



## 2015 FESC Workshop AGENDA

May 20-21, 2015 Orlando Airport Marriott Lakeside, FL

### **TUESDAY, MAY 19**

**3:00 - 5:00 pm EARLY CHECK IN/REGISTRATION**

### **WEDNESDAY, MAY 20**

**7:00 - 8:30 am REGISTRATION, Orlando Airport Marriott Lakeside  
POSTER SET-UP for Session I**

**7:15 - 8:15 am BREAKFAST**

**GENERAL SESSION: MARRIOTT - GRAND BALLROOM (AMELIA AND SANIBEL)**

*MODERATOR: JENNIFER CURTIS, FESC DIRECTOR*

**8:15 – 8:25 am WELCOME**

**Buck Martinez**, Senior Director Office of Clean Energy, Florida Power & Light Company

**8:25 – 10:00 am OVERVIEW and POLICY PANEL SESSION**

*MODERATOR: BUCK MARTINEZ, SENIOR DIRECTOR OFFICE OF CLEAN ENERGY, FLORIDA POWER & LIGHT COMPANY*

**Overview: Florida's Energy Future**

**Invited Keynote: Amy L. Stein**, Professor, UF Levin College of Law

**Policy: A Changing Energy Landscape**

**Invited Keynote: Jeremy Susac**, Berger Singerman

**Natural Gas: Natural Gas Markets - Why Prices Continue to Trend Lower**

**Invited Keynote: Meera Bagati**, Sr. Economist, NextEra Energy Resources, LLC

***Solar and Smart Grid Key note speakers will join the panel discussion during Q&A***

**10:00 – 10:15 am BREAK**

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#### 10:15 – 11:15 am SESSION I: RENEWABLE/ALTERNATIVE POWER AND STORAGE PANEL SESSION

##### MARRIOTT GRAND BALLROOM (AMELIA AND SANIBEL)

*MODERATOR: CAMILLE E. COLEY, J.D., ASSISTANT VP FOR RESEARCH, ASSOCIATE DIRECTOR FOR THE SOUTHEAST NATIONAL MARINE RENEWABLE ENERGY CENTER (SNMREC), FLORIDA ATLANTIC UNIVERSITY*

##### **Marine Energy: Ocean Energy Turbine Development**

**Invited Keynote: Phillip Janca**, Co-founder, Crowd Energy and Founder, TEKNA Manufacturing, LLC

##### **American Job Project: The American Jobs Project: Florida State Roadmap to Clean Energy Jobs**

**Invited Keynote: Jin Noh**, University of California, Berkeley

#### 11:15 am - 12:25pm SESSION I ORAL PRESENTATIONS (5 min each)

##### Track I: Renewable/Alternative Power and Storage MARRIOTT – ROOM MARCO

*Chair: Camille E. Coley, J.D., Assistant VP for Research, Associate Director for the Southeast National Marine Renewable Energy Center (SNMREC), Florida Atlantic University*

- *What's "Current" in Ocean Energy – Camille E. Coley, Florida Atlantic University*
- *Natural Gas: A Pathway to Low Carbon Motor Fuels - David E. Bruderly PE, Bruderly Engineering Associates, Inc.*
- *Selective Non-Catalytic Reduction (SNCR) in a Diesel Engine - John Nuzzkowski, David Armstrong, Samantha Delgado, Matt Furlong, Alex Knapp, C. Reid Shore, University of North Florida*
- *Security-Constrained Unit Commitment with Dynamic Ratings – Anna Danandeh, Bo Zeng, Brian Buckley, University of South Florida*
- *General Capacitor's High Energy Li-ion Capacitors - Jim P. Zheng and Wanjun Cao, FAMU-FSU College of Engineering*
- *Optimization of LiMnPO<sub>4</sub> Using Solid State Processes – Charles Oladimeji, P.L. Moss, FAMU-FSU College of Engineering*
- *Hydrogen Energy Storage for On-Board Fuel Cells, Concentrated Solar Power and Secondary Batteries – Sesha Srinivasan, Ryan Ineglia, Jaspreet Dhau, Jorge Vargas, Florida Polytechnic University*
- *Flywheel Energy Storage for Rural Residential Applications Supplied by Intermittent Wind Power - Ahmed Elsayed, Tarek Youssef, Osama Mohammed, Florida International University*

