# Joshua P. Kilborn, Ph.D.

#### **Research Assistant Professor**

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#### PROFESSIONAL SUMMARY

Academic researcher with a track record of success in the development and application of computational mathematical and ecological methods directed at challenges related to marine fisheries, socio-ecological systems' dynamics, and holistic aquatic resource management. A progressive leader and educator committed to promoting growth, equity, and understanding among all stakeholders through the pursuit of knowledge and providing access to the best possible scientific evidence for fact-based decision making.

As a full-time **Research Assistant Professor** (April 2019-Present) and **Principal Investigator**, my responsibilities include the advancement and administration of novel scientific research and graduate student development that both rise to the exacting standards of a preeminent research university. Under the auspices of research, I fully support my work via externally funded grant opportunities (see "Secured Funding – Research Grants") while undertaking proposal creation, budgeting, purchasing and acquisitions, hiring, task management, and project performance and coordination. Under the mission of graduate education, I develop all course curriculum, lectures, and evaluation tools for all sections that I teach. I have delivered courses using in-person, synchronous-online, and hybrid formats. As a graduate faculty member, I also contribute to students' training via direct mentorship and participation in research theses and dissertations.

## EDUCATIONAL BACKGROUND

2017 **Ph.D. Marine Science** – Concentration in *Marine Resource Assessment*, University of South Florida, College of Marine Science, St. Petersburg, FL

<u>Dissertation</u>: **Kilborn, J. P.** 2017. *Investigating the Marine Resources in the Gulf of Mexico at Multiple Spatial and Temporal Scales of Inquiry*. Graduate Theses and Dissertations, University of South Florida, College of Marine Science. <u>https://digitalcommons.usf.edu/etd/7046/.</u>

2002 B.S. Mathematics. Jacksonville University, Jacksonville, FL

<u>Undergraduate Research:</u> Differential equation models of HIV dynamics via CD4+ T cells; 2001

<u>Undergraduate Thesis Project:</u> Minimizing airline expenses for relocation of assets faced with natural disaster – A modeling project using the SIMPLEX method; 2002.

## **PROFESSIONAL PREPARATION**

7/2021-Present **Ecosystem Technical Committee Member**. Gulf of Mexico Fisheries Management Council. Tampa, FL. (~14 days year<sup>-1</sup>)

- "<u>Technical Committees</u> are special advisory panels made up of academics, agency, and industry personnel with expertise in relevant subject matter that can advise and assist the Council by reviewing relevant subject matter and providing recommendations."
- "The mission of the <u>Ecosystem Technical Committee</u> is to incorporate ecological interactions into fish stock assessments and management goals based on objectives set forth by the Council. The <u>Ecosystem</u> <u>Technical Committee</u> will work with Council staff to support the

development of the Council's ecosystem-based fishery management plan. This plan will accommodate regional needs in the Gulf of Mexico while considering the existing National Ecosystem Plan and Regional Ecosystem Roadmap Guiding principles."

7/2021-Present Special Ecosystem Scientific & Statistical Committee Member. Gulf of Mexico Fisheries Management Council. Tampa, FL. (~15-30 days year<sup>-1</sup>).

- "<u>Scientific & Statistical Committee Members</u> are stock assessment or quantitative biologists/ecologists, economists, quantitative anthropologists/sociologists, and other scientists who are knowledgeable about the technical aspects of fisheries in the Gulf of Mexico. Members are appointed for three-year terms."
- Participate in the development and consideration of management advice based on topics including, but not limited to, general fisheries biology, ichthyology, histology, physiology, genetics, age/size distributions, population dynamics, in/vertebrate and plankton ecology, harmful algal blooms, oceanography, and other ecosystem-level considerations.
- 4/2019-Present Research Assistant Professor, University of South Florida, College of Marine Science (USF-CMS), St. Petersburg, FL (40-hrs week<sup>-1</sup>; see 'Professional Summary').

