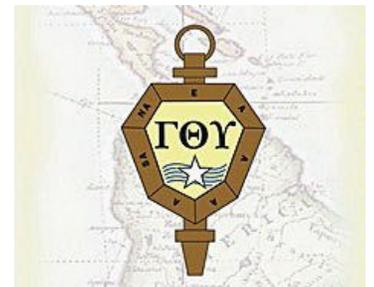
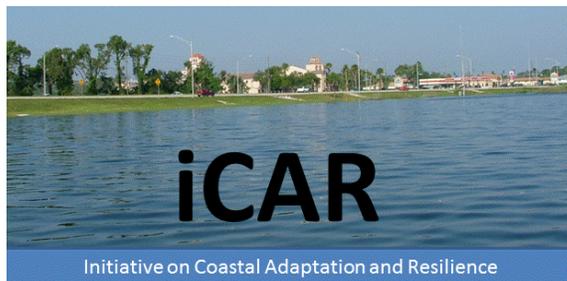




**Reports from the Frontier II - Lessons Learned
from Hurricanes: Preparation, Recovery and
Resilience
iCAR Phase IV**

October 30-31, 2018

**Location: University of South Florida, St. Petersburg
Room: University Student Center (USC) Ballroom
200 6th Ave South, St. Petersburg, FL 33701**



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iCAR Executive Board

Dr. Barnali Dixon (PI and Executive Director of iCAR)
Dr. Rebecca Johns (Director of Community Outreach and Education)
Dr. Donny Smoak (Director of Research, Climate Science)

iCAR Advisory Panel

Maya Burke (TBEP))
Gary Mitchum CMS USF)
Jamie Serino (OceanSpace, TSIC)
Heidi Stiller (NOAA)
Ryan Moyer (FWRI)
Siobhan O’Kane (Urban Land Institute)
Heather Young (TBRPC)
Jan Booher (Climate Resilience Ministry)
Kelli Hammer-Levi (Pinellas County)

iCAR 2018 Workshop Advisory Panel

Gary Mitchum CMS USF)
Jamie Serino (TSIC of Manatee County)
Ryan Moyer (FWRI)
Benjamin Smet (OPEN)
Jenny Fessler (OPEN)

Introduction:

This 2-day workshop, hosted by the Initiative on Coastal Adaptation and Resilience (iCAR), USF St. Petersburg, Gamma Theta Upsilon, and the Tampa Bay Regional Planning Council ONE BAY Resilient Communities Working Group, will engage participants in discussion about social and physical vulnerabilities to coastal hazards, and efforts to build regional resiliency. Through a series of presentations and followed by facilitated discussions and breakout sessions between experts from the national level, state level and Tampa Bay regions, participants will explore potential regional solutions and approaches for addressing the resilience and adaptations of coastal cities to climate change.

In the wake of Hurricanes Irma, Harvey and Maria, we received a glimpse of what can happen in Tampa Bay area when there are multiple storms coming our way. More than ever, in the context of increased high intensity extreme weather events, we must effectively address the concepts of preparedness, resilience and adaptation. Key to success are effective messaging and resilience planning that are targeted to specific audiences, and address the unique needs of distinct communities. Studies have shown that the presences of strong social networks helps with preparedness, resilience and adaptation. Recent trends in research point to the need to pay attention to those impacts of climate-related events that are not economic in nature and cannot be quantified. Emotional resilience is particularly important in neighborhoods that have experienced repeated losses and weather-related events, or where the ability to cope and respond to storms, floods, heat, etc. is a persistent and ongoing problem.

Workshop Objectives:

- ✓ The conference will build-on previously identified research, data, and policy gaps and find strategies to link research agendas to public policy formulation that emphasizes solution-oriented approaches for coastal cities, with a particular focus on lessons learned from Irma regarding social aspect of resilience.
- ✓ Explore enhancing social networking before and after disasters.
- ✓ Explore innovative strategies to increase information flow before, during and after an event
- ✓ Explore neighborhood scale innovation and challenges in social resiliency including the use of community and recreation centers and libraries as hubs for information and resource distribution
- ✓ Explore development of community or neighborhood level preparedness, response and resilience strategies for both collective and individual preparation and recovery
- ✓ Explore effective messaging, building on success and also identify challenges to effective messaging
- ✓ Exploring emotional resilience and non-economic loss from climate-related events
- ✓ Publish a conference presentation called ‘Lessons Learned from Irma’.

Workshop Topics:

1. Review of current science based predictions about the likelihood of increased hurricane activity, increased storm size and effective means of communicating climate change

2. Lessons learned from FEMA and the Red Cross, especially in regard to providing assistance to vulnerable populations
3. Reports from other frontline responders about what Hurricane Irma taught them about what works, what needs to be improved, and how to advance our resiliency and recovery.
4. Identifying structural barriers to recovery and resilience
5. Building energy resilience and infrastructure
6. Prioritizing safety following a disaster
7. Building health resilience and addressing emotional trauma
8. Collaboration between agencies and neighborhoods to create a team of neighborhood-level first responders through standardization of training
9. Building strength through social networks & innovative communication including integrating citizen science into addressing challenges before and after an event, to enhance preparation and resilience

Who Should Attend:

- ✓ Citizens, and Representatives from Homeowners Associations, Neighborhood Civic organizations
- ✓ Businesses including but not limited to: Insurance industry, Real Estate, Consulting Firms, Energy providers
- ✓ NGOs (including those interested in environmental and social justice) and social service providers (religious organizations, affinity organizations)
- ✓ Students, Faculty & Researchers
- ✓ Elected Officials & Government Administrators
- ✓ Professionals involved in coastal resilience: Transportation and Urban Planners, Floodplain Managers, Emergency Managers, Public Works, Health Professionals, Natural Resource Managers, Engineers & Scientists.

Benefits:

- ✓ Network and share information with other individuals engaged in coastal resilience planning throughout Florida
- ✓ Shape research agendas and future climate adaptation efforts in the Tampa Bay region and beyond

To learn more about iCAR and past workshops please Visit our w
For additional workshop details (program, logistics, registration etc.), please visit <http://www.usfsp.edu/icar/upcoming-events/>.

