#### WILLIAM & MARY Curriculum Vita

#### PERSONAL INFORMATION

| Name: Eric James Hi | ton Date: December 14, 2022   |  |
|---------------------|---|--|
| Office Address:     | 123/125 Fisheries Science Laboratory, Virginia Institute of Marine Science, P.O. Box 1346, Gloucester Point, VA 23062 |  |
| Phone (office):     | (804) 684-7178  |  |

**POSITION:** Professor of Marine Science, Department of Fisheries Science

# **EDUCATION**

- Ph.D. (Organismic and Evolutionary Biology), University of Massachusetts, Amherst, 2002.
  Dissertation title: A contribution to the osteology and phylogenetic systematics of osteoglossomorph fishes. Dissertation committee: W. E. Bemis (Chair), E. L. Brainerd, P. L. Forey, L. Grande, & B. Kynard.
- M.S. (Organismic and Evolutionary Biology), University of Massachusetts, Amherst, 1999. Major academic advisor: W. E. Bemis.
- B.S., *cum laude* (Wildlife Biology and Conservation), 1996. University of Massachusetts, Amherst. Advisor: T. K. Fuller.

# ACADEMIC POSITIONS

# Positions at the Virginia Institute of Marine Science, William & Mary

Vice Chair, Department of Fisheries Science, July 2021- June 2024

Professor of Marine Science, August 2018-present.

Associate Professor of Marine Science, July 2012–August 2018.

Cornelia Brackenridge Talbot Distinguished Term Associate Professor of Marine Science, July 2013–June 2016.

Assistant Professor of Marine Science, September 2007–June 2012.

Curator, Nunnally Ichthyology Collection, 2007-present.

#### **Research Associate Positions**

- Research Associate, Geology Department, Field Museum of Natural History, Chicago, 2007-2014; 2019-present (Research Associate positions at the Field Museum were eliminated from 2015-2018 due to institutional reorganization).
- Resident Researcher, Friday Harbor Laboratories, University of Washington, Friday Harbor, Washington, August to December 2022.

## Postdoctoral and Graduate Student Fellow Positions

- Postdoctoral Research Scientist. September 2005 to August 2007. Geology Department, Field Museum of Natural History, Chicago. Supervisor: L. Grande.
- Postdoctoral Fellow. September 2004 to August 2005. Division of Fishes, National Museum of Natural History, Smithsonian Institution, Washington, D. C. Supervisor: G. D. Johnson.
- Postdoctoral Research Scientist. September 2002 to August 2004. Geology Department, Field Museum of Natural History, Chicago. Supervisor: L. Grande.
- Lester Armour Family Graduate Fellow. Field Museum. September 2000 to August 2001. Geology Department, Field Museum of Natural History, Chicago. Supervisor: L. Grande.

## HONORS, PRIZES AND AWARDS

#### **Professional awards:**

- 2020 2020 Plumeri Award for Faculty Excellence, William & Mary
- 2015 2014 Best Paper in Ichthyology, Copeia
- 2013 William & Mary Alumni Fellowship Award

## Offices in professional societies:

- 2015-2019. Board of Governors, American Society of Ichthyologists and Herpetologists.
- 2009-2013. Board of Governors, American Society of Ichthyologists and Herpetologists.

## **Editorial positions:**

Associate Editor, 2019-present. Zoological Journal of the Linnean Society.

2017-present, Editorial Board, member, Acta Zoologica (Stockholm)

2010-present. Editorial Board, member, Organisms Diversity and Evolution

2012-2019. Editor (Marine and Estuarine Fishes), Zootaxa

2015-2017. Subject Editor (Fish Larvae Taxonomy and Biology). Marine Biology Research.

2003-2013. Associate Editor. Journal of Paleontology.

2001-2008. Editorial Board, member. Copeia.

# CONTRIBUTIONS TO THE EDUCATIONAL PROGRAM

# **Courses taught (Graduate and Undergraduate)**

# VIMS/School of Marine Science:

- MSCI 501F; Introduction to Fisheries Science, 2 credits, Spring 2022 (with Dr. A. Scheld; 15 students).
- MSCI 506; Scientific Communication, 2 credits, Fall 2010 (with Dr. J. Milliman; 17 students); Fall 2012 (with Dr. J. Milliman; 8 students); Spring 2015 (with Dr. D. Steinberg; 6 students); Spring 2017 (with Dr. D. Steinberg; 9 students); Spring 2020 (with Drs. D. Steinberg and E. Rivest; 4 students).

#### MSCI 507; Responsible Conduct in Research, 1 credit, Fall 2021 (9 students).

- MSCI 666; Systematic Ichthyology, 4 credits, Spring 2008 (4 students), Fall 2009 (9 students), Spring 2011 (3 students, 2 others sat in), Spring 2012 (2 students); Spring 2013 (3 students, 1 other sat in); Fall 2015 (8 students); Fall 2017 (6 students); Fall 2019 (2 students); Spring 2022 (5 students).
- MSCI 698; Scientific Illustration and Manuscript Preparation, 1 credit, Fall 2008 (9 students), Spring 2010; (10 students).
- MSCI 698; Cladistics, Spring 2011 (with Dr. C. Dillman); 4 students, 3 others sat in.
- MSCI 698; Anatomy of Fishes, 3 credits, Summer 2012 (with Dr. P. Konstantinidis); 1 student, 1 other sat in.
- MSCI 698; Comparative Methods in Evolutionary Biology, 1 credit, Spring 2013 (with Dr. C. Dillman); 4 students.
- MSCI 698; History of Ichthyology, 2 credits, Spring 2018; 2 students, 1 member of the public auditing; also participated in remotely by colleagues at Cornell University.
- MSCI 698; Scientific Illustration, 1 credit, Spring 2018; 8 students, 1 member of the public auditing.
- MSCI 548; Introduction to the Anatomy of Fishes, 2 credits, Spring 2021; 1 student.