1/2018-Present Instructor, USF-CMS, St. Petersburg, FL (8-hrs week-1)

- <u>Applied Statistical Analysis/Biometry:</u> Graduate level course covering core concepts of univariate statistical analysis and introductory coding practices with an emphasis on ecological and biological datasets and implemented in **R** (formerly **MATLAB**). Particular focus on experimental design, simple and multiple linear regression, single and multi-factor analysis of variance (and covariance), and computational programming.
- <u>Applied Multivariate Statistics</u>: Graduate level course emphasizing handson analysis of large, high-dimensional marine ecological and environmental datasets using distribution-free methodologies. Focus on non-normal, highly skewed, and zero-inflated data and relevant analyses. Exploratory and cluster analyses, hypothesis testing (canonical analyses), detection of species-environmental relationships (direct gradient analysis, information theoretic approaches), and direct spatial analyses are emphasized throughout the course. Extensive **R** software (formerly **MATLAB**) used throughout the course.
- 7/2019-12/2020 **Statistical Consultant**, USF-CMS, St. Petersburg, FL (40-hrs week<sup>-1</sup>; 2-mo year<sup>-1</sup>) Population and Ecosystem Dynamics Lab (PI: Steven A. Murawski, Ph.D.)
  - Gulf of Mexico Research Initiative/C-IMAGE III (No. SA 18-16): Core Area III Synthesis Project to coordinate, organize, analyze, and synthesize regional time series data collected over the decade post-*Deepwater Horizon* oil spill; Contributed to all relevant products and publications (reference section).
- 8/2017-4/2019 **Postdoctoral Researcher**, USF-CMS, St. Petersburg, FL (40-hrs week<sup>-1</sup>) Project title: *Investigating multivariate ecological time-series models to improve our understanding and assessment of the Gulf of Mexico Large Marine Ecosystem* (see 'Secured Funding – Research Grants' for details).
- Summer 2016 Statistical Contractor, Ocean Conservancy, St. Petersburg, FL (20-hrs week<sup>-1</sup>; 3-mo year<sup>-1</sup>)
  - Develop and document a multivariate statistical model for the Gulf of Mexico fisheries ecosystem (see Kilborn et al. 2018 for details).

Spring 2015 Statistical Consultant, Hawaii International Environmental Services (HIES), Kailua, Hawai'i (20-hrs week<sup>-1</sup>; 2-mo year<sup>-1</sup>) • Evaluate HIES's statistical power analysis of a long-term ecological monitoring (LTEM) program's ability to detect changes as defined in the LTEM program's goals. • Evaluate HIES's critical analysis of a LTEM program's sampling design and statistical methods with particular emphasis on the non-parametric and multivariate nature of the LTEM dataset collected. Fall 2014 Research Assistant, USF-CMS, St. Petersburg, FL. Physical Oceanography Lab (PI: Gary Mitchum, Ph.D.; 20-hrs week-1; 3-mo year-1) • Theoretical statistical model verification and MATLAB implementation with algorithm optimization for a project using sea surface height data from tide-gauges to estimate satellite altimeter drift and error. 8/2010-12/2017 Research Assistant & Ph.D. Candidate, USF-CMS, St. Petersburg, FL (40hrs week-1). Co-Advisors: David Naar, Ph.D. and Ernst Peebles, Ph.D., (see project details in 'Educational Background'). Vice President of Administration, The Garden Produce Company, 1/2007-8/2010 Jacksonville, FL (40-hrs week<sup>-1</sup>) • Oversee employees and coordinate activities related to company-wide Accounts Receivables, Accounts Payables, Personnel Management, and Reception. 12/2006-8/2010 Information Systems Manager, The Garden Produce Company, Jacksonville, FL (40-hrs week<sup>-1</sup>) • Maintenance and development of company-wide databases for 2000+ customers, 10,000+ inventoried items, and point-of-sale software implementations (both remote online and in-person formats). 10/2004-12/2006 Territory Sales Manager, Pitman Produce Company, Jacksonville, FL (40hrs week<sup>-1</sup>) • Manager responsible for all facets of territory operations including solicitation, development, long-term partnerships, and new product introductions for fresh produce and other perishable items. General Manager, Southend Brewery & Smokehouse, Jacksonville, FL (40-9/2000-8/2004 hrs week<sup>-1</sup>) • General Manager responsible for all employees and facets of unit operations including purchasing, receiving, inventory, profit-loss analyses, sales, profitability growth solutions, and building maintenance. • Hiring, training, scheduling, and day-to-day management for 40+ employees in fast-paced casual dining experience with on-site craft

## PEER-REVIEWED MANUSCRIPTS

brewing operations

- Kilborn, J. P. 2024. Characterizing a Regional Fishery Ecosystem Trajectory: The Humpty Dumpty Fish Tale of the U.S. Gulf of Mexico from 1986-2013. *Frontiers in Marine Science*. 11:1333756. doi: 10.3389/fmars.2024.1333756.
- Schram, M. J., M. E. Emory, J. P. Kilborn, J. A. Peake, K. R. Wall, I. Williams, C. D. Stallings. 2024. Reef fish assemblages differ both compositionally and functionally on artificial and natural reefs in the eastern Gulf of Mexico. *ICES Journal of Marine Science* doi: 10.1093/icesjms/fsae075.
- Murawski, S. A., P. T. Schwing, W. F. Patterson III, T. T. Sutton, P. A. Montagna, R. J. Milligan, S. B. Joye, L. Thomas, **J. P. Kilborn**, C. B. Paris, R. Faillettaz, D. S. Portnoy, and S. Gilbert.