Tentative Schedule

Day 1: October 30 th	Day 1: October 30 th
11:30 AM - Noon	Registration
12:00 noon	Welcome , Martin Tadlock, Regional Chancellor, USFSP
12:05 PM	Welcome , Barnali Dixon, Executive Director of iCAR
12:10 PM	Overview of iCAR and the Conference Schedule , Rebecca Johns, iCAR
12:15 PM	Inauguration: Mayor Rick Kriseman, St. Petersburg
12:20 PM – 1:15 PM	Aresty Leadership Panel: Perspectives from the Eye of the Storm Rick Kriseman , Mayor, St. Petersburg, Florida Bill Barnett , Mayor, Naples, Florida Nancy Shaver , Mayor, St. Augustine, Florida Liz Alpert , Mayor, Sarasota, Florida Moderator: Robin Sussingham, WUSF Public Media
1:15 PM – 1:30 PM	Q & A for the Panel
1:30 PM – 2:30 PM	Opening Panel I: Climate Science: Storm Predictions and Impacts Climate Science and Storm Predictions, Charlie Paxton, Channelside Weather Assessing the impacts: Irma, Harvey and Maria --Ecological Impacts, Ryan Moyer, FWC --Storm Surge & Coastal Impacts, Bob Weisberg, USF. Moderator: Gary Mitchum USF
2:30 PM – 2:50 PM	Q & A for the Panel
2:50 PM – 3:00 PM	Coffee break - Sponsored by HDR

3:00 PM – 3:50 PM	<p>Panel II: First Responders and other Community Responders Report Back from Irma & Maria</p> <p>City of St. Petersburg Emergency Management, Amber Boulding Pinellas County Emergency Management, Mary Burrell Red Cross, Bene Hunter, Senior Disaster Program Manager, Central Florida Region Responding to Maria and others, Dwayne Meadows, NOAA</p> <p>Moderator: Dwayne Meadows, NOAA</p>
3:50 PM – 4:00 PM	Q & A for the panel
4:00 PM – 4:50 PM	<p>Panel III: Identifying Structural Barriers to Recovery and Resilience</p> <p>Stormwater system weaknesses, Kelli Hammer-Levy, Pinellas County Power Outages and the Elderly, Kathy Hyer, USF Transportation Accessibility and Barriers, Jacob Labutka, PSTA Resiliency Hubs, Kristen Baja, USDN</p> <p>Moderator: Julie Rocco, Healthy St. Pete Foundation</p>
4:50 PM – 5:00 PM	Q & A for the Panel
5:00 PM – 5:10 PM	<p>Introduction and update on Gulf of Mexico Studies Initiative</p> <p>Presenter: Bill Hogarth</p>
5:10 PM – 5:30PM	Open Q & A Session
5:30 PM	Adjourn
Day 2: October 31st	
8:00 AM – 8:30 AM	Registration and Coffee
8:30 AM – 9:00 AM	<p>Introduction and Update on Tampa Bay regional Coalition on Resilience</p> <p>Presenters: Heather Young, TBRPC Janet Long, Pinellas County Commissioner</p>
8:50 AM -9:00 AM	Open Q & A

9:00 AM – 9:10 AM	Overview of OPEN wiki for iCAR
9:10 AM – 10:00 AM	<p>Panel IV: Community Wellbeing: Building Health Resilience and Addressing Emotional Trauma</p> <p>Community Mental Health, Susan Clayton, College of Wooster Community Resilience and Disasters, Margarethe Kusenbach, USF Community Efforts, Department of Health, Tamara Marshall</p> <p>Moderator: Deb Trehy, Physicians for Social Responsibility</p>
10:00 AM – 10:15 AM	Q & A for the Panel
10:15 AM – 10:30 M	Coffee Break Sponsored by Fletcher & Fischer P.L.
10:30 AM – 11:00 AM	<p>Reporting and Discussion Session: Disaster Area: Concerns and Outreach/Engagement Opportunities:</p> <p><i>Tell us your story: Identify Critical Community Needs</i></p> <p>Session Leaders: Rebecca Johns, Libby Carnahan</p>
11:00 AM – 11:50 AM	<p>Panel V: Prioritizing Safety Following a Disaster</p> <p>St. Petersburg Police Department: Chief Anthony Holloway St. Petersburg Fire Department: Lana Stevanovic Community Emergency Response Team, Elizabeth Dunn</p> <p>Moderator: Joan Reid, USFSP</p>
11:50 AM – 12:00 Noon	Q & A for the Panel
12:00 Noon – 12:30 PM	<p><u>Breakout session:</u> Brain Storming on Energy Issues and Solutions</p> <p><i>Tell us your story: Identify Critical Community Needs</i></p> <p>Session Leaders: Rebecca Johns and Rachelle Pontes</p>
12:30 PM – 2:00 PM	Lunch provided
	Judging for King Tide Photo Contest

2:00 PM – 2:50 PM	<p>Panel VI: Storm Recovery and Building Energy Resilience and Protection of Infrastructure</p> <p>Regional Solar Coop, Angela DeMonbruen City infrastructure reliance on the power grid, Sherri Swanson, HDR Community Infrastructure & Living Shorelines post Irma assessments, Tom Ries, ESA SCHEDA</p> <p>Moderator: Jamie Serino</p>
2:50 PM – 3:00 PM	Q & A for the Panel
3:00 PM – 3:10 PM	Coffee Break Sponsored by Rising Tide Innovation Center
3:10 PM – 3:40 PM	<p>Keynote II: Michael McDonald, Global Health Initiatives</p> <p><i>Climate Change and Global Health: Communication Strategies</i></p> <p>Q&A</p>
3:40 PM – 3:50 PM	
3:50 PM – 4:30 PM	<p>Panel VII: Innovative Technology for Effective Communication and Engagement</p> <p>Smart Swarms, Michael D. McDonald Citizen Science, Jan Booher, RisingTogether Crowd-Sourced SeeClickFix Apps in Pinellas, Barnali Dixon</p> <p>Moderator: Benjamin Smet, OPEN</p>
4:30PM – 4:40 PM	Q & A for the Panel
4:40PM - 5:20 PM	<p>Large Group Discussion: Identification of Critical Community Needs and Research Gaps</p> <p>Session Leaders: Rebecca Johns and Rachelle Pontes</p>
5:25PM	Closing Remarks, Barnali Dixon
5:30PM	Adjourn