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- *Quest for Grid Energy Storage: Case for the Performance of Iron-Ion/Hydrogen Redox Flow Battery Mixed Electrolytes* - Venroy Watson, Derrick Nguyen, Edward E. Effiong, Egwu E. Kalu, Florida A & M University
- *Economic Performance of Thermal Energy Storage Integrated with Natural Gas Combined Cycle Power Plants* - Barry Osterman-Burgess, Yogi Goswami, Elias Stefanakos, University of South Florida/CERC
- *FAMU Spheromak: Fusion Energy for Distributed Energy Resources* - Jerry Clark, Charles A. Weatherford, Ronald Williams - Florida A&M University
- *Renewable Cities: Technology, Goals, and Implementation* - Santiago Arias, Darren Brandes, Christopher Brown, Caroline Mayer, Fazil T. Najafi, University of Florida
- *A Systems Engineering Model for Harvesting Electricity From Shallow Water Tidal Currents* - John Domenech, Tim Eveleigh, George Washington University

### Track II: Education MARRIOTT – ROOM CAPTIVA

**Chair: Jennifer Curtis, FESC Director**

- *Solar Energy Technologies: Fundamentals and Applications in Buildings* - Cheng-Xian Lin, Florida International University
- *Buildings and Energy: Design and Operation vs. Sustainability: an Energy Engineering Course for Florida-specific Building Design & Operation* - Prabir Barooah, Duzgun Agdas, Ravi Srinivasan, University of Florida
- *Renewable Energy Courses for Master's in Global Sustainability* - George Philippidis, University of South Florida/Patel College of Global Sustainability
- *Renewable Energies and Sustainability Education* – Ryan Inteqlia, Sesha Srinivasan, Gary Albarelli, Brian Birky, Jorge Vergas, Jaspreet Dhau, Ghazi Darkazalli, Florida Polytechnic University
- *Cultivating Change: Using Social Marketing to Encourage Environmental Behaviors* - Laura A. Warner, Kathryn A. Stofer, University of Florida
- *Educating on Economic Realities of Sustainable Energy* – Michelle Phillips, Mark Jamison, PURC
- *Educational Modules in Support of Sustainable Energy Courses* - J.C. Ordonez, Sam Yang, M.B. Chagas, K. Ribeiro, C. Ordonez, T. Solano, J.V.C. Vargas, H. Li, Energy and Sustainability Center
- *Matching Training to Industry Needs* - Nina Stokes, Marilyn Barger, Richard Gilbert, FLATE
- *The University of Florida Training Reactor: Powering Nuclear Education & Innovation* - Shannon L. Eggers, Kelly A. Jordan, University of Florida
- *Save Money: Be a Savvy Consumer of Energy* - Heidi Copeland, Will Sheftall, Bob Seaton, University of Florida/IFAS Extension
- *Developing Leaders for a Sustainable Future* - Linda Seals, Holly Abeels, Gayle Whitworth, University of Florida/IFAS Extension Brevard County

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12:25 - 1:00 pm SESSION I POSTER REVIEW AND DISCUSSIONS

1:00 – 2:30 pm **BUFFET LUNCH – INFORMAL ROUND TABLE DISCUSSIONS**  
*REMOVAL OF SESSION I POSTERS and SET-UP of SESSION II POSTERS*

2:30 – 3:30 pm **SESSION II: BIOMASS AND SOLAR ENERGY PANEL SESSION**  
**MARRIOTT GRAND BALLROOM (AMELIA AND SANIBEL)**

*MODERATOR: TOMMY BOROUGHS, PARTNER, HOLLAND & KNIGHT*

**Biomass: Transformational Biomanufacturing Technologies for Sustainable Fuel and Chemical Production**

**Invited Keynote: Ramon Gonzalez**, Professor, Chemical & Biomolecular Engineering, Bioengineering, Director, Energy and Environment Initiative (EEI), Rice University