#### Guest lectures given in courses outside of VIMS:

- Native American Tropical Biology Research Experience. Spring 2008; co-instructor for NSF-funded field course in tropical biology in Palo Verde, Costa Rica, for Native American students enrolled at tribal colleges; organized by Dr. D. Buresh, Sitting Bull College (Fort Yates, ND).
- Functional Morphology and Marine Ecology of Fishes. Summer 2008, 2010. Guest lectures on the diversity and morphology of fishes. Friday Harbor Labs, University of Washington, Friday Harbor WA; Dr. A. P. Summers (UWA) and L. Ferry (ASU) coinstructors.
- Visual Journal (W&M COLL 200), Spring 2016. Guest lecture on scientific illustration. L. Carey (W&M Department of Art and Art History) instructor.
- Environmental Problem Solving II & III (EVST 105.305/405), Spring, 2020. Randolph-Macon College. Guest lecture and discussion leader on biology and monitoring of American shad in Virginia. Drs. Michael Fenster and Charles Gowan (R-MC), instructors.
- Natural History (W&M COLL 150), Fall 2020, 2021. Guest lecture on Ichthyology. L. D. Morse (W&M Department of Geology) instructor.

#### **Students Mentored**

#### **Major Advisor**

#### a. Current Graduate Students

Andrew D. Corso, Ph.D. Larvae of Antarctic fishes (entered fall 2017); co-advised with D.K. Steinberg.

Miguel Montalvo (admitted fall 2021, deferred start until January 2022)

Kaitlyn Cisz (entered fall 2022); co-advised with J. McDowell.

#### b. Graduated (chronological order)

- Patrick E. McGrath, Ph.D., 2010; Life history of Longnose Gar, *Lepisosteus osseus* (currently employed as Marine Scientist I, Virginia Institute of Marine Science)
- Todd R. Clardy, Ph.D., 2014; Morphology and systematics of Pricklebacks, Stichaeidae (currently employed as Collection Manager, Los Angeles County Museum)
- Alison L. Deary, Ph.D., 2015. Ontogenetic ecomorphology of drums, family Sciaenidae (currently employed as Fisheries Research Biologist, NOAA Alaska Fisheries Science Center, Seattle)
- Jennifer M. Martin, Ph.D., 2015. Taxonomy, ontogeny, and systematics of Lampridiformes (currently employed as a Professor at Thomas Nelson Community College).
- Katie May Laumann, Ph.D., 2016. Sturgeons (Acipenseridae): systematics, ontogeny, biogeogragphy. (employed after graduation as a Fisheries Planner, Virginia Marine Resources Commission).
- Cindy Marin Martinez, M.S. 2017. Larval fish community structure; Fulbright Fellow, 2013-2015 (currently employed as collection associate, Friedrich Schiller University, Jena, Germany).
- Adela Roa-Varón, Ph.D. 2018. Systematics of hakes, family Merlucciidae, and other Gadiformes (currently a NOAA Postdoctoral Fellow, National Systematics Lab).
- Katherine E. Bemis, Ph.D. 2020. Studies on the anatomy of teleostean fishes (currently employed as Research Zoologist, NOAA National Systematics Lab).
- Diego Francisco Biston Vaz, Ph.D. 2020. Morphology and phylogenetic systematics of Batrachoidiformes (currently employed as Ernst Mayr Postdoctoral Fellow, Harvard University's Museum of Comparative Zoology.

#### **Post-doctoral Advisees**

#### Former (chronological order)

- Dr. Filipe Ribeiro (currently Postdoctoral Researcher Researcher, Marine and Environmental Sciences Centre, Faculdade de Ciências da Universidade de Lisboa Campo Grande, Lisboa, Portugal)
- Dr. Peter Konstantinidis (currently Vertebrate Curator, Oregon State University, Corvallis, Oregon)
- Dr. Casey R. Dillman (currently Curator of Fishes, Reptiles, and Amphibians, Cornell University, Ithaca, New York)
- Dr. Nalani K. Schnell (currently Researcher, Muséum National d'Histoire Naturelle, Station marine de Concarneau, Concarneau, France)

# Student Committee Service (at VIMS unless otherwise stated)

#### Current

Paul Clerkin, Ph.D. (J. McDowell, major advisor)

Caroline G. DeVries, M.S. (K. Weng & R.J. Latour, major advisor) Christopher Groff, Ph.D. (C. Patrick, major advisor) Tor Mowatt-Larssen, Ph.D. (D.K. Steinberg, major advisor)