**This event is sponsored by
GTU, USFSP, USF Conference Grant and OPEN (Open Partnership Education Network), as well as
Tampa Bay Regional Planning Council (TBRPC), HDR, Fletcher & Fischer P.L. and Rising Tide
Innovation Center.**

**We would also like to thank UUUF for their generous donations.
Gamma Theta Upsilon (GTU) is an international honor society in geography**

Speakers/Moderators and Workshop Organizing Committee Members



Kristin Baja (kristinbaja@usdn.org) is the Climate Resilience Officer for the Urban Sustainability Directors Network (USDN). In this role she is responsible for helping cities identify strategic ways to advance climate resilience planning and implementation and building their capacity to take action. The majority of her time is spent directly supporting cities and facilitating deeper relationships between local governments and other stakeholders. Prior to USDN, she served as the Climate and Resilience Planner with the City of Baltimore's Office of Sustainability where she led the city's climate adaptation and equity work. She holds a Masters of Urban Planning and a Masters of Science from the

University of Michigan. In 2016, she was recognized by the Obama Administration as a Champion of Change for her work on climate and equity and in 2018, she was selected as an Aspen Global Climate Center Fellow.



Janice T. Booher, MS (JJLBooher@comcast.net) is the Director of Unitarian Universalist Justice Florida's Climate Resilience Ministry (UUJF). She serves as UUJF liaison on the Florida Interfaith Climate Actions Network Steering Committee, provides field and organizational support for the Florida Disaster Resilience Initiative, and partners with environmental justice communities to address environmental health issues. She works with the *Rising Together* tri-lingual outreach project, which has stepwise methods and materials that were developed under an EPA Environmental Justice grant to the UU Fellowship of Boca Raton Green Sanctuary Committee. Janice received Honorable Mention in the 2017 FEMA Community Preparedness Champions category for leading *Rising Together*, which provides preparedness information to low-income, limited English proficiency

households. Her work in Shorecrest, Miami in 2017 and 2018 included partnership with the National Library of Medicine/NIH Community Health Mapping Initiative and Florida International University's Sea Level Solutions Center, to develop materials and methods for citizens to collect and map data about the depth, salinity, and presence or absence of coliform and *E. coli* in floodwaters. Her current work with the Florida Disaster Resilience Initiative deepens connections in these communities to further build disaster resilience.



Mary Burrell (maryburrell@pinellascounty.org) is the Public Outreach and Education Coordinator for Pinellas County Emergency Management. She is trained as a Public Information Officer and worked for 10 years in media relations, crisis communications and across multi-platforms to education the public about the county's services during blue skies as well as managing crisis situations. She is a former newspaper editor and reporter. Her focus is building resiliency in the community, involving all segments of the community to assist in the preparation, response and recovery stages of a disaster.



Amber Boulding (amber.boulding@stpete.org) is the Emergency Manager for the City of St. Petersburg. She is a certified Florida Professional Emergency Manager (FPEM) through the Florida Emergency Preparedness Association (FEPA). Amber holds a Master of Public Health (MPH) degree from the University of South Florida and a Bachelor of Science degree in Health Education from the University of Florida. She began her career in emergency preparedness in 2010 with FDOH-Pinellas in the Public Health Preparedness Program. She came to the City of St. Petersburg Fire Rescue Department in 2016 as an EM Specialist and moved into the Emergency Manager role in early 2018. In this position, Amber maintains and improves the comprehensive emergency management program for the City including the planning, coordination and administration of the Emergency Management Division of Fire Rescue. Amber has been involved with several disaster response events and EOC activations to include: Hurricanes Irma and Hermine, the 2015 Ebola response, the 2015-2017 Zika response, the Republican National Convention in 2012, and the 2016 College Football National Championship.



Libby Carnahan (lcarnahan@co.pinellas.fl.us) is the UF/IFAS Extension, Florida Sea Grant Agent in Pinellas County. Libby is playing a leading role in Tampa Bay in helping citizens, governments, and industry make well-informed choices in the face of a changing climate. Libby facilitates the Tampa Bay Climate Science Advisory Panel, is a member of the Gulf of Mexico Climate Outreach Community of Practice, and a leader of the UF/IFAS Florida Sea Grant Work Action Group. Libby holds a BS in Biology from Truman State University (1998) and an MS in Marine Science from the University of South Florida (2005).



Susan Clayton Ph.D (sclayton@wooster.edu) is the Whitmore-Williams Professor of Psychology at the College of Wooster in Ohio. She has written or edited six books, including most recently *Psychology and Climate Change* (2018; co-edited with Christie Manning). Her Ph.D., from Yale University, is in social psychology. Her research focuses on the human relationship with nature, how it is socially constructed, and how it can be utilized to promote environmental concern. She has written extensively about the implications of climate change for human well-being, and will be a lead author on the upcoming 6th assessment report from the Intergovernmental Panel on Climate Change.



Angela DeMonbreun (angela@solarunitedneighbors.org) serves as the Florida program director for Solar United Neighbors, a D.C. based nonprofit working to help increase rooftop solar. She directs regional solar co-ops; a community driven initiative that leverages the power of bringing communities together to facilitate informed decision making about going solar. Angela also works directly with local and state elected officials, either encouraging them to go solar or recognize the overall benefits to local and Florida communities overall. Her experience includes project development, grassroots organizing, community engagement and policy advocacy focusing on capacity building. Angela served as president of the League of Women Voters Jacksonville First Coast, working to increase informed voter participation through education and advocacy and currently serves as the Outreach Director. Angela also serves as a Board of Trustee for St. Johns Country Day School in Orange Park, FL, is a certified scuba diver, and proud wife and mom.



