B. Mapes, and C. Zhang. UM Co-PI
Project total \$454,868.
4. "An investigation into feedbacks between low-level cloud, atmospheric circulation, and temperature on decadal timescales and in anthropogenic climate change". National Science Foundation. 09/01/2009 - 08/31/2012. Clement A., R. Burgman, J. Norris. UM Co-PI.
Project total \$430,102.
5. "Parameterizing Convective Organization". U.S. Department of Energy. 09/01/2008 - 08/31/2011
Mapes B., **R. Burgman**. UM Co-PI.
Project total \$553,165.
6. "Past and Future North American Drought". USCLIVAR DRICOMP 10/01/2007 - 03/31/2008
Burgman R., A. Clement. UM PI.
Project total \$30,000.

PATENT DISCLOSURES, APPLICATIONS, AND AWARDS

1. Outstanding Alumni Award winner, College of Science, George Mason University, 2008

PROFESSIONAL HONORS, PRIZES, FELLOWSHIPS

1. USCLIVAR travel award for WCRP/CLIVAR Workshop on Multidecadal to Centennial Global Climate Variability, November 11/15/2006-11/17/2006
2. NSF travel award, NATO Advanced Study Institute, Seasonal to Interannual Climate Variability: its Prediction and Impact on Society. Gallipoli, 05/23/2005 - 06/03/2005
3. NSF travel award, East Pacific Investigation of Climate Cruise, NOAA RV Ron Brown, 10/09/2001 - 10/25/2001

OFFICES HELD IN PROFESSIONAL SOCIETIES

N/A

OTHER PROFESSIONAL ACTIVITIES AND PUBLIC SERVICE

1. United States Climate Variability and Predictability (USCLIVAR) Predictability, Predictions, and Applications Interface Panel Member. 2016-present
2. Member of National Oceanographic and Atmospheric Administration Modeling, Analysis, Predictions and Projections (NOAA MAPP) Subseasonal to Seasonal (S2S) Prediction Task Force. 2016-present

3. Climate Consulting 2015 - 2016
4. Participant NATO Advanced Study Institute on Seasonal to Interannual Climate Variability: its Prediction and Impact on Society Gallipoli, Italy 23/05/2005 -03/06/2005

Association Memberships and Journal Editorial Board

1. Member, Florida Climate Institute
2. Member, American Meteorological Society
3. Member, American Geophysical Union
4. Member, Southeast Climate Consortium 2007-2009

Referee/Reviewer

Reviewer for Granting Agencies:

1. Mail reviewer for Strategic Environmental Research and Development Program, Department of Defense
2. Mail reviewer for National Science Foundation

Reviewer for Journals:

2011-Present (after being at FIU): 20 papers

1. Climate Dynamics (5 papers)
2. Earth and Planetary Science Letters (1 paper)
3. Geophysical Research Letters (3 papers)
4. International Journal of Climatology (1 paper)
5. Journal of Atmospheric Science (1 paper)
6. Journal of Climate (6 papers)
7. Journal of Geophysical Research –Atmospheres (1 paper)
8. Journal of Geophysical Research –Oceans (1 paper)
9. Nature Science Reports (1 paper)

Chairpersonship of Conference Sessions

1. Co-Convener of the joint session of PPAI/PSMI breakout session on Decadal Variability: 5-year-ahead scale for water and other sectors. 2017 USCLIVAR Summit meeting. Baltimore MD, 08/08/2017.
2. Co-Convener and Chair of the fourth session of “Tropical Dynamics” at the Davos Atmosphere and Cryosphere Assembly 2013, Davos, CH, 07/12/2013.
3. Co-Convener and Chair of the fourth session of “Tropical Dynamics” at the 26th International Union of Geodesy and Geophysics General Assembly 2015. Prague Czech Republic, 06/25/2015.

Before FIU:

1. Co-Convener and Session Chair of the second session “Southeastern Pacific Stratocumulus coupled land-ocean-atmosphere processes” at the American Geophysical Union Joint Assembly, Fort Lauderdale, FL, 12/27/2008.