**2023**. Vulnerability and resilience of living marine resources to the *Deepwater Horizon* oil spill: an overview. *Frontiers in Marine Science* 10:1202250. doi: 10.3389.fmars.2023.1202250.

- Michaud, B. C., J. P. Kilborn, T. C. MacDonald, and E. B. Peebles. **2022**. A description of Florida estuarine gradient complexes and the implications of habitat factor covariation for community habitat analysis. *Estuarine, Coastal and Shelf Science*, 264:107669. https://doi.org/10.1016/j.ecss.2021.107669.
- Murawski, S. A., J. P. Kilborn, A. C. Bejarano, D. Chagaris, D. Donaldson, F. J. Hernandez Jr., T. C. MacDonald, C. Newton, E. Peebles, K. L. Robinson. 2021. A Synthesis of Deepwater Horizon Impacts on Coastal and Nearshore Living Marine Resources. *Frontiers in Marine Science* 7:594862. doi: 10.3389.fmars.2020.594862.
- Schwing, P. T., P. A. Montagna, S. B. Joye, C. B. Paris, E. E. Cordes, C. R. McClain, **J. P. Kilborn**, S. A. Murawski. **2020**. A synthesis of deep benthic faunal impacts and resilience following the Deepwater Horizon oil spill. *Frontiers in Marine Science* 7:560012. doi: 10.3389/fmars.2020.560012.
- Dell'Apa, A., J. P. Kilborn, W. J. Harford. 2020. Advancing ecosystem management strategies for the Gulf of Mexico's fisheries resources: implications for the development of a fishery ecosystem plan. *Bulletin of Marine Science*. 96(4):617-640. https://doi.org/10.5343/bms.2019.0081.
- Kilborn, J. P., M. Drexler, and D. L. Jones<sup>†</sup>. **2018**. Fluctuating fishing intensities and climate dynamics reorganize the Gulf of Mexico's fisheries resources. *Ecosphere* 9(11):e02487.10.1002/ecs2.2487.
- **Kilborn, J. P.**, D. L. Jones, E. B. Peebles, and D. F. Naar. **2017**. Resemblance profiles as clustering decision criteria: Estimating statistical power, error, and correspondence for a hypothesis test for multivariate structure. *Ecology and Evolution*; 7:2039-2057. https://doi:10.1002/ece3.2760.
- Tzadik, O. E., **J. P. Kilborn**, and R. S. Appeldoorn. **2017**. Differential habitat use of reef fishes on a shelf-edge off La Parguera, Puerto Rico. *Bulletin of Marine Science*; 93(3):893-914.

## SECURED FUNDING - RESEARCH GRANTS

- 2024-2025 National Oceanographic and Atmospheric Administration, National Marine Fisheries Service (NOAA-NMFS). Methods and Model Development for Estimating Catch and Effort for Federally Managed Fishes Using Southeast For-Hire Integrated Electronic Reporting Program Outputs. Kilborn, J. P. (PI, USF-CMS). \$128,550
  - Review and recommend catch and effort estimation methods and modeling approaches for SEFHIER data products (e.g., capture-recapture estimation).
  - Develop/Test **R** software to implement recommended models/methods.
- 2023-2028 National Oceanographic and Atmospheric Administration, National Centers for Coastal Ocean Science (NOAA-NCCOS). Surveillance of Pollution from Emerging Chemical Threats in Tampa Bay. Murawski S. A., Romero, I., Kilborn, J. P. (Co-PI, USF-CMS), O'Leary, H., Schwing, P., Breitbart, M. \$3,400,000 (Kilborn portion: \$125,858)
  - Undertake field collections sampling water, waste waters, sediments, invertebrates, and vertebrate fishes of Tampa Bay to characterize the concentration, spatial distribution, sequestration, and seasonality of selected Contaminants of Emerging Concern and Contaminants of Known Concern.
  - Survey various human sub-populations to ascertain the characteristics of human consumption patterns potentially leading to elevated toxicological risks from seafood consumption (e.g., focusing especially on subsistence-level fishers).
  - Develop quantitative risk assessments for seafood consumption of various popular seafood species using results of contaminant sampling.