#### Graduated (chronological order)

Branson Williams, M.S., 2010 (M. Fabrizio, major advisor)
Christopher J. Sweetman, M.S., 2012 (R. J. Latour & M. Vecchione, major advisors)
Sarah E. Sumoski, M.S., 2012 (J. J. Orth, major advisor)
Daniel Lumbantobing, Ph.D., 2012, George Washington University (J. Burns and L. Parenti, co-major advisors)
Sikai Peng, M.S., 2013 (R. Carnegie & K. Tang, major advisors)
Diane Tulipani, Ph.D. 2013 (R. Lipcius, major advisor)
Emily Loose, M.S. 2014 (J. Graves, major advisor)
Kristene Parsons, Ph.D. 2017 (R. J. Latour, major advisor)
Christopher J. Sweetman, Ph.D. 2018 (R. J. Latour, major advisor)
Jingwei Song, Ph.D. 2020 (Jan McDowell, major advisor)
Jackson Martinez, M.S. 2021 (Jan McDowell & J. Graves, co-advisors)

#### **Undergraduate Students (chronological order)**

- Kate Nolan; 2012-2013 (William & Mary); Honor's Thesis Committee Member. Morphological patterning in gill-raker microstructure and relation to water flow and filtration in the oral cavity. (S.L. Sanderson, major advisor)
- Peter (Will) Sweetser (William & Mary); Independent study on morphology of the fishes of the family Pholidae, Fall 2012, Spring 2013, Fall 2013; REU Summer intern, 2013.
- Kamila Aguiar Rodrigues de Jesus (Brazil Scientific Mobility Program); Independent study of the skeleton of the gill arches of Squaliformes. Summer, 2015; co-advised by Kristene Parsons.
- Erin Roberts; 2015-2016 (William & Mary); Honor's Thesis Committee Member. Modeling the fluid dynamics of filtering structures in suspension-feeding fishes. (S.L. Sanderson, major advisor)
- Andrew Corso; 2016. (William & Mary); Independent study on the larval fishes of Antarctica
- Hannah Bruzzio, 2018. (William & Mary); Honor's Thesis Committee Member. (S.L. Sanderson, major advisor)
- Nathanial Carter (John Tyler Community College); REU Summer intern, 2018. Staining and CT scanning of larval fishes
- Khalil Russell; 2019-2021. (William & Mary); Honor's Thesis major advisor; Rapid morphological divergence in three introduced cichlid species
- Christopher Snyder; 2019-2021. (William & Mary); Geology Senior Thesis, major advisor: Quantifying morphological variation in the ornament of dermal scutes in sturgeon (Acipenseridae).

- Meredith Nolan; 2021. (William & Mary); Spring and Summer Intern; A. Corso and A. Schonfeld, primary advisors: Morphological variation in a time series of notothenioid fishes.
- Kiera Sears; 2021. (William & Mary); Spring and Summer Intern; A. Corso and A. Schonfeld, primary advisors: Morphological variation in a time series of notothenioid fishes.
- Arthur Jones; Larson Palmgren; Anna Wilkinson; Spring 2022. (William & Mary); Independent study students; projects in development; S.K. Huber, primary advisor of Palmgren and Wilkinson.
- Anu Desai; 2022-present. (William & Mary); Independent study: Morphology of the eelpout, *Zoarces americanus*.

Larson Palmgren, Fall 2022; Independent study: morphology of billfishes.

#### **Other Students (chronological order)**

- Lauren Horton (Gloucester High School); Governor's School (Summer 2008); conducted research on sturgeon scutes.
- Lei Yang (Saint Louis University); hosted for a two-week visit to train in morphological techniques; funded by NSF RNC Deep-Fin (August – September, 2009)
- Peter Hundt and Elizabeth Wallace (University of Minnesota); hosted for a twoweek visit to train in morphological techniques; funded by NSF RNC Deep-Fin (May-June, 2010)
- Sean Lusk (Virginia Tech); VIMS REU, Occurrence of juvenile southern flounder in the York River (May-August, 2012)
- Peter Warth, Ph.D., Friedrich Schiller University, Jena, Germany (L. Olsson, major advisor); I serve as a collaborator and unofficial mentor for Peter for his dissertation research on the ontogeny of the skeleton in Acipenseridae, and have sponsored several extended collaborative visits to my lab between 2014 and 2016.
- Pedro Rizzato (Universidade de São Paulo, campus de Ribeirão Preto); Ontogeny and homology of dermal bones of the skull related to laterosensory canals in basal actinopterygians (Vertebrata: Osteognathostomata); funded by Fundação de Amparo à Pesquisa do Estado de São Paulo (In residence at VIMS October, 2016-October 2017); I also serve as an outside reviewer for his dissertation.
- Dahyes F. Regasso (Universidade de São Paulo, campus de Ribeirão Preto); Study of heterochronic events in Characiformes and the implications of heterochrony for the evolution of South American ichthyofauna); funded by Programa de Doutorado-sanduíche no Exterior da CAPES (In residence at VIMS December 2019-April 2020; program ended early due to COVID-19).

#### FELLOWSHIPS AND GRANTS

Virginia Marine Resources Commission and U. S. Fish and Wildlife Service. Pending. Monitoring relative abundance of American shad and river herring in Virginia's rivers. E. J. Hilton, PI. \$320,329; with \$40,000 supplement from Virginia Marine Fisheries Improvement Fund.