Barnali Dixon Ph.D (bdixon@mail.usf.edu) is a professor of GIS and Remote Sensing at the Univ. of South Florida Saint Petersburg. She is also the Director of the Geospatial Analytics lab. She has extensive experience in the application of Geographic Information Systems (GIS), remote sensing and approximation tools such as fuzzy logic for environmental modeling. Specific research interests and projects include: risk assessment and environmental modeling for soil, water and landuse interactions, as well as surface and ground water quality and quantity. She earned her PhD in Environmental Dynamics from the University of Arkansas in 2001. Dr. Dixon's study areas include Florida, Malaysia, India, Iran, Greece and Turkey. She has over 50 refereed publications and 5 monographs. She recently published a text book titled '*GIS and Geocomputation for Water Resource and Science Engineering*'. She is the Executive Director of iCAR and PI of the Conference Grant and research project related to iCAR. <http://www.usfsp.edu/esp/dixon/>. She recently gave a TEDEx Youth talk in China about Climate change related adaptation and resilience.



Elizabeth A. Dunn, MPH, CPH (edunn@health.usf.edu) is a full-time faculty member at the USF College of Public Health and Director of the USF Community Emergency Response Team (CERT). She holds a Bachelors in both Economics and International Studies, an MPH in Global Disaster Management and Humanitarian Relief and is currently a student in the Doctor of Public Health (DrPH) in Advance Practice Leadership. The focus of her current research is examining and evaluating disaster management systems working primarily with vulnerable populations, looking at the importance of community engagement and multidisciplinary collaboration, and how the built environment and social implications impact at-risk neighborhoods. Elizabeth is a founding member of the

newly accepted American Institute of Architecture (AIA) Design and Health Research Consortium here at USF with their first research project focusing on Peril of Floods and Sea Level Rise. Her previous work experience and research has focused on public health projects pertaining to international economic development in Bosnia I Herzegovina, Vietnam, and Belize, as well as response efforts for mass care operations in NYC during Sandy and at the Hillsborough County Emergency Operation Center (EOC) during Hurricane Irma



William T. Hogarth, Ph.D. Currently sits on the Gulf of Mexico Research Initiative Board (GoMRI), which oversees the funds of \$500 million committed by BP to investigate the impacts of the oil effects in the Gulf of Mexico during the Deepwater Horizon disaster. Retired as Director of the Florida Institute of Oceanography (FIO), in 2016. FIO is a consortium comprised of 30 various scientific and educational institutions from Florida that work collaboratively to maximize marine research and education resources. Was appointed to Regional Chancellor for USF-St. Petersburg from August 2012-June 2013 and was Dean of the USF's College of Marine Science from January 2008-2011. Before joining USF, Dr. Hogarth was the former Assistant Administrator of the National Marine Fisheries

Services (NMFS) at the National Oceanic and Atmospheric Administration (NOAA), appointed by President George W. Bush in September 2001. During his appointment, he served as chairman of the International Whaling Commission and the International Commission for the Conservation of Atlantic Tunas. Prior to NOAA, Dr. Hogarth was the Director of the North Carolina Division of Marine Fisheries, a position he held from 1986 to 1994. He received his bachelor's and master's degrees from the University of Richmond in Virginia and a Ph.D. from North Carolina State University.



Anthony Holloway began his law enforcement career with the Clearwater Police Department in 1985. Upon his retirement in 2007, he was selected as the Chief of Police for the City of Somerville, Massachusetts. In February 2010, he rejoined the Clearwater Police Department as Chief of Police, and in August 2014, he was selected and now serves as Chief of Police for the St. Petersburg Police Department. Chief Holloway earned his Bachelor of Arts degree (Business Management) in 1999 and Master's degree (Business Administration) in 2001. Chief Holloway has taught law enforcement to governmental, military, educational, and community organizations throughout Florida. He serves as Chair of

the Professional Standards Committee of the Florida Police Chiefs Association, Co-Chair of the Law Enforcement Committee on Criminal Justice Section of the American Bar Association, Chair of the Florida Regional Community Policing Institute and Chair of the Juvenile Justice Advisory Council. Chief Holloway currently serves on the Florida Supreme Court Standing Committee on Fairness and Diversity and the Florida Supreme Court Racial and Ethnic Disparities Advisory Workgroup. Chief Holloway sits on the Board of Directors for the Homeless Emergency Project and also serves on the nominating committee for Senator Bill Nelson's United States Armed Forces Academy Board. In May of 2018, Chief Holloway was named a Distinguished Fellow at the Joint Special Operations University (JSOU) at MacDill Air Force Base for his contributions to a branch of learning associated with national security and special operations.



Bené Hunter (Bene.hunter2@redcross.org) is a Senior Disaster Program Manager with the American Red Cross. She received her B.S from Jacksonville State University in Emergency Management and Homeland Security and has an American Red Cross Disaster Manager Certification. She has been in the realm of Emergency Services for 16 years in various roles from 9-1-1 Telecommunicator and EMT to her current role with the Red Cross. Bené has deployed and worked disasters across the country, including Superstorm Sandy, flooding in Texas and Louisiana and multiple tropical/hurricane events in the recent years. Her current position encompasses managing a workforce across central FL for 19 counties in order to provide disaster preparedness, response and recovery to the

communities. Bené is the mother of five daughters and resides in Bradenton, FL with her husband, where she often can be found on the softball field coaching.