- Characterize, using multivariate statistical techniques, the associations between various contaminant chemicals and outcomes to indicate the potential for synergies among them.
- 2023-2024 Florida Department of Environmental Protection (FDEP). FDOU 51, Phase II. A Holistic Assessment of Aquatic Resources and Habitats in the Kristin Jacobs Coral Reef Ecosystem Conservation Area. Kilborn, J. P. (PI, USF-CMS). **\$58,347** 
  - Define and map organizational states among benthic habitat composition and reef fishes' abundances throughout the Kristin Jacobs Coral Reef Ecosystem Conservation Area (Coral ECA).
  - Utilize National Coral Reef Monitoring Program (NCRMP) data for both benthic observations and Reef-fish Visual Census (RVC). Analyses also include FL Reef Resilience Program Disaster Response Monitoring (DRM) survey data.
  - Determine which RVC and NCRMP + DRM species are indicative of regimes.
- 2022-2025 National Oceanographic and Atmospheric Administration, Ocean and Atmospheric Research, Climate Protection Office (NOAA-OAR-CPO). Climate Change Indicators Across the National Marine Sanctuaries System. Muller-Karger, F., Dorton, J. Simoniello, C., Kilborn, J. P. (Co-PI, USF-CMS) (Kilborn portion: \$99,180)
  - Developed a standardized method for monitoring the system status for National Marine Sanctuaries in the southeastern United States using ecological and oceanographic observational datasets.
  - Applied multivariate statistical modeling to measure the complex adaptive state changes in the trophic organization and physio-chemical environments over time and to help characterize risks due to factors including, climate changes, storm effects, sea-level variability, fresh water effects, contaminants, or other essential oceanic or biological variables.
- 2021-2022 Florida Department of Environmental Protection (FDEP). FDOU 51: Meta-Analysis of Water Quality, Fish, and Benthic Data; Phase-I. Kilborn, J. P. (PI, USF-CMS). **\$74,073** 
  - Data discovery for the three subsystems of the Coral ECA.
  - Facilitation of diverse stakeholder engagement opportunities among State, Federal, and university research scientist to conceptualize the Coral ECA subsystems while also determining and prioritizing their unique needs.
  - Develop the final scope and focus of the FDOU-51 project, based on scientific and management stakeholder consensus, to best inform aquatic resource management and policy decision making.
  - Developed a final report describing the outcomes of scoping exercises, detailing the next steps for the final analytical phase of FDOU-51, and making recommendations for improving monitoring and surveillance of the Coral ECA.
- 2021-2023 MS/AL Sea Grant via University of Southern Alabama. Greater Amberjack (Seriola dumerili) Abundance, Distribution, and Movement in the South Atlantic and Gulf of Mexico. USF-CMS Group: Murawski, S. M. (Co-PI); Kilborn, J. P. (Investigator/Analyst); Grasty, S.; Hommeyer, M.; Lembke, C. \$1,114,992 (Kilborn portion: \$81,375)
  - Data collection, assimilation, and synthesis for all biological observations of related *Seriola* spp. study across the Gulf of Mexico and South Atlantic regions.
  - Data collection, synthesis, and GIS-mapping of benthic habitat data for the Gulf of Mexico and South Atlantic regions' natural and artificial reefs.
  - Community and statistical analyses of observational data for *Seriola* species.
- 2020 **Gulf of Mexico Fishery Management Council** (GMFMC). Exploring Unexplained Variability in Stock-Recruitment Relationship Estimates for the Gulf of Mexico's

Greater Amberjack (Seriola dumerili) Stock with Long-Term, Ecological Time Series. **Kilborn, J. P. (PI**, USF-CMS). **\$85,000** 