- National Science Foundation. Pending. William & Mary Noyce Track I ARISE Program: Recruiting, Preparing, and Retaining Teachers through Action Research in STEM Education (ARISE).
- National Fish and Wildlife Foundation. Pending. *RecFish: User Acquisition, Engagement and Retention*. L. Kellogg & E.J. Hilton. \$271,244.
- Virginia Marine Resources Commission and U. S. Fish and Wildlife Service. 2021-2022. Monitoring relative abundance of American shad and river herring in Virginia's rivers. E. J. Hilton, PI. \$320,329; with \$40,000 supplement from Virginia Marine Fisheries Improvement Fund.
- National Fish and Wildlife Foundation. 2021-2022. *RecFish: Enhanced Functionality in Response to Stakeholder Input.* L. Kellogg & E.J. Hilton. \$315,227.
- Virginia Marine Resources Commission and U. S. Fish and Wildlife Service. 2020-2021. Monitoring relative abundance of American shad and river herring in Virginia's rivers. E. J. Hilton, PI. \$320,329; with \$40,000 supplement from Virginia Marine Fisheries Improvement Fund.
- National Fish and Wildlife Foundation. 2020-2021. RecFish: Engaging Recreational Anglers as Community Scientists Using a Cutting-Edge Mobile App. L. Kellogg, E.J. Hilton, R. Quartel, D. Trivedi, & H. Shah. \$321,369.
- Virginia Department of Wildlife Resources. 2020-2023. Optimization and application of environmental DNA protocols for blackbanded sunfish (Enneacanthus chaetodon) detection in Virginia. J. McDowell, E.J. Hilton, H. Small (VIMS) & M. Pinder (VDWR). \$33,833 (\$22,922 direct, \$10,911 match).
- VIMS Dean and Director's Innovation Fund. 2020-2021. Automated fish identification: RecFish App and beyond. L. Kellogg & E.J. Hilton. \$35,000.
- National Science Foundation. 2020-2023. Snapshots from the ancient Indo-Pacific: Remarkable Eocene fish faunas and their implication for the origin of a modern marine biodiversity hotspot. M. Friedman, PI (University of Michigan), E.J. Hilton, PI (VIMS), P. Cowman, senior personnel (James Cook University). VIMS budget: \$231,036.
- Virginia Marine Resources Commission and U. S. Fish and Wildlife Service. 2019-2020. Monitoring relative abundance of American shad and river herring in Virginia's rivers. E. J. Hilton, PI. \$327,489; with \$40,000 supplement from Virginia Marine Fisheries Improvement Fund.
- Virginia Marine Resources Commission and U. S. Fish and Wildlife Service. 2019. Monitoring relative abundance of American shad and river herring in Virginia's rivers. E. J. Hilton & R. Latour, co-PIs. \$276,188. [project shifted to a 9-month project for 2019 in order to shift start date of future awards to November 15, to better coincide with the biology of alosines and needs of the program]; with \$40,000 supplement from Virginia Marine Fisheries Improvement Fund.

- Field Museum, Chicago. Science and Scholarship Committee 2019 Bass Senior Fellowship. Studies on the morphology and systematics of fossil and living basal actinopterygian fishes. \$11,850.
- Virginia Marine Resources Commission and U. S. Fish and Wildlife Service. 2018-2019.
   Monitoring relative abundance of American shad and river herring in Virginia's rivers. E. J.
   Hilton & R. Latour, co-PIs. \$391,272.
- National Science Foundation. 2018-2021. DEB-1754627. Systematics and evolution of migration in Clupeiformes (Herring, Sardines, Shad, Anchovies, and their Allies. D. Bloom (Western Michigan University), N. Lovejoy, Senior Personnel (University of Toronto), and E.J. Hilton, Senior Personnel (VIMS). Hilton's budget through WMU (total project budget \$773, 808).
- National Science Foundation 2018-2022. DEB-1754483. A new, well preserved Late Cretaceous freshwater fish fauna from North America: insights into the systematics and evolution of sturgeons, paddlefishes, gars, bowfins, and teleosts. E.J. Hilton, PI (VIMS), L. Grande, co-PI (Field Museum). VIMS budget: \$46,872.
- National Science Foundation. 2017-2022. DBI-1702143. Collaborative Research: Digitization TCN: Collaborative Research: oVert: Open Exploration of Vertebrate Diversity in 3D. S. K. Huber, PI & E. J. Hilton, co-PI (VIMS); D. Blackburn (FLMNH, lead PI; 15 institutions involved total). VIMS budget: \$70,415.
- National Oceanographic and Atmospheric Administration (National Marine Fisheries Service).
  2016-2019. Assessment of Critical Habitats for Recovering the Chesapeake Bay Atlantic
  Sturgeon Distinct Population Segment-Phase II: A Collaborative Approach in Support of
  Management. B. Greenlee, (VDGIF), G. C. Garman & M. Balazik (VCU), E. J. Hilton, M. T.
  Fisher & K. Weng (VIMS), co-PIs; B. Richardson (MDDNR) & T. King (USGS),
  cooperators. VIMS budget: \$579,081.
- Virginia Marine Resources Commission and U. S. Fish and Wildlife Service. 2017-2018. Monitoring relative abundance of American shad and river herring in Virginia's rivers. E. J. Hilton & R. Latour, co-PIs. \$391,272.
- Virginia Marine Resources Commission and U. S. Fish and Wildlife Service. 2016-2017. Monitoring relative abundance of American shad and river herring in Virginia's rivers. E. J. Hilton & R. Latour, co-PIs. \$346,185; with \$40,000 supplement from Virginia Marine Fisheries Improvement Fund.
- Virginia Marine Resources Commission Recreational Fishery Advisory Board. 2015-2016. E.J. Hilton, PI, P.E. McGrath, co-PI. *Investigating temperature selectivity and movement patterns of speckled trout*. \$61,208 (plus \$18,308 match).
- National Fish and Wildlife Foundation. 2015-2017. *Monitoring river herring stocks in the Pamunkey River, Virginia.* E.J. Hilton, PI, R.J. Latour, and K. Weng co-PIs. \$128,049 (plus \$129,277 match).
- Virginia Marine Resources Commission and U. S. Fish and Wildlife Service. 2015-2016. Monitoring relative abundance of American shad and River Herring in Virginia's rivers. E. J. Hilton & R. Latour, co-PIs. \$343,737; with \$40,000 supplement from Virginia Marine Fisheries Improvement Fund.