**Solar Energy: State of the Solar Market: Innovations and Trends**

**Invited Keynote: Miriam Makhyoum**, Solar Energy Industry Expert

3:30 – 4:40 pm **SESSION II SHORT ORAL PRESENTATIONS (5 min each)**

### Track I: Biomass MARRIOTT – ROOM MARCO

*Chair: George Philippidis, Associate Professor, Sustainable Energy, Patel College of Global Sustainability, University of South Florida*

- *Development and Scale-Up of a Horizontal Bioreactor for High-Density Cultivation of Microalgae - Ioannis Dogaris, Michael Welch, Bethany Loya, Andreas Meiser, Lawrence Walmsley, George Philippidis University of South Florida*
- *Cultivation and Optimization of Saline Microalgae BG0011 for Production of Biofuels and Bioproducts - Yingxiu Zhang, Tung Chen, Vincent Ferrone, Cesar M Moreira, Spyros Svoronos, Edward Philips, Pratap Pullammanappallil, University of Florida*
- *Introducing a Membrane Photobioreactor for Cultivating Microalgal Biofuels in Wastewater - Ivy Drexler, M Pickett, DH Yeh, University of South Florida*
- *Industrial Sweetpotato and Energybeet Potential for Biofuel Feedstocks in South Florida - Brian Boman, Edward Evans, Ann Wilkie, Janie Ryan-Bohac, University of Florida/Indian River REC*
- *Evaluating the Bioenergy Potential of Sweetpotato Vines - Wendy A. Mussoline, Ann C. Wilkie, University of Florida/IFAS Extension*
- *Florida Farm to Fly: Advanced Biofuel Feedstock Supply Chain Integration - Ben DeVries, Treasure Coast Research Park*

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- *Reinvigorating Oleoresin Collection in the Southeastern USA: Evaluation of Stand Management and Tree Characteristics with Borehole Tapping* - J. Lauture, Gary Peter, A. Hodges, University of Florida
- *An Intensified Process for Production of Liquid Hydrocarbon Fuels From Biogas to Overcome BGTL Economy of Scale Challenges* - Nada Elsayed, Babu Jospeh, John Kuhn, University of South Florida
- *Adaptation of Mesophilic and Thermophilic Anaerobic Digester to Saline Conditions* - Doan, Nguyet, Cabrol, L., Moreira, C., Tapia, E., Svoronos, S. A., Philips, E., Ruiz-Filippi, G., Pullammanappallil, P.C., University of Florida
- *Novel Biocatalytic Process for Biodiesel Production* - Huali Wang, Brent Chrabas, Viesel Fuel LLC.