Community Education and Outreach

1. Climate Change, summer seminar for Miami Dade high school students 07/21/2014
2. FIU and SEAS “Speaking Sustainability” Seminar Series Natural Climate Variability: Contextualizing Persistent Drought. Deering Estate Miami Florida 10/23/2013
3. FIU and SEAS "Eat, Think and Be Merry" Seminar Series Climate Dynamics: Contextualizing Extreme Drought. Luna Star Lounge, Miami Florida 09/11/2012

Department Service

1. Undergraduate Committee - Fall 2018
2. Department Webmaster, Fall 2015 – Present
3. Faculty Advisor to Meteorology Club
4. Department Representative to the College Library Committee, Fall 2012 - Present
5. Department Technology (Software) Consultant, Fall 2012 - Present
6. Department Secretary, Fall 2014 - Spring 2015
7. Judge: 2016 Annual Department of Earth and Environment Graduate Research Symposium, 02/18/2016
8. Judge: 2015 Annual Department of Earth and Environment Graduate Research Symposium. 02/20/2015
9. Judge: 2014 Annual Department of Earth and Environment Graduate Research Symposium. 02/21/2014

10. Judge: 2012 Annual Department of Earth and Environment Graduate Research Symposium. 04/11/2012
11. Evaluated 2011-2012 NASA/FIU Hurricane and Remote Sensing Summer Educational and Research Internship Program final presentations. 08/19/2011
12. Coordinator: Graduate Earth Science Seminars. Spring 2012
13. Undergraduate Senior Seminar Assessments. Spring 2012, Spring 2015, Fall 2017, Spring 2018

College and School Service

1. Member, Administration, Facilities, and Support Working Group, FIU College of Arts Sciences and Education Strategic Plan Committee. 04/02/2018 - present
2. Project Co-investigator, Florida Coastal Everglades LTER 05/10/2017 - present
3. Project Collaborator, Florida Coastal Everglades LTER 09/10/2012 - 05/10/2017
4. Member, LTER Climate and Disturbance Legacies Working Group, 07/31/2015 - present
5. Represented School of Environment, Art and Society at 2013 Southeastern University Research Association (SURA) meeting, Tampa, FL. 02/17/2014
6. Collaborator: FIU's Center for Internet Augmented Research and Assessment FLOWSURGE project. Principal case study. 09/07/2012 - 10/23/2015
7. Consulted with UTS for purchase of Symmetric multiprocessing (SMP) facilities at the instructional and Research Computing Center 09/20/2011 – 11/15/2012
8. Judge: 2017-2018 Annual FIU VIP & SCIS Senior Project Showcase, 12/01/2017
9. Judge: 2017-2018 Annual FIU VIP & SCIS Senior Project Showcase, 04/20/2018

TEACHING ACTIVITIES AT FIU

Graduate courses

1. Climate Dynamics (MET 5990, now MET 5135, newly developed), Fall 2013
2. Graduate Seminar and Advanced Graduate Seminar (GLY5931/GLY6931), Spring 2012

Undergraduate courses

1. Physical Climatology (MET 3120), Spring 2012, Spring 2014, Spring 2016 (0.5 time), Spring 2017, Spring 2018
2. Physical Meteorology (MET 4420), Fall 2012, Fall 2013, Fall 2014, Fall 2015, Fall 2016, Fall 2017
3. Oceanography (OCE 3014), Fall 2014, Spring 2015

4. Physical Oceanography (OCP 3002, newly developed), Fall 2017

NEW COURSES DESIGNED AND DEVELOPED AT FIU

1. Climate Dynamics (MET 5135)
2. Physical Oceanography (OCP 3002)

GRADUATE STUDENT ADVISING

As Committee Chair

1. Rigoberto Olivera, Geosciences, Ph.D. student at FIU (begins, Fall 2018)
2. Heather Vazquez, Geosciences, Ph.D. student at FIU (expected graduation, Summer 2018)
3. Peter Washam, Geosciences, M.S. student at FIU (graduated, Summer 2014)

As Committee Member

1. Margie Kieper, Earth and Environment, Ph.D. Geosciences
2. Isreal Gonzalez, Geosciences, Ph.D. student at FIU
3. John Tenenholtz, Mathematics and Statistics, M.S. Statistics (graduated in Fall 2017)
4. Brad Klotz, Geosciences, Ph.D. student at FIU (graduated in Spring 2017)
5. Cen Gao, Geosciences, Ph.D. student at FIU (graduated Summer 2016)
6. Isreal Gonzalez, Geosciences, M.S. student at FIU (graduated in Spring 2014)
7. Javiera Hernandez, Geosciences, M.S. student at FIU (graduated in Spring 2014)
8. Hozmay Lopez, Meteorology and Physical Oceanography, Ph.D. student at University of Miami (graduated, Fall 2013)
9. MyeongHee Han, Meteorology and Physical Oceanography, Ph.D. student at University of Miami (failed qualifying exam, June 2013)

UNDERGRADUATE STUDENT RESEARCH ADVISING

1. Regan Ratcliff, Atmospheric Sciences Track, Undergraduate Internship FIU, Spring 2018
2. Cody Gibbons, Atmospheric Sciences Track, Undergraduate Research FIU, Spring 2016
3. Szandra Peter, Atmospheric Sciences Track, Honors Thesis FIU, Fall 2014 - Spring 2015
4. Jatnna Alvarez, Agro-Ecology Program, Spring 2012 - Spring 2014