National Oceanographic and Atmospheric Administration (National Marine Fisheries Service),

Office of Sustainable Fisheries, Saltonstall-Kennedy Grant Program. 2014-2015. *Testing raised foot lines in Virginia's striped bass fishery: A gear-based method of reducing Atlantic sturgeon interactions in anchored gillnets*. T. J. Murray (PI); E.J. Hilton, R. Fisher (VIMS) and G.C. Garman (VCU), collaborators. \$161,803

- National Science Foundation. 2014-2017. DBI-1349327. Collections in Support of Biological Research: Natural History: Organization, expansion, and digitization of the larval fish collection at the Virginia Institute of Marine Science. E. J. Hilton, PI, S. K. Huber and D. K. Steinberg, co-PIs. \$499,579
- Virginia Marine Resources Commission and U. S. Fish and Wildlife Service. 2014-2015.
   *Monitoring relative abundance of American shad and River Herring in Virginia's rivers*. E.
   J. Hilton & R. Latour, co-PIs. \$343,737.
- National Oceanographic and Atmospheric Administration (National Marine Fisheries Service).
  2013-2016. Assessment of Critical Habitats for Recovering the Chesapeake Bay Atlantic
  Sturgeon Distinct Population Segment. B. Richardson (MDDNR), B. Greenlee, (VDGIF), D. H. Secor (UMD-CBL), G. C. Garman (VCU), & E. J. Hilton (VIMS). VIMS budget:
  \$702,724.
- Virginia Marine Resources Commission and U. S. Fish and Wildlife Service. 2013-2014. Monitoring relative abundance and bycatch of American shad in Virginia's rivers. E. J. Hilton & R. Latour, co-PIs. \$330,384.
- Virginia Marine Resources Commission and U. S. Fish and Wildlife Service. 2012-2013. Monitoring relative abundance and bycatch of American shad in Virginia's rivers. E. J. Hilton & R. Latour, co-PIs. \$330,569.
- Living Marine Resources Cooperative Science Center Technical Advisory Board. 2012. Sensory ecology of Atlantic sturgeon: ecophysiological auditory and visual performance measures.
  A. Horodysky (Hampton University), PI; E. J. Hilton (VIMS), & R. Brill (NOAA), collaborators. \$18,763.
- Virginia Marine Resources Commission and U. S. Fish and Wildlife Service. 2011-2012. VMRC F-116-R-14. *Monitoring relative abundance and bycatch of American shad in Virginia's rivers*. E. J. Hilton & R. Latour, co-PIs. \$390,742.
- Virginia Marine Resources Commission and U. S. Fish and Wildlife Service. 2010-2011. VMRC F-116-R-13. *Monitoring relative abundance and bycatch of American shad in Virginia's rivers*. E. J. Hilton & R. Latour, co-PIs. \$390,124.
- National Science Foundation. 2009-2011. BRC-0847905. Renovation of the Ichthyology Collection and associated facilities at the Virginia Institute of Marine Science. E. J. Hilton & T. T. Sutton. \$311,993. No-cost extension through August 2013.
- National Science Foundation. 2009-2012. DEB-0841691. Revisionary Syntheses in Systematics (REVSYS): Phylogenetic systematics and the taxonomic revision of sturgeons (Actinopterygii: Acipenseridae), an endangered family of ray-finned fishes. E. J. Hilton. \$494,603. In no-cost extension through August 2013.
- Virginia Sea Grant. 2009-2011. R/CF-09-01, R/CF-10-01. Dynamics of ichthyoplankton ingress from the coastal ocean into Delaware and Chesapeake Bays: comparing spatiotemporal

concordance, transport mechanisms and larval sources. E. J. Hilton & J. E. Olney, co-PIs. \$93,939.