Kathryn Hyer, PhD, MPP, the Director of the Florida Policy Exchange Center on Aging and Professor in the School of Aging Studies, College of Behavioral and Community Sciences, at the University of South Florida, Tampa. Since 2004, Dr. Hyer has studied the impact of natural disasters, especially hurricanes, on elders residing in nursing homes, assisted living facilities and in the community. Dr. Hyer is the PI on a National Institute of Aging RO1, “Strategic Approach to Facilitating Evacuation by Health Assessment of Vulnerable Elderly in Nursing Homes and Assisted Living (SAFE HAVEN II)” to study Hurricanes Irma and Harvey. After Irma, Dr. Hyer testified before the US Senate Special Committee on Aging hearing, “Disaster Preparedness and Response: The Special Needs of Older Americans” and before Florida’s House Select Committee on Hurricane Response and Preparedness on “Transitioning Nursing Home Residents during Hurricane

Emergencies: the Mortality and Morbidity Consequences of Evacuating Versus Sheltering in Place”. Our work has demonstrated that nursing home residents are at increased risk of death and hospitalization if they EVACUATE the nursing home rather than shelter in place. Since its inception in 2002, Dr. Hyer is the PI on a Department of Elder Affairs contract to review and certify required dementia training for Florida’s Assisted living facilities, nursing homes, adult day care, hospice and home care agencies. Dr. Hyer’s served on FHCA’s Disaster Preparedness Committee for 15 years, was Co-PI on a Hartford foundation grant, and helped develop many training materials. Since 2015 she’s been a member of the Governor’s Florida Gold Seal Panel on Excellence in Long-Term Care.



Rebecca Johns, Ph.D (rebakrishnaswami@usfsp.edu) is the former Frank E. Duckwall Professor of Florida Studies and an associate professor of geography. She received her Ph.D. from Rutgers University and her M.S. from the University of Wisconsin-Madison, both in geography. She holds a B.A. in Anthropology from Stanford University. She is currently the secretary of the Florida Society of Geographers. Dr. Johns’ recent publications focus on local scale problems related to Florida’s social and environmental landscapes, including issues of native plants, residential yardscapes, and lawns, and food deserts. She is currently working issues related to the

intersection of environmental education, outdoor programming, and environmental and social justice. She serves as the Director of Education and Outreach for iCAR and the Senior Editor for the iCAR Workshop Proceedings. She recently helped launch a community outreach and education series for iCAR. More information can be found at <http://www.usfsp.edu/icar/community-outreach-and-education/>.



Margarethe Kusenbach PhD (mkusenba@usf.edu) is an Associate Professor at the Department of Sociology, University of South Florida, Tampa. She received her Ph.D. from the University of California, Los Angeles, in 2003. Dr. Kusenbach's research focuses on urban and community issues, social psychology, qualitative research methods, and social aspects of disasters. In 2017, she edited a special issue of the *International Journal of Mass Emergencies and Disasters*, titled "Disaster Vulnerability and Resilience Building at the Social Margins" (with Gabriela Christmann). In her publications on disasters, Dr. Kusenbach draws on sociological insights in the areas of identity, interaction, community, and culture to enhance our understanding of disaster vulnerability and resilience, particularly concerning mobile home communities and residents in Florida.



Jacob Labutka (JLabutka@psta.net) is a project planner from Pinellas Suncoast Transit Authority (PSTA). He works with a dedicated planning team on a variety of transit projects ranging from route redesigns to planning for electric buses. He oversees PSTA's zero-emission vehicle program, which has provided funding for up to six electric buses through various sources. He also works on developing innovative transit programs (such as planning for AV deployment and first/last mile services) and assessing their effectiveness at serving existing and potential riders. As PSTA's designated "Sustainability Champion," Jacob is responsible for compiling environmental data and expanding the agency's sustainability program. He is a graduate of Rutgers University where he earned a Master's in City and Regional Planning.



Kelli Hammer Levy (klevy@co.pinellas.fl.us) received her B.S. in Marine Science from Eckerd College, her M.S. in Marine Science from the University of South Florida, and is pursuing her Master's in Public Administration from FIU. Currently the Division Director for Pinellas County Environmental Management her responsibilities include oversight of the environmental monitoring and assessment, coastal management, and environmental compliance and education programs. Kelli represents the county on the Tampa Bay Climate Science Advisory Panel, is on the executive committee of the Florida Stormwater Association, serves as the vice-chair of the TBEP Management Board, and co-chairs the TBEP Technical Advisory Committee and the Suncoast Sea Level Rise Collaborative at St. Pete College. Kelli has been working in the Tampa Bay area for over 20 years.



Commissioner Janet C. Long (janetclong@pinellascounty.org) has served on Seminole City Council for two terms in the Florida House of Representatives for two terms and was elected Countywide to a seat on the Pinellas County Commission in 2012 and again in 2016. She currently serves as the Chair of the Tampa Bay Regional Planning Council whose primary initiative this year was to develop a Regional Resiliency Plan and agreement among the Tampa Bay region's counties and city governments. This Tampa Bay Regional Resiliency Coalition was signed by 25 member governments on October 8th, 2018, with a mission to reduce the risk of sea level rise and climate change to ensure a strong and vibrant economy for generations to come and to move forward with the goal of an annual summit. Janet has been married to her husband, Richard, a retired officer with the Seminole Fire Department, for 40 years and has three children and five grandchildren.



Tamara Marshall (tamara.marshall@flhealth.gov) is community organizer with several years of experience working with the Department of Health for the State of Florida. She currently serves as a Public Health Preparedness Training Consultant for Pinellas County. Other positions held at the Department of Health include Peer Counselor and Human Service Analyst. As a Training Consultant, Tamara oversees creating, disseminating, and presenting training materials to various state officials and employees. In her free time, she enjoys writing, reading, and spending time with her son.



Michael D. McDonald, Dr.P.H. (Michael.d.mcdonald@mac.com) is the architect of Resilience Systems and Resilience Networks in many regions of the United States and many countries around the world. The purpose of the Resilience Systems is to rapidly expand information sharing environments, open data systems, and collective intelligence to improve health, economic well-being, resilience, and human security, while enhancing levels of development and sustainability. The resilience of each community's social determinants of health is crucial to all other mission critical functions in the U.S. and worldwide as the impacts of climate change and broader global changes intensify around the world. Dr.