- Develop mathematical/statistical models and code to analyze the relationship between the stock recruitment of Greater Amberjack (GAJ) and natural environmental variability, particularly with respect to *Sargassum*.
- Assess whether a monitoring system can be developed to support near realtime decision making with respect to GAJ and incorporating environmental predictions or observations.
- 2017-2021 National Oceanographic and Atmospheric Administration, Marine Fisheries Initiative (NOAA, MARFIN). Investigating multivariate ecological time-series models to improve our understanding and assessment of the Gulf of Mexico Large Marine Ecosystem. Kilborn, J. P. (PI, USF-CMS), M. Drexler (Co-PI, Ocean Conservancy). **\$524,106** 
  - Develop, code, and evaluate the Ecosystem-Level, Management-Indicator Selection Tool (EL-MIST); EL-MIST description in Kilborn et al. (2018)
  - Apply EL-MIST to the Gulf of Mexico large marine ecosystem (Gulf LME) to understand the temporal dynamics and system-wide organization of aquatic resources (e.g., fishes, marine mammals, sea turtles, and birds)
  - Use EL-MIST to determine which natural (e.g., Atlantic Multidecadal Oscillation, dissolved nutrients) and anthropogenic (e.g., fishing effort, oil industry) factors best account for aquatic resource organization over time.
  - Apply EL-MIST to assess the long-term temporal dynamics of the King Mackerel (*Scomberomorus cavalla*) population in the Gulf LME using recent stock assessment outputs.
  - Contribute to the scientific work in Dell'Apa et al. (2020) listed above that advocates a framework for the development of a fishery ecosystem plan for multispecies management of all fisheries resources throughout the Gulf LME

# SPECIAL SKILLS

- Extensive knowledge of MATLAB, the R-language, and RStudio
- Advanced knowledge of ArcGIS, Stock Synthesis and Git-Hub
- Unix-based, high-performance cluster computing utilization
- Data **simulation** and testing (e.g., statistical methods development and optimization)
- Working knowledge C++, Ecopath with Ecosim, Fortran, and COBOL
- Extensive knowledge of Adobe Illustrator, Microsoft Windows, and Microsoft Office
- Former certified Instructor for the National Association of Underwater Instructors
- Former certified Instructor for the Diver's Alert Network

# TECHNICAL REPORTS (NON-REFERREED)

- Kilborn, J. P. 2024. FDOU-51, Phase II: A Holistic Assessment of Aquatic Resources and Habitats in the Kristin Jacobs Coral Reef Ecosystem Conservation Area; Interim Progress Report. *Prepared for the Florida Department of Environmental Protection, Coral Reef Conservation Program*. University of South Florida, College of Marine Science. Saint Petersburg, Florida. *ii* and 20 pp.
- Kilborn, J. P. 2022. Phase-I Final Report for a Meta-Analysis of Water Quality, Fish, and Benthic Data within the Kristin Jacobs Coral Reef Ecosystem Conservation Area. *Report prepared for the Florida Department of Environmental Protection's Coral Reef Conservation Program*. University of South Florida, College of Marine Science. Saint Petersburg, Florida. *ix* and 49 pp.
- Kilborn, J. P. 2022. Summary of Collaborative Meeting #2 for a Meta-Analysis of Water Quality, Fish, and Benthic Data within the Kristin Jacobs Coral Reef Ecosystem Conservation Area. *Report prepared for the Florida Department of Environmental Protection, Coral Reef Conservation Program.* University of South Florida, College of

Marine Science, Saint Petersburg, FL: *viii* and 30 pp. <u>https://floridadep.gov/sites/default/files/FDOU%2051%20Report%20%233%20-</u> <u>%20Feasbility%20Analysis%20Meeting%20Summary\_0.pdf</u>

- Kilborn, J. P., K. Lizza. 2022. Summary of Collaborative Meeting #1 for a Meta-Analysis of Water Quality, Fish, and Benthic Data within the Kristin Jacobs Coral Reef Ecosystem Conservation Area. *Report prepared for the Florida Department of Environmental Protection, Coral Reef Conservation Program.* University of South Florida, College of Marine Science, Saint Petersburg, FL: *ix* and 65 pp. <u>https://floridadep.gov/sites/default/files/FDOU%2051%20Report%20%232%20-</u> %20Fish\_Bnethic\_WQ\_AllHands\_Meetings\_Combined\_0.pdf
- Kilborn, J. P. 2022. Data Discovery for a Meta-Analysis of Water Quality, Fish, and Benthic Data within the Kristin Jacobs Coral Reef Ecosystem Conservation Area. *Report prepared for the Florida Department of Environmental Protection, Coral Reef Conservation Program.* University of South Florida, College of Marine Science, Saint Petersburg, FL: *ix* and 54 pp. <u>https://floridadep.gov/sites/default/files/FDOU-51%20Report%20%231%20-%20Data%20Discovery\_0.pdf</u>
- Kilborn, J. P. 2021. Exploring Unexplained Variability in Stock-Recruitment Relationship Estimates for the Gulf of Mexico's Greater Amberjack (*Seriola dumerili*) Stock with Long-Term Ecological Time-Series. *Technical Report Prepared for the Gulf of Mexico Fisheries Management Council.* <u>https://gulfcouncil.org/wp-content/uploads/A-7b-2021-</u> 04\_Kilborn\_GAJ\_Sargassum\_Final\_Report\_Update.pdf.