- National Science Foundation. 2004-2007. DEB-0414552. Comparative osteology and phylogenetic systematics of fossil and living sturgeons (Actinopterygii, Acipenseriformes), part 2. E. J. Hilton & L. Grande, co-PIs. \$185,076. Supplement DEB-0946244; \$7,780.
- National Science Foundation. 2002-2005. DEB-0128929. Comparative osteology and phylogenetic systematics of fossil and living sturgeons (Actinopterygii, Acipenseriformes). E. J. Hilton, PI; L. Grande & W. E. Bemis, co-PIs. \$143,107.
- National Science Foundation. 2000-2002. DEB-0073066. Doctoral Dissertation Improvement Grant. *Anatomy and systematics of basal teleost fishes, with special reference to the genus* Hiodon (*Teleostei, Osteoglossomorpha*). \$7,500.
- Major grants and fellowships received by graduate students for which I provided significant input on the proposals (small student travel and research grants for which I provided comments and editorial reviews are not listed):
- Explorer's Club Explorers Club OceanX Grant. 2020. Andrew D. Corso. *Investigate and Discover (I.D.) Antarctic Larval Fishes.* \$4,299.
- Scientific Committee on Antarctic Research. 2019. Andrew Corso. A larval fish bycatch guide for the Antarctic krill fishery. \$4,500.
- Smithsonian Institution Predoctoral Fellowship. 2016. Adela Roa-Varón. Funded a one-year (2016-2017) fellowship at the Smithsonian Institution; in collaboration with Dr. Carole Baldwin and Dr. Guillermo Ortí.
- National Science Foundation. 2016-2018. DEB-1601433. Doctoral Dissertation Improvement Grant: Integrative Taxonomy and Species Delimitation of Hakes (Merluccius, Merlucciidae), an Important Group for Fisheries Conservation. E.J. Hilton, PI (DDIG for Adela Roa-Varón). \$18,685.
- Virginia Sea Grant. 2015-2016. NA14OAR4170093. Community dynamics of larval fishes in the York River of Virginia and the Chesapeake Bay. C. Marin Martinez, PI, E.J. Hilton, co-PI. \$40,000 (plus \$23,173 match).
- National Science Foundation. 2015. East Asia and Pacific Summer Institute. Adela Roa-Varon; funded a summer research experience in the lab of Dr. Chenhong Li, Shanghai Ocean University, China.
- National Science Foundation. 2013. East Asia and Pacific Summer Institute. Katie May Laumann; funded a summer research experience in the lab of Dr. Masaki Miya, Chiba, Japan.
- National Science Foundation. 2009. East Asia and Pacific Summer Institute. Jennifer Martin; funded a summer research visit to the Australian Museum, Sydney and other collections in Australia, sponsored by Dr. Jeffery Leis.

#### All grants and Faculty Research Assignments received from William & Mary

Anti-Racist Pedagogy in STEM Classrooms, Andrew W. Mellon Foundation Grant to William & Mary. November 2021, in support of a workshop led by Dr. Bryan Dewsbury (FIU) to take

place for VIMS/ W&M Arts &. Sciences, March 29-30, 2022. \$7000 (including \$500 match from VIMS and \$500 match from W&M Arts & Sciences).

Faculty Research Leave, June 25, 2022 – December 24, 2022.

Faculty Research Leave, September 1, 2013 - March 1, 2014.

Reeves Center Faculty International Travel Grant. February, 2009. \$500.

# RESEARCH

# Refereed publications in periodicals, chapters in books, law review articles and conference proceedings (\*graduate student author; \*\*undergraduate student author)

## Papers accepted pending revision

# Papers in press

- 103. Waldman, J., D. DeVries, D. Bloom, E. J. Hilton, & W. E. Bemis. In press. Clupeidae Herrings and Shad. North American Freshwater Fishes: Evolution, Ecology, and Behavior, Volume 3. B. Burr & M. Warren (eds.). Johns Hopkins University Press. [anticipated publication 2023].
- 102. \*Vaz, D.F.B. & **E.J. Hilton.** Skeletal ontogeny of *Porichthys notatus* (Batrachoidiformes). *Journal of Anatomy.* 68 text pages, 1 appendix, 26 figures. Proofs returned.

# Papers published and available online (e.g., Early View)

- 101. \*Corso, A.D., J.R. McDowell, E.E. Biesack, S.C. Muffelman, & E.J. Hilton. 2022. Larval stages of the Antarctic Dragonfish *Akarotaxis nudiceps* (Waite, 1916), with comments on the larvae of the morphologically similar species *Prionodraco evansii* Regan 1914 (Notothenioidei: Bathydraconidae). *Journal of Fish Biology*; pages 1-8. doi.org/10.1111/jfb.15267
- 100. Hilton, E.J., & L. Grande. 2022. Late Cretaceous sturgeons (Acipenseridae) from North America, with two new species from the Tanis site in the Hell Creek Formation of North Dakota. *Journal of Paleontology*; pages 1-20. doi: 10.1017/jpa.2022.81

# Papers published and in print or final version on-line

- 99. Hilton, E. J. 2022. Origin and diversity of early teleostean fishes. Pages 1-17 in *Coastal Fishes of the Western Indian Ocean. Volume 2.* P. C. Heemstra, E. Heemstra, D. A. Ebert, W. Holleman, & J. E. Randall (eds.). South African Institute for Aquatic Biodiversity, Makhandra.
- 98. McGrath, P.E., B.E Watkins, A Magee, & E.J Hilton. 2022. Patterns of hatchery-produced returns of American Shad, *Alosa sapidissima*, in the James River, Virginia. *North American Journal of Fisheries Management* 42: 906–914.
- 97. Mundy, B. & E.J. Hilton. 2022. H. Geoffrey Moser. Larval fishes: Taxonomy, distribution, and fisheries biology. *Ichthyology & Herpetology* 110: 161-173.