McDonald coordinates the Florida Disaster Resilience Initiative, which advises on the forecasting and management of strategic and existential threats within the State of Florida, currently with a special focus on South, Central, West, and Southwest Florida, following

Hurricane Irma. Dr. McDonald, as the coordinator of the Global Health Response and Resilience Alliance. Dr. McDonald ran \$50 million in advanced technology programs while directing the Koop Foundation with the U.S. Surgeon General. He coordinated the U.S. Health Information Infrastructure Consortium, which led to the build out of the \$30 Billion National Health Information Network, while chairing the U.S. Medical Technology Policy Committee (IEEE). Dr. McDonald took HealthCentral public as its Founding Chairman. He is now Chairman of Health Initiatives Foundation Inc. and President of OVIAR Global Resilience Systems, Inc. Dr. McDonald, within his ongoing work on the U.S. Resilience System and the Florida Resilience Systems, he is overseeing preparations for catastrophic impacts of hurricanes and other events within Florida. The Florida Disaster Resilience initiative is providing an environment for leading health, energy, communication, and computing grid innovators to help shape the future of Florida disaster resilience and sustainability utilizing state of the art tools and methods accessible within vulnerable communities. Dr. McDonald is now applying his extensive experience with developing decentralized networks to achieve unity of effort in Florida's most vulnerable communities as the risks of climate change intensify.



Gary Mitchum (mitchum@usf.edu) is presently a Professor of Physical Oceanography and the Associate Dean in the College of Marine Science at the University of South Florida. After receiving his PhD from the Department of Oceanography at the Florida State University in 1985, he spent 11 years in the Department of Oceanography at the University of Hawaii, first as a postdoctoral researcher and then as a member of the research faculty and as the Director of the University of Hawaii Sea Level Center. He came to the University of South Florida in 1996. His research interests emphasize short-term climate changes, ranging from interannual variations such as El Nino, to decadal changes, to long-term sea level rise.



Dwayne Meadows, PhD. (Dwayne.Meadows@noaa.gov) is an endangered species ecologist who has worked in academia, the non-profit sector, and for government. He is currently an endangered species biologist for the National Marine Fisheries Service. His work has been affected by natural disasters since his first year of graduate school when Hurricane Hugo destroyed their research site. Dr. Meadows survived the 2004 Indian Ocean tsunami in Thailand and led ecological restoration projects throughout the region. He has served as a member of the Hawaii Tsunami Technical Advisory Committee and advisor to the National Tsunami Hazard Mitigation Program.

He was a founding member of both the Civilian Response Corps for Federal employees to assist in foreign disasters and FEMA's Surge Capacity Force of employees from other Federal agencies able to deploy to assist FEMA in large domestic disasters. Dr. Meadows is a graduate of the University of California at Berkeley and Oregon State University.



Ryan P. Moyer, PhD (ryanpmoyer@mail.usf.edu) is an Associate Research Scientist and leader of the Coastal Wetlands Research Program (CWRP) at the Florida Fish and Wildlife Conservation Commission's Fish and Wildlife Research Institute (FWRI) in St. Petersburg, Florida. He also serves as a Courtesy Assistant Professor in the Environmental and Marine Science programs at the University of South Florida. The CWRP at FWRI facilitates the Coastal Habitats Integrated Mapping and Monitoring program, and is currently conducting baseline monitoring of four critical coastal habitat sites in the Tampa Bay area. Dr. Moyer's general research interests include the cycling, transformation, and storage of carbon (both organic and inorganic) in coastal and marine ecosystems, including wetlands, estuaries, and coral reefs.



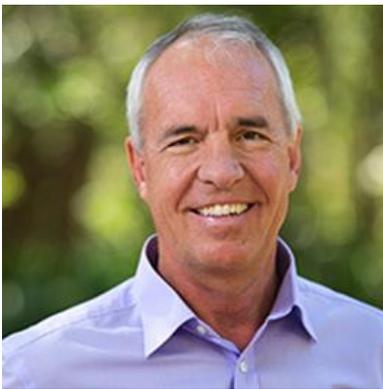
Charles H. Paxton Ph.D., (charlie@channelsideweather.com) is a Certified Consulting Meteorologist with Channelside Weather LLC, Charlie has a diverse meteorological skill set providing forecast services and expert testimony for legal cases. He retired as a NOAA Science Officer after 33 years with the National Weather Service - 31 of which were in Florida. Prior to that he was a weather forecaster in the US Navy. Charlie co-authored a book released in 2017 titled; *Florida Weather and Climate – More Than Just Sunshine* and has authored or co-authored numerous publications linked to a wide variety of damaging weather and ocean phenomena. Charlie earned bachelor's and master's degrees in Meteorology from the Florida State University and a Ph.D. in Environmental Science and Policy from the University of South Florida.



Rachelle Pontes (pontesr@mail.usf.edu) is a graduate student at the University of South Florida St. Petersburg pursuing her Masters in Florida Studies with a specialization in geography and the environment. Rachelle currently serves as a Research Assistant to Dr. Rebecca Johns, supporting her work in issues related to environmental education, outdoor programming, and environmental justice. She also volunteers internationally, striving to empower those struggling against gender, racial and, economic injustices. Rachelle holds A.A.S. in both Avionics Systems Technology and Instruction of Technology/Military Science. She also holds B.B.A in Economics from the University of Alaska Anchorage and a M.B.A from Webster University.



Joan A. Reid Ph.D (jareid2@usf.edu) is an Associate Professor of Criminology and the Chair of the Department of Society, Culture and Language at the University of South Florida St. Petersburg. She earned her Ph.D. in Criminology and MA in Rehabilitation and Mental Health Counseling from the University of South Florida. Dr. Reid has authored over 40 publications predominantly focused on human trafficking in Florida. She also maintains her license as a mental health counselor and provides trauma counseling to victims of crime in the Tampa Bay area.