### Track II: Solar Energy MARRIOTT – ROOM CAPTIVA

**Chair: Jim Fenton, Director, Florida Solar Energy Center**

- *An Analysis Between the State of Solar Energy Development in Europe and the United States* - Mary Kate Fitzgerald, Gage Vincent, Estelle Wilson, Pan Xu, Nicholas Yonezawa, Fazil T. Najafi, University of Florida
- *Advancing Solar* – Susan Glickman, Southern Alliance for Clean Energy
- *The Integration of Solar Power as a Renewable Source of Energy in the United States* - Patricia Cruz, Doug Hinton, Dorian Johnson, Cara Keller, Giuseppe Zuozzo, Fazil T. Najafi, University of Florida
- *Conducting Polymer-Dye Composites for Photoelectrochemical Solar Cells and Energy Storage* - Arash Takshj, University of South Florida
- *Atmospheric Pressure Chemical Vapor Deposition of Functional Oxide Materials for Crystalline Silicon Solar Cells* - Kristopher O. Davis, Winston V. Schoenfeld, University of Central Florida/FSEC
- *Establishing Field Equivalents of Accelerated Tests for Bypass Diodes in PV Modules* – Narendra Shiradkar, Vivek Gade, Kalpathy Sundaram, Winston Schoenfeld, University of Central Florida
- *Factors in the Formation of Cracks in Mono-Crystalline Silicon Solar Cells* - Hubert Seigneur, Narendra Shiradkar, University of Central Florida
- *Nanoscale Interfaces in Energy Application* - Luping Li, Cheng Xu, Kirk J. Ziegler, University of Florida
- *Recent Advances in Polymer Solar Cells* - Ifedayo Ogundana, Simon Y. Foo, Zhibin Yu, Indranil Bhattacharya, Florida State University
- *Smart Solar Electric Vehicle Technology* - Ashly Locke, Ryan Integlia, Sesha Srinivasan, Jorge Vergas, Jaspreet Dhau, James Mulharan, Eric Vickers, Florida Polytechnic University
- *Performance Analysis of C-Si Module Deployed at FSEC After 10 Years Exposure* - Eric Schneller, Joe Walters, Stephen Barkaszi, Kris Davis, Winston Schoenfeld, University of Central Florida

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- *Solar Thermochemical Fuel Production at the University of Florida - Jonathan R. Scheffe, David W. Hahn, Renwei Mei, University of Florida*
- *High Efficiency Thermochemical Fuel Production Using the UF 10 kW Solar Reactor - Kelvin Randhir, Like Li, Nick AuYeung, Amey Barde, Benjamin Greek, Nathan Rhodes, Renwei Mei, David Hahn, James Klausner, University of Florida*
- *The Costs and Benefits of Solar Road Technology - Courtney Cardozo, Juan Camargo, Kyle Findlater, Josh Herrera, Fazil T. Najafi, University of Florida*

**4:40 – 5:20 pm BREAK and SESSION II POSTER REVIEW AND DISCUSSIONS**

**5:20pm REMOVAL of SESSION II POSTERS and SET-UP of ADDITIONAL POSTERS**

**5:25 – 5:55 pm ADDITIONAL POSTER SESSION**

#### Renewable/Alternative Power and Storage (Poster Session)

- *Sustainability in Rapid Prototyping - Joseph Prine, John McCormack, Jorge Vargas, Jaspreet Dhau; Sesha Srinivasan, Ryan Integlia, Florida Polytechnic University*

#### Biomass (Poster Session)

- *Dual Purpose Benefits of the Sweetpotato Crop: Biofuel and Animal Feed - Lara R. Nesralla, Wendy A. Mussoline, Ann C. Wilkie, University of Florida/IFAS*
- *Cultivation of Filamentous Algae for Bioenergy Production - Kimberly D. Hafner, Ann C. Wilkie, University of Florida*
- *Impact of Phytohormones on Microalgal Growth and Lipid Content - Brett S. Nelson, Ann C. Wilkie, University of Florida*
- *Techno-Economic Analysis of Bioethanol Production From Lignocellulosic Biomass: Process Integration with Energy Recovery From Wastes - Na Wu, Pratap Pullammanappallil, University of Florida*
- *Synthesis of Biodiesel via Supercritical Transesterification Route from Waste Cooking Oil - Z. Cerniga, Shriyash Deshpande, D. Townsend, K. Cogswell; A. Driscoll, A. Sunol, G. Philippidis, M. Pandey, University of South Florida*

#### Solar Energy (Poster Session)

- *Avian Mortality at Solar Energy Facilities in Southern California - Stephanie Meyers, Lee Walston, University of Illinois at Urbana–Champaign*
- *A Thermo-Mechanical Method for Fabrication of Porous Structure for Solar Thermo-Chemical Fuel Production - Kelvin Randhir, Like Li, Nick AuYeung, Amey Barde, Renwei Mei, David Hahn, James Klausner, University of Florida*