- 96. \*Corso, A.D., D.K. Steinberg, S.E. Stammerjohn, & E.J. Hilton. 2022. Climate drives long-term dynamics in Antarctic Silverfish along the Antarctic Peninsula. *Communications Biology* 5, 104 (2022). https://doi.org/10.1038/s42003-022-03042-3.
- 95. Hilton, E.J., C.B. Dillman, M. Paraschiv, & R. Suciu. 2022. Cranial morphology of the Stellate Sturgeon, *Acipenser stellatus* Pallas 1771 (Acipenseriformes, Acipenseridae), with notes on the skulls of other sturgeons. *Acta Zoologica (Stockholm)* 103(1): 57–77. [cover article].
- 94. Hilton, E.J., & L. Grande. 2021. Superorder Chondrostei Muller 1845 (= Podopterygia Cope 1887). Pages 236-256 in *Handbook of Paleoichthyology*. H.-P. Schultze (ed.). Verlag Friedrich Pfeil.
- 93. **Hilton, E.J.,** O. Kovalchuk, & N. Podoplelova. 2021. Sturgeons (Acipenseridae) from the Miocene of Ukraine, with a discussion of materials associated with Widhalm's (1886) nomen nudum, †*Acipenser eohuso. Zootaxa*. 5057 (3): 385-401.
- 92. Hilton, E.J., A.M. Bauer, K.E. Bemis, M. H. Sabaj, D. Smith, & G.J. Watkins-Colwell. 2021. A common love of science: The 100<sup>th</sup> Meeting of the American Society of Ichthyologists and Herpetologists. *Ichthyology and Herpetology* 2021: 916-924.
- 91. \*Martin, J. & E. J. Hilton. 2021. A taxonomic review of the family Trachipteridae (Lampridiformes), with an emphasis on taxa distributed in the Western Pacific Ocean. *Zootaxa* 5039 (3): 301–351.
- 90. Hunt, E.P., K.W. Conway, K. Hamilton, E.J. Hilton, K. Piller, J.J. Wright, & D.S. Portnoy. 2021. Molecular Phylogenetics of the Chub Suckers (Teleostei: Catostomidae: *Erimyzon*) inferred from nuclear and mitochondrial loci. *Ichthyology & Herpetology* 109: 626-635.
- 89. Hilton, E.J., G.J. Watkins-Colwell, & S.K. Huber. 2021. The expanding role of natural history collections. *Ichthyology & Herpetology* 109: 379–391.
- 88. \*Roa-Varón, A., R. Dikow, G. Carnevale, C. Baldwin, L. Tornabene, C. Li, & E. J. Hilton. 2021. Confronting sources of systematic error to resolve historically contentious relationships: a case study using gadiform fishes (Teleostei, Paracanthopterygii, Gadiformes. *Systematic Biology* 70: 739–755
- Hilton, E.J., L. Grande, & J. Fan. 2021. Redescription of *†Yanosteus longidorsalis* Jin et al. 1995 (Chondrostei: Acipenseriformes: *†Peipiaosteidae*) from the Early Cretaceous of China. *Journal of Paleontology* 95:170-183.
- Hilton, E.J., & P.E. McGrath. 2021. It's raining sturgeons: a likely occurrence of avian predation or scavenging of Atlantic Sturgeon (*Acipenser oxyrinchus* Mitchell 1815). *Banisteria*. 55: N7-12.
- 85. **Hilton, E.J.,** P. Konstantinidis, & A. Williston. 2021. Osteology of *Parabrotula plagiophthalmus* (Ophidiiformes, Bythitidae). *Breviora* 529(1): 1-18.
- 84. Hays, G. C., J. D.R. Houghton, T. M. Thys, [*et al.* including E.J. Hilton]. 2021. Unresolved questions about Ocean Sunfishes, Molidae: a family comprising some of the world's largest teleosts. Pages 280–296 in *The Ocean Sunfishes: Evolution, Biology and Conservation*. T.M. Thys, G.C. Hays and J.D.R. Houghton, editors. CRC Press. Boca Raton.

- 83. \*Bemis, K.E., J.C. Tyler, E.J. Hilton & W.E. Bemis. 2021. Overview of the anatomy of Ocean Sunfishes (Tetraodontiformes: Tetraodontoidea: Molidae). Pages 55-71 in *The Ocean Sunfishes: Evolution, Biology and Conservation* T. Thys, G. Hays & J. Houghton, editors. CRC Press, Boca Raton.
- 82. Bauer, A.M., & E.J. Hilton. 2020. Obituary: Joseph C. Mitchell (1948–2019), Master Naturalist. *Bibliotheca Herpetologica* 14: 12-14.
- 81. \*Rizzato, P.P., A. Pospíšilova, E.J. Hilton, & F.A. Bockmann. 2020. Development and homology of bones associated with lateral-line canals in the Senegal Bichir, *Polypterus senegalus* (Cladistii: Polypteriformes), with a discussion about the interrelationships between lateral-line canals and bone formation in the skull of fishes. *Journal of Anatomy* 237: 439-467.
- 80. \*Hoey, J., F. J. Fodrie, Q. Walker, E.J. Hilton, T. Kellison, T.E. Targett, C. Taylor, K.W. Able, & M.L. Pinsky. 2020. Extensive larval dispersal in summer flounder across space and through time using multiple natural tags. *Molecular Ecology* 29:1421-1435.
- 79. \*Vaz, D.F.B., & E.J. Hilton. 2020. The caudal skeleton of Batrachoidiformes (Percomorphacea: Teleostei): A study of morphological diversity, intraspecific variation and phylogenetic inferences. *Zoological Journal of the Linnean Society* 189: 228-286.
- Hilton, E.J., A.M. Bauer, K. Buhlmann, & C.K. Dodd, Jr. 2020. Joseph C. Mitchell (1948–2019): Herpetologist and natural historian of the Old Dominion. [Obituary]. *Copeia* 108: 188-194.
- 77. **Hilton, E.J.,** and J. Carpenter. 2020. Bony-tongue fishes (Teleostei: Osteoglossomorpha) from the Eocene Nanjemoy Formation, Virginia. *Northeastern Naturalist* 27: 25-34.
- 76. **Hilton, E.J.,** D.E. Stevenson, & A.C. Matarese. 2019. Osteology of *Ronquilus jordani* (Zoarcoidei: Bathymasteridae), with a discussion of the developmental osteology and systematics of bathymasterid fishes. *Acta Zoologica* 100: 389-407.
- 75. Hilton, E.J., P. Warth, & P. Konstantinidis. 2019. The morphology, development, and evolution of the head of fishes: foundational studies for a renaissance of comparative morphology. *Acta Zoologica*. 100(3): 221-231. Simultaneously published online as an introductory paper for a virtual issue of *Acta Zoologica*, which electronically brings together 26 papers from the past 100 years of the journal. Available at: https://onlinelibrary.wiley.com/topic/vi-categories-14636395/virtual-issues/14636395
- 74. \*Keefe, R., E.J. Hilton, M.F. Thome de Souza, C. Cox Fernandes. 2019. Cranial morphology and osteology of the sexually dimorphic electric fish, *Compsaraia samueli* (Apteronotidae, Gymnotiformes). *Zootaxa* 4555 (1): 101–112.
- 73. \*Bemis, K.E., S.M. Burke, C.A. St. John, E.J., Hilton, & W.E. Bemis. 2019. Tooth development and replacement in the Atlantic Cutlassfish, *Trichiurus lepturus*, with comparisons to other Scombroidei. *Journal of Morphology*. 280: 78-94. [cover article]
- 72. Hilton, E.J., & S. Lavoué. 2018. Review of the systematic biology of fossil and living bony-tongue fishes, Osteoglossomorpha. *Neotropical Ichthyology*. e180031; 1-35.
- 71. Nichols, J.T. (Introduction by Smith, D.G. & E.J. Hilton). 2018. What is a naturalist, anyway? *Copeia* 106: 199-202.