## **PRESENTATIONS & SYMPOSIA**

- Kilborn, J. P. November 29, 2023. FDOU-5, Phase II: A Holistic Assessment of Aquatic Resources and Habitats in the Kristin Jacobs Coral Reef Ecosystem Conservation Area: Quarterly Meeting #1. <u>Facilitator/Speaker</u>: Phase II Kick-off. St. Petersburg, FL. [*virtual*]
- Kilborn, J. P. April 17, 2023. *Seriola spp.* Synthesis of Biological Data: Greater Amberjack Count Project. Interim Project Team Update. St. Petersburg, FL. [*virtual*]
- Kilborn, J. P. March 9, 2023. Asymmetric Eigenvector Mapping Applications to Account for Temporal Variability in Fisheries Resources and Recruitment Deviations. *Gulf of Mexico Fisheries Management Council*; Tampa, FL.
- Kilborn, J. P. March 1, 2023. Synthesis of Habitat Data for the Greater Amberjack Count Project. All-Hands Meeting #2, *Louisiana State University*; Baton Rouge, LA.
- Kilborn, J. P. March 11, 2022. FDOU-51 Collaborative Meeting #1, Pre-meeting Check-In. <u>Facilitator</u>: SEFCRI, FDOU-51 Project Team. [*virtual*]
- Kilborn, J. P. March 23-25, 2022. FDOU-51 Collaborative Meeting #1, Virtual Meeting Introduction. [*virtual*]
- Kilborn, J. P. March 23-25, 2022. FDOU-51 Collaborative Meeting #1, Phase-I Goals and Objectives. [*virtual*]
- Kilborn, J. P. March 23, 2022. FDOU-51 Collaborative Meeting #1, Conceptual Model Overview for the Benthic Subsystem of the Coral ECA. [*virtual*]
- Kilborn, J. P. March 23, 2022. FDOU-51 Collaborative Meeting #1, Data Discovery Results for the Benthic Subsystem of the Coral ECA. [*virtual*]
- Kilborn, J. P. March 24, 2022. FDOU-51 Collaborative Meeting #1, Conceptual Model Overview for the Fish Subsystem of the Coral ECA. [*virtual*]
- Kilborn, J. P. March 24, 2022. FDOU-51 Collaborative Meeting #1, Data Discovery Results for the Fish Subsystem of the Coral ECA. [*virtual*]
- Kilborn, J. P. March 24, 2022. FDOU-51 Collaborative Meeting #1, Data Discovery Results for the Water Quality Subsystem of the Coral ECA. [*virtual*]
- Kilborn, J. P. March 25, 2022. FDOU-51 Collaborative Meeting #1, Review of Activities from each Subsystem-Specific Meeting. [*virtual*]
- Kilborn, J. P. March 25, 2022. FDOU-51 Collaborative Meeting #1, Data Discovery Results and Updates for the All Subsystems of the Coral ECA. [*virtual*]