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- *Detailed Analysis of Spatially Mapping Solar Cell Parameters - Kortan Ogutman, Kris Davis, University of Central Florida*
- *Modeling of Scroll Expanders for Decentralized Power Generation using Solar Energy as Heat Source - Arun Kumar Narasimhan, Rajeev Kamal, Yogi Goswami, Elias K. Stefanakos, University of South Florida*
- *Investigation of Long Term Reactive Stability of Ceria for Use in Solar Thermochemical Cycles - Nathan R. Rhodes, Michael M. Bobek, David W. Hahn, University of Florida*
- *High Throughput Processes for PV Module Manufacturing - Vasilios Palekis, S. Collins, V. Evani, M. Khan, C. S. Ferekides, University of South Florida*
- *Understanding the Impact of Point Defects on the Performance of Thin Film Solar Cells – Vamsi Evani, M. I. Khan, P. Bane, V. Palekis, S. Collins, C. Ferekides, University of South Florida*

#### Energy Efficiency (Poster Session)

- *Anomaly Identification, Detection and Correction on Distribution Networks: a Non-technical Power Loss Study Case - Rodrigo D. Trevizan, Aquiles Rossoni, Arturo S. Bretas, University of Florida*
- *Integration of Technologies for Recovery of Energy and Nutrients from Dairy Wastes – Shunchang Yang, University of Florida*
- *An Experimental Investigation of Occupancy-Based Control of Commercial Building Climate - Jonathan Brooks, Siddharth Goyal, Rahul Subramany, Yashen Lin, Timothy Middelkoop, Prabir Barooah, University of Florida*

#### Smart Grid & Energy Storage (Poster Session)

- *Distributed Optimization-based Load Control in a Power Grid for Primary Frequency Response while Minimizing Consumer Disutility - Jonathan Brooks, Prabir Barooah, University of Florida*
- *Smart And Flexible Resources to Harness Solar Power in Florida - D. Surya Chandan, A. S. Bretas, Sean Meyn, Prabir Barooah, University of Florida*
- *Solar-Driven Photo-Thermochemical Water-Splitting Cycle with Integrated Thermal Energy Storage - Nazim Muradov, Ali T-Raissi, Nan Qin, University of Central Florida/FSEC*

**5:55 pm REMOVAL OF ADDITIONAL POSTERS**

**6:00 – 7:15 pm RECEPTION – CAPRI GREAT LAWN**

**7:00 pm DINNER ON YOUR OWN**





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### **THURSDAY, MAY 21**

**7:00 - 8:30 am REGISTRATION, Orlando Airport Marriott Lakeside**  
***POSTER SET-UP for Session III***

**7:30 - 8:30 am BREAKFAST**

**8:30 – 9:00 am GENERAL SESSION: MARRIOT GRAND BALLROOM (AMELIA AND SANIBEL)**  
***MODERATOR: JENNIFER CURTIS, FESC DIRECTOR***

**Invited Keynote: *A Grid in Transition - A look at Power Systems Regulations***  
**Jordan Kislear, Program Analyst at US Department of Energy**

**9:00 – 10:00 am SESSION III: ENERGY EFFICIENCY AND SMART GRID/ENERGY STORAGE PANEL SESSION**

**MARRIOT GRAND BALLROOM (AMELIA AND SANIBEL)**

***MODERATOR: JEREMY SUSAC, BERGER SINGERMAN***

**Energy Efficiency: *Some History, Buildings and the Grid***

**Invited Keynote: Jim Payne, Technology Project Officer, Office of Energy Efficiency and Renewable Energy, US DOE**

**Smart Grid: *Bridging Gaps between Design, Operations and Software in Smart Grids—Next Generation SCADA***

**Invited Keynote: Marija Ilic, Professor of Electrical & Computer Engineering and Engineering & Public Policy, Carnegie Mellon University**