Thomas F. Ries (tries@esassoc.com) is the Vice President / SE Biological Services & Restoration Director, ESA Scheda. He earned his Bachelor Degree - Biology/Geology (Minor), USF (1983). As a scientist, Mr. Ries has more than 35 years of experience working with Florida ecosystems, specializing in habitat restoration and conducting biological assessments. Formerly worked for the SWFWMD SWIM Program implementing ecosystem restoration efforts for Tampa Bay, Sarasota Bay and Charlotte Harbor; and for the past 24 years has been involved with the design and implementation of habitat restoration projects throughout the State. Many of these projects have won regional awards for environmental excellence.



Julie Rocco, (julie@healthystpete.foundation) in her role as Program Officer – Research, is responsible for advancing the mission of Foundation for a Healthy St. Petersburg by leading convening initiatives, overseeing research and knowledge management, and spearheading the identification of new opportunities that contribute to the achievement of best practices in population health and health equity. Julie is a seasoned programs and projects manager with specializations in housing, economic development, sustainability, education, and criminal justice. Her career has spanned from service in law enforcement at the Lee County Sherriff’s Office to combatting human trafficking for the Florida Coalition against Human Trafficking, as well as serving as a collaborative lead on economic development and housing initiatives in the Tampa Bay Region. She has a B.A. in Criminology from University of South Florida and a MPA from Hodges University in Fort Myers, Florida. Her personal interests focus on social justice, sustainability, and cultural arts.



Robin Sussingham (RSUSSINGHAM@wusf.org) is Senior Editor at WUSF Public Media, where she also hosts the weekly current affairs program, Florida Matters, and its associated podcast, Florida Matters More. She's earned multiple awards for reporting on science, health, the environment, culture and education. In her eclectic career, Robin has hosted a daily call-in show at a public radio station in Salt Lake City; been the health editor at a newspaper in Texas; and reported many national stories for NPR, as well as publications like Newsday, the Times of London, the Tampa Bay Times, epicurious and others. Along the way, Robin has worked as a research chemist at the National Institutes

of Health, owned a cookie delivery business, and raised three lovely sons. She has an undergraduate degree in Chemistry from Duke University and a Masters Degree in Journalism from New York University.



Jamie L. Serino, MSM/MBA (jamie.serino@outlook.com) is the Executive Director of Take Stock in Children of Manatee County. He has earned more than 20 awards for achievements in such areas as conservation planning, marine conservation, education, campaign development, fundraising and marketing. He has held the positions of Director of NOAA's National Under Search Center, Caribbean Region, the Director of EPA's Gulf of Mexico Program for Florida, the Director of the Everglades Research and Restoration Division for SFWMD and the Director of Philanthropy and Marketing for The Nature Conservancy. Jamie holds a MSM/MBA from National Louis University in Chicago, IL and a BS in Marine Science from Eckerd College, St Petersburg, FL.



Benjamin Smet (bas1@mail.usf.edu) served in the U. S. Navy from 2001 until 2009. After his time in the military Benjamin discovered his calling working with youth in predominantly low-income areas teaching at local public schools. He has helped to set up dozens of after school enrichment programs including Hispanic outreach centers, STEM clubs and soccer camps and has presented numerous times on the topic. Benjamin earned his Master of Education in Educational Leadership in 2014 with a focus on social justice and policy formation. He is currently pursuing a Doctor of Education with a concentration in innovations in program development from

the University of South Florida focusing on the development of holistic military to veteran wrap-around transition services.



Joseph M. Smoak Ph.D (smoak@mail.usf.edu) is a professor of biogeochemistry at the University of South Florida in St. Petersburg. He has over 50 publications in peer-reviewed journals and book chapters, and has received research funding from numerous regional, state and federal agencies including the National Science Foundation. Dr. Smoak has conducted research at sites ranging from Florida to locations around the world including Antarctica, Australia, Brazil, China, Iran, Mexico and Venezuela. He has examined lakes, freshwater wetlands, coastal ecosystems, continental margins and deep-sea sediments. Dr. Smoak's current research focuses is on how coastal wetlands respond to climate change and sea-level rise. Specifically, his work examines carbon burial (i.e., sequestration) in coastal wetlands, and how that burial might change and influence the global climate.

<http://www.usfsp.edu/espg/smoak/>. He serves as the Director of Research, Climate Science for iCAR.



Sherri Swanson, MS (sherri.swanson@hdrinc.com) is an Environmental Scientist and Project Manager at HDR Engineering in Sarasota, Florida. She works closely with engineers, scientists, and planners to provided environmentally-sound, sustainable, and resilient solutions for infrastructure designs and habitat restoration projects. She also provides expertise to coastal communities and clients to evaluate projects and permit designs in the context of climate vulnerability and adaptation. Her academic background includes a B.S. in Environmental, Soil and Water Science from the University of Arkansas and an M.S. in Global Sustainability from University of South Florida with a focus on water, climate science, and sustainable tourism. She is a Professional Wetland Scientist (PWS) and an Authorized Gopher Tortoise Agent (GTA) and she holds her Envision™ Sustainability Professional Credentials.



Lana Stevanovic (Lana.Stevanovic@stpete.org) is the Training Coordinator for St. Petersburg Fire Rescue. Lana has been with the Department since 2013, she is responsible for providing the community with education on fire safety, injury prevention, and emergency preparedness. She is a USFSP alumni and a City of St. Petersburg native. She brings a broad range of training and public education experience.



Deborah Trehy MD, (dtrehy52@gmail.com) was born and raised in St. Petersburg, Florida only to move to Tampa in 1971 to receive her Bachelor of Arts in 1975, Doctorate of Medicine in 1978, completed her internship/residency at Tampa General Hospital through the USF's Division of OB/GYN in 1982 and opened her own practice in the specialty of Obstetrics and Gynecology that same year. After practicing 30 years, she closed her practice to begin volunteer-teaching as an Assistant Clinical Professor at the Morsani College of Medicine (MCOM) where she serves as a preceptor for Doctoring 2 Class and as the attending for Gynecologic Services to the underserved at MCOM's Bridge Clinic.

She is here representing the group, Physicians for Social Responsibility.