- 70. \*Warth, P., E.J. Hilton, B. Neumann\*, L. Olsson & P. Konstantinidis. 2018. Development of the muscles associated with the mandibular and hyoid arches in the Siberian sturgeon, *Acipenser baerii. Journal of Morphology* 279: 163–175.
- 69. Hilton, E.J. & C. Cox Fernandes. 2017. Identity of "Apteronotus" bonapartii (Castelnau, 1855), a sexually dimorphic South American knifefish from the Amazon, with notes on its cranial osteology and on the taxonomic status of "Apteronotus" apurensis Fernández-Yépez, 1968 (Gymnotiformes, Apteronotidae). Proceedings of the Academy of Natural Sciences of Philadelphia. 165: 91-103.
- Kolvachuk, O.M., & E.J. Hilton. 2017. Neogene sturgeon (Acipenseriformes, Acipenseridae) remains from southeastern Europe. *Journal of Vertebrate Paleontology* e1362644 (7 pages).
- 67. \*Deary, A.L., R.J. Latour, & E.J. Hilton. 2017. Niche partitioning in early life history stage, estuarine-dependent fishes (Sciaenidae). *Estuaries and Coasts.* 40: 1757–1770.
- 66. \*Loose, E.L., **E.J. Hilton**, & J.E. Graves. 2017. Comparative scale morphology of roundscale spearfish (*Tetrapturus georgii*) and white marlin (*Kajikia albida*). *Journal of Fish Biology* 90: 1548-1569.
- 65. \*Deary, A.L. & **E.J. Hilton**. 2017. Influence of cladogenesis on feeding structures in early life history stage Drums (Sciaenidae) from the Chesapeake Bay. *Zoology* 120: 53-61.
- 64. \*Warth, P., P. Konstantinidis, B. Naumann\*, L. Olsson, & E.J. Hilton. 2017. Description and comparison of cranial development of Siberian sturgeon (*Acipenser baerii*) and Russian sturgeon (*Acipenser gueldenstaedtii*). *Journal of Morphology*. 278:418-442.
- 63. **Hilton, E. J.,** B. Kynard, M. Balazik, A. Horodysky, & C. B. Dillman. 2016. Review of the biology, fisheries, and conservation status of the Atlantic sturgeon, *Acipenser oxyrinchus oxyrinchus* Mitchill, 1815. *Journal of Applied Ichthyology* 32 (supplement 1): 30-66.
- Kynard, B., T. King, S. Bolden, M. Kieffer, M. Collins, D. Peterson, E. J. Hilton, M. Litvak, M. T. Kinnison, & H. Brundage. 2016. Life history and status of shortnose sturgeon (*Acipenser brevirostrum*). Journal of Applied Ichthyology 32 (supplement 1): 208-248.
- 61. **Hilton, E.J.,** & M.L. Crump. 2016. The American Society of Ichthyologists and Herpetologists at 100: Setting the stage for the next hundred years. *Copeia* 104:952-964.
- 60. \*McGrath, P. E., E. J. Hilton, & J. A. Musick. 2016. Population demographics of longnose gar (*Lepisosteus osseus*), in the tidal tributaries of Chesapeake Bay. *Copeia* 103: 738-745.
- 59. Hilton, E.J., C.B. Dillman, T. Zhang, L. Zhang, P. Zhuang. 2016. The skull of the Chinese sturgeon, *Acipenser sinensis* (Acipenseridae). *Acta Zoologica* 97: 419-432.
- 58. **\*\***Sweetser, P.W., & **E. J. Hilton**. 2016. Osteology of the Crescent Gunnel, *Pholis laeta* and the systematics of the family Pholidae