**10:00 – 10:15 am BREAK**

**10:15 – 11:25 am SESSION III ORAL PRESENTATIONS (5 min each)**

**Track I: Energy Efficiency MARRIOTT – ROOM MARCO**

***Chair: Rob Vieira, Director, Buildings Research Division, Florida Solar Energy Center***

- *Boosting Efficiency in Buildings - Chris Castro, Jonathan Ippel, City of Orlando*
- *High Efficiency Multi-Family Housing Renovations at UF's Corry Village - Craig Miller, Bahar Armaghani, Steve Wargo, University of Florida Program for Resource Efficient Communities*



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- *Efficiency of Florida's Affordable Multifamily Housing: Diving Deeper into Consumption, Property, and Tenant Characteristics Data - Nicholas Taylor, Anne Ray, Jennison Searcy, Lesly Jerome, University of Florida Program for Resource Efficient Communities*
- *Multifamily Energy-Efficiency Retrofit Programs: A Florida Case Study - Nicholas Taylor, Jennison Searcy, Pierce Jones, University of Florida*
- *Design of Incentive Programs to Promote Net Zero Energy Buildings - Alireza Ghalebani, Tapas K Das, University of South Florida*
- *Experimental Exergy Analysis of an Off-Grid Zero Emissions Building - Sam Yang, M. Chagas, J.C. Ordonez, J.V.C. Vargas, C. Ordonez, Florida State University*
- *Optimization of Chilled Water Plant Operation using Modelica Buildings Library - Sen Huang, Wangda Zuo, University of Miami*
- *Transportation Energy and Space Technology Hub (TEST Hub) at NASA Kennedy Space Center - Advanced Transit Technology Demonstration Projects: Dual-Fuel Fuel Cell Demonstration and Thermo Electric Generation Transit Bus Demonstration - David Teek, Tim Franta, Mike Aller, Energy Florida*
- *Ducted Heat Pump Water Heater Cooling and Heating Performance in Florida - Carlos Colon, Eric Martin, Danny Parker, University of Central Florida/ FSEC*
- *Greenstar Roof Insulation— Paul White, Greenstar Panels*
- *Planning for Urban Sustainability: Comparing the Impacts of Residential Design Alternatives - Lynn M. Jarrett, Hal S. Knowles III, Barbra C. Larson, University of Florida/Program for Resource Efficient Communities*
- *Performance and Energy Efficiency Analysis of Join Algorithms on GPUs - Ran Rui, Hao Li, Yicheng Tu, University of South Florida*
- *Smart Meter Data Analytics – Using Data for Energy Efficiency, Kevin Burns, Orlando Utilities Commission*
- *Dynamic Power-Aware Disk Storage Management in Database Servers - Peyman Behzadnia, Yicheng Tu, University of South Florida*
- *Dynamically Controlled Smart Walls – The New Standard for Home and Building Construction - Justin Zhou, Julius Regalado, IVy Composites, Inc. (Poster Only)*

### Track II: Smart Grid & Energy Storage MARRIOTT – ROOM CAPTIVA

***Chair: Sean Meyn, Director Florida Institute for Sustainable Energy, Director Laboratory for Cognition & Control, Professor of ECE and Robert C. Pittman Eminent Scholar Chair***

- *Dispatchable Micro-CHP and Micro-CCHP - Stephen Welty, Calor Technologies*
- *Cloud and Mobile Technology will Change Energy Systems Now and the Future - Ben Amaba, IBM*
- *eNOS - An Open Source Energy OS - Raymond Kaiser, Amzur Technologies*
- *High Impedance Fault Detection on Distribution Networks: an Adaptive Approach Considering a Noisy Environment - Arturo Bretas, Leonardo Lurinic, Renato Ferraz, University of Florida*