Robert Weisberg, PhD. (weisberg@usf.edu) Distinguished University Professor, College of Marine Science - USF is a physical oceanographer engaged in ocean circulation and ocean-atmosphere interaction studies that presently emphasize the West Florida Continental Shelf and its estuaries. He uses real-time, *in-situ* observations and numerical circulation models to describe and understand the processes that control these water bodies. Recent applications include harmful algal blooms, hurricane storm surge and waves, tracking of oil, fisheries recruitment, forensic studies and other topics of societal concern. His undergraduate degree is in engineering from Cornell University followed by MS and PhD

degrees in Physical Oceanography from the University of Rhode Island. Recruited to USF in 1984 from the North Carolina State University, he earned the Distinguished University Professor designation in 2007.



Heather Young (heather@tbrpc.org) is a Principal Planner with the Tampa Bay Regional Planning Council. With a wide breadth of environmental focused efforts ranging from watershed planning, dam removal, habitat restoration and climate change adaptation Heather's interest and experience lies in finding solutions that can result in multiple benefits. She has a coastal management background, working with natural resource professionals, land planners and engineers at the local, state and federal level to implement multidisciplinary projects. Heather coordinates the Agency on Bay Management and ONE BAY Resilient Communities Working Group for the Tampa Bay Regional Planning Council. Heather has a B.S. in Marine Science from Coastal Carolina University and a M.S. in Marine Science from the University of North Carolina Wilmington.

Aresty Leadership Panel: Perspectives from the Eye of the Storm

Rick Kriseman, Mayor, St. Petersburg, Florida

Bill Barnett, Mayor, Naples, Florida

Nancy Shaver, Mayor, St. Augustine, Florida

Liz Alpert, Mayor, Sarasota, Florida

4th Annual iCAR Conference

(Initiative on Coastal Adaptation and Resilience)

Reports from the Frontier - Lessons Learned from Hurricanes: Preparation, Recovery and Resilience

Hosted by Robin Sussingham from Florida Matters 

			
Rick Kriseman Mayor, St. Petersburg, Florida	Bill Barnett Mayor, Naples, Florida	Nancy Shaver Mayor, St. Augustine, Florida	Liz Alpert Mayor, Sarasota, Florida

Program Change Addendum

Day 1 Oct 30th	Oct 30 th
5:00 PM – 5:10 PM	<p>Introduction and update on Gulf of Mexico Studies Initiative</p> <p>Presenter: Caryn Nesmith, GMS - USFSP</p>

Day 2: Oct 31st	Oct 31 st
9:10 AM – 10:00 AM	<p>Panel IV: Community Wellbeing: Building Health Resilience and Addressing Emotional Trauma</p> <p>Community Mental Health, Susan Clayton, College of Wooster Community Resilience and Disasters, Margarethe Kusenbach, USF Community Efforts, Department of Health, Gayle A. Guidash</p> <p>Moderator: Deb Trehy, Physicians for Social Responsibility</p>
10:00 AM – 10:15 AM	Q & A for the Panel
11:00 AM – 11:50 AM	<p>Panel V: Prioritizing Safety Following a Disaster</p> <p>St. Petersburg Police Department: Chief Anthony Holloway St. Petersburg Fire Department: Chief James Large Community Emergency Response Team, Elizabeth Dunn</p> <p>Moderator: Joan Reid, USFSP</p>
11:50 AM – 12:00 Noon	Q & A for the Panel

Short Bio Addendum



Gayle A. Guidash, MPH, REHS

(Gayle.Guidash@flhealth.gov) Ms. Gayle Guidash has been the Assistant Director for the Health Department in Pinellas County since August of 2015. She directly oversees the Disease Control, Environmental Health, Communications and Preparedness Divisions. These Divisions consists of programs such as Immunizations, Epidemiology, HIV/STD Prevention, Community Environmental Health, Water & Septic Programs, Child Care Licensing as well as Special Need Sheltering. She is also currently facilitating the Pinellas County Opioid Task Force. Gayle was previously a Public Health Preparedness Planner and conducted planning, training and preparedness response operations for the Department. She started at the Health Department in 1991. She received her Certification as a Registered

Environmental Health Sanitarian from the National Environmental Health Association (NEHA) in 2011. She received her Masters Degree in Epidemiology at the University of South Florida, Tampa in 1997. She completed her Bachelors degree in Biology at the University of Tampa in 1990. She also graduated from the Public Health Leadership Institute of Florida, Class Nine, the Environmental Public Health Leadership Institute and the Florida Emergency Management Academy, Class Three.



Fire Chief James D. Large

(james.large@stpete.org) joined St. Petersburg Fire Rescue in 1974 and was appointed Chief in 2006. As chief, he oversees the 355 employees in the Fire Administration, Prevention, Operations, Rescue, Emergency Management, and Training Departments. Chief Large graduated with honors with two associate's degrees in Fire Science (suppression and prevention), has a bachelor's with distinction in Organizational Studies, and a Masters in Business Administration (MBA). He is also a graduate of the Eckerd College Management Development Institute's Leadership Development Program and the St. Petersburg Area Chamber of Commerce Leadership St. Pete Program. He has completed six courses of study at the National Fire Academy in Emmitsburg, Maryland, and holds state certifications as a Firefighter, an Emergency Medical

Technician, and a Fire Safety Inspector. He holds the National Fire Protection Association's certification as a Certified Fire Protection Specialist (CFPS). The Commission on Chief Fire Officer Designation has designated Chief Large as a Chief Fire Officer (CFO). He has received plaques of appreciation for his role as president of Tampa Bay Fire Marshals Association and the Chair of the 2003 Leadership St. Pete Class. Chief Large currently serves on the board of directors for the St. Petersburg Municipal Employees Credit Union, and is a member of the Florida Fire Chiefs' Association, International Association of Fire Chiefs, Southeastern Association of Fire Chiefs, and Pinellas County Fire Chiefs Association. He is a past board member of the Police Athletic League and the Pinellas County Construction and Licensing Board and served on the planning committee for Leadership St. Pete from 2000 through 2004.