- Kilborn, J. P. April 8, 2022. FDOU-51 Subsystem Conceptual Model Updates and Priority Setting Exercise Results for the Coral ECA from Collaborative Meeting #1. <u>Invited</u> <u>Speaker</u>: SEFCRI, FDOU-51 Project Team. [*virtual*]
- Kilborn, J. P. May 4, 2022. FDOU-51 Collaborative Meeting #1 Debriefing and Review of Selected Research Priorities. <u>Invited Speaker</u>: SEFCRI, FDOU-51 Technical Advisory Committee. [*virtual*]
- Kilborn, J. P. May 18 & 23, 2022. FDOU-51 Collaborative Meeting #2, Virtual Meeting Introduction. [*virtual*]
- Kilborn, J. P. May 18, 2022. FDOU-51 Collaborative Meeting #2, Discussing the Analytical Feasibility of Selected Research and Management Priorities for the Coral ECA. [virtual]
- Kilborn, J. P. May 23, 2022. FDOU-51 Collaborative Meeting #2, Explicit Discussion of Research Themes #4 & #5 for the Coral ECA. [*virtual*]
- Kilborn, J. P. June 13, 2022. Greater Amberjack Count Synthesis of *Seriola spp.* Catch and Habitat Data for the Gulf of Mexico and South Atlantic. All-Hands Meeting #1, *University of South Alabama*; Mobile, AL. [*virtual*]
- Kilborn, J. P. September 2, 2022. FDOU-51 Summer 2022 Update for the Project Team. Invited Speaker: SEFCRI, FDOU-51 Project Team. [virtual]
- Kilborn, J. P. September 8, 2022. FDOU-51 Parameter Selection Workshop Overview and Discussion. [*virtual*]
- Kilborn, J. P. October 19, 2022. FDOU-51 Project Summary for the Florida Coral Reef Surveillance Task Force. <u>Invited Speaker</u>: Florida Coral Reef Surveillance Task Force. [*virtual*]
- Kilborn, J. P. December 12, 2022. Summary and Final Recommendations from the Phase-I Activities of FDOU-51 for the Coral ECA. <u>Invited Speaker</u>: SEFCRI, FDOU-51 Technical Advisory Committee. [*virtual*]
- Kilborn, J. P. 2021. Greater Amberjack (*Seriola dumerili*): Exploring Unexplained Variability in the Stock-Recruitment Relationship Estimates in the Gulf of Mexico. <u>Invited Speaker</u>: *Gulf of Mexico Fisheries Management Council*. Meeting date: April 14, 2021. [*virtual*]
- Kilborn, J. P. 2020. Complex Adaptive Fisheries Ecosystems: Exploring the temporal trends, drivers, and states, of the Gulf of Mexico's living marine resources. <u>Invited Seminar</u> <u>Speaker</u>: *University of Florida, Fisheries and Aquatic Sciences Program.* Gainesville, FL. [*virtual*]
- Schwing, P. T. (presenter), J. P. Kilborn, P. Montagna, C. Paris, R. Faillettaz., I. C. Romero, S. B. Joye, W. A. Overholt, G. Brooks, R. Larson, D. J. Hollander, S. A. Murawski, T. Sutton, W. Patterson III. 2020. Assembling the benthic record of species and community change for the Gulf of Mexico following the Deepwater Horizon Event. *Gulf of Mexico Oil Spill & Ecosystem Science Conference*, Tampa, FL.
- Murawski, S. A. (presenter), J. P. Kilborn, L. DiPinto, D. Chagaris, D. Donaldson, J. Litz, T. MacDonald, C. Newton, E. B. Peebles, K. Robinson, L. Schwacke, R. Takeshita. 2020. On the Resilience of Coastal/Nearshore Living Resources to Deepwater Horizon: A Harbinger of Future Coastal Restoration Efforts? *Gulf of Mexico Oil Spill & Ecosystem Science Conference*, Tampa, FL.
- Murawski, S. A. (presenter), W. Patterson III, P. T. Schwing, P. Montagna, R. Milligan, T. Sutton, J. P. Kilborn, S. Gilbert. 2019. Poster presentation: Vulnerability and Resilience of Species and Ecosystems to Large-Scale Contamination Events: Lessons Learned from the Deepwater Horizon. *American Geophysical Union Fall Meeting*, San Francisco, CA.
- Kilborn, J. P. 2019. Ecosystem Impacts of the Deepwater Horizon Event: Detecting Trends and Evaluating Changes in Ecosystems and Populations. *C-IMAGE II; Core Area III Synthesis Workshop #2*, Washington D.C.
- Kilborn, J. P. 2019. Explicitly Accounting for Temporal Variability in the Context of EBFM for the Gulf of Mexico's Living Marine Resources 1986-2013. *American Fisheries Society & American Wildlife Society Joint Meeting*, Reno, NV.

- Ellis R. (chair), J. Carroll, **J. P. Kilborn**. 2019. (Symposium) Variation in Life History of Fishes: Accounting for and Incorporating Spatiotemporal Variability in Demographic Rates. *American Fisheries Society & American Wildlife Society Joint Meeting*, Reno, NV
- Kilborn, J. P. 2019. Ecosystem Impacts of the Deepwater Horizon Event: Overview Statistical Methods to Detect Trends & Evaluate Change. *C-IMAGE II; Core Area III Synthesis Workshop #1*, St. Petersburg, FL.
- Kilborn, J. P., M. Drexler, and D. L. Jones. 2018. Using the Ecosystem-Level Management-Indicator Selection Tool to Explicitly Model Temporal Trends and Partition the Variability for Fisheries Resources in a Large Marine Ecosystem. *American Fisheries Society – Annual Meeting*, Atlantic City, NJ.
- Kilborn, J. P., M. Drexler, and D. L. Jones. 2017. An Ecosystem-Level Management-Indicator Selection Tool for the Distillation of Complex Multivariate Datasets: Gulf of Mexico Case Study. NOAA Southeast Regional Office – Brown Bag Lunch Seminar Series, St. Petersburg, FL.
- Kilborn, J. P., M. Drexler, and D. L. Jones. 2017. Describing Three Decades of Fisheries Regime States in the Gulf of Mexico Using an Ecosystem-Level Redundancy Analysis Approach. *International Council for the Exploration of the Sea – Annual Science Conference* (ICES-ASC), Ft. Lauderdale, FL.
- Kilborn, J. P., M. Drexler, and D. L. Jones. 2017. Describing Three Decades of Fisheries Regime States in the Gulf of Mexico Using an Ecosystem-Level Redundancy Analysis Approach. *American Fisheries Society Annual Meeting*, Tampa, FL.
- Kilborn, J. P., M. Drexler, and C. Ridings. 2016. An ecosystem-level redundancy analysis decision tool to inform the integrated ecosystem assessment indicator selection process. *ICES-ASC*, Riga, Latvia.
- **Kilborn, J. P.**, O. E. Tzadik, and R. S. Appeldoorn. 2015. Differential habitat use and reef-fish community organization among the reef-top and slope morphology within a single shelf-edge ecotone in La Parguera, Puerto Rico. *Gulf and Caribbean Fisheries Institute 68<sup>th</sup> Conference*, Panama City, Panama.
- Kilborn, J. P., D. L. Jones, and E. B. Peebles. 2014. Detection of unique bentho-demersal fish communities in the high diversity West Florida Shelf ecosystem and the impact of environmental drivers. *ICES-ASC*, A Coruña, Spain.
- **Kilborn, J. P.**, E. B. Peebles, and D.L. Jones. 2013. Poster presentation: Clustering methods for assigning community types, spatial distributions, and habitat associations to multispecies benthic fish communities on the West Florida Shelf, eastern Gulf of Mexico. *ICES-ASC*, Reykjavik, Iceland.
- **Kilborn, J. P.**, E. B. Peebles, D. L. Jones, and D. F. Naar. 2012. Poster presentation: Using one fish community to predict another: Dynamic models of predator distribution based on lower-trophic-level community structure and other habitat features. *ICES-ASC*, Bergen, Norway.
- Kilborn, J. P. 2012. An exposition on essential fish habitat. University of South Florida College of Marine Science, Graduate Student Symposium, St. Petersburg, FL.
- Kilborn, J. P., S. Rai. 2001. A differential equation model of HIV dynamics via CD4+ T cells. *National Council of Undergraduate Research*, Lexington, KY.
- Kilborn, J. P., S. Rai. 2000. A differential equation model of HIV dynamics via CD4+ T cells. *Mathematical Association of America – Sectional Meeting*, Ft. Meyers, FL

# HONORS & AWARDS

- Dec-2017 Kilborn, J. P., Graduate Student Commencement Ceremony Speech, University of South Florida Graduate Students' Spring Commencement Ceremony, USF Sun Dome, Tampa, FL
- 2000 **Outstanding Mathematics Student of the Year**. Jacksonville University. Awarded by Mathematics department. faculty to most promising student for the academic year
- 1995 Eagle Scout Award. Troop 12, Baden Powell Council, Boy Scouts of America

#### COMMUNITY OUTREACH/SERVICE ACTIVITIES

- *Oct-2014* **Planning and Logistics Committee**, St. Pete Science Festival Event Dates: October 17-18, 2014
  - Coordinated sign-up and logistical needs of 100+ exhibitors
  - Organized and planned site map for the day of the event
- 2011-2014 **Chapter Vice President** (2012-2014), SCUBAnauts International, LLC, St. Petersburg, FL Chapter

**Dive Safety Officer** (*2011-2012*) responsible for all SCUBA diving activities, planning, and safety

Organizer of marine debris coastal cleanups

- Deer Key, FL Keys, USA, May 2012; July 2012
- Clam Bayou Education Center in St. Petersburg, FL, November 2011
- 2011 Science Mentor, USF College of Marine Science, Oceanography Camp Especially for Girls

Sept-2011 Volunteer Artificial Reef Cleanup, Reef Monitoring Inc., Clearwater Beach, FL

\*Note: Dr. Kilborn is a U.S. citizen as has registered for the U.S. selective service.