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- *Smart Fridge / Dumb Grid : Architecture for the Electricity Network of 2020 - Y. Chen, J. Ehren, R. Kaddah, J. Mathias, P. Barooah, A. Busic, Sean Meyn, University of Florida*
- *Develop Smart Power Inverters to Improve the Performance of Smart Power Grid - Shuo Wang, University of Florida*
- *Home Is Where the Heart Is: Complexity, Pattern, and Meaning in Short Interval Residential Electric Smart Meter Data – Hal Knowles, University of Florida/PREC*
- *Fault Location Identification in Smart Distribution Networks with Distributed Generation - Jose Cordova, Omar Faruque, Florida State University*
- *Real-Time Digital Simulation Based SCADA Lab and HIL Machine Drive Lab at USF - Hossein Ghassempour Aghamolki, Zhixin Miao, Lingling Fan, University of South Florida*
- *Nickel Iron Batteries for Twenty First Century Energy Storage - David Atherton, Randy Ogg, Encell Technologies*
- *G4 Synergetics High Power Battery - Mark Kohler, G4 Synergetics, Inc.*
- *The Impact of Double-use Storage on a Grid Connected House with Photovoltaics - Richard Aarons, Omonayo Bolufawji, Mark H. Weatherspoon, Florida A & M University*
- *Analysis of Coupling Dynamics for Power Systems with Iterative Discrete Decision Making Architectures - Zhixin Miao, University of South Florida*
- *Modeling of Packed Bed Thermal Energy Storage with Encapsulated Phase Change Material - Francesca Moloney, University of South Florida*

**11:25 – 11:55 am SESSION III POSTER REVIEW AND DISCUSSIONS**

**11:55 am REMOVAL OF POSTERS**

**GENERAL SESSION: MARRIOT GRAND BALLROOM (AMELIA AND SANIBEL)**

**12:00 – 12:05 pm CLOSING REMARKS**

Jennifer Curtis, FESC Director

**12:05 BUFFET LUNCH**

**1:15 – 4:15pm SHORT COURSE: LARGE-SCALE PROPOSAL DEVELOPMENT AND ACCELERATORS FOR UNIVERSITIES - MARRIOT GRAND BALLROOM (AMELIA AND SANIBEL)**

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**Ben Rowland and Alison Lipson**, Founders of University Proposals ([universityproposals.com](http://universityproposals.com))

Based in the Washington, DC metro area, Ben and Alison have produced more than 1,000 proposals and oral presentations throughout their careers. They are experts at managing every aspect of a proposal and site visit from development through delivery – including technical and research volumes, pre- and full-proposals, facilitating team writing, peer reviews, orals coaching, site visits, and reverse site visits. They assist Principal Investigators and their teams by providing creative solutions, industry knowledge, guidance, and extensive experience in interpreting RFP and FOA solicitation language

and requirements.

### Short Course Abstract:

Over the years, the proposal industry has developed approaches and processes that accelerate the proposal cycle to organize and streamline preparation, improve the overall quality of the response, and respond specifically and clearly to the requirements. Accelerators directly translate into time and cost savings, stronger proposals, and more wins. Nowhere are these benefits needed more than at universities where time and resources are limited and Government solicitations can be difficult to follow.

During this course, university participants learn valuable skills from the experts that manage large-scale proposals to Federal agencies such as the DOE, NSF, and NASA. Participants will learn new approaches to old problems that all universities struggle with. They receive powerful reference material (including virtual resources) they can use on their next proposal and every one after that. The seminar includes a question and answer period and participants are encouraged to stay and discuss their toughest problems.

### Accelerators 101 – Organizing and Outlining (approximately 60 minutes)

- Organizing Your Response to Meet the Requirements
- Outlining to “Answer The Mail”: Developing Your Proposal From the Solicitation
- Converting Requirements Into Your Words
- Author Guidance: What Authors Should Know and Do
- From the Start – Leverage Your Strengths and Mitigate Your Weaknesses



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- Harmonizing One-Voice

### **3:00 – 3:15 pm BREAK**

Accelerators 102 – Proposal Process and Parts (approximately 60 minutes)

- Role of Proposal Team Members (even if there's only one of you)
- Meaningful Internal and External Reviews
- Look Good and Read Well: Formatting and Editing
- Summaries That Sizzle
- Resumes and Bios That Rock
- Graphics Accelerators

Questions & Answers (approximately 30 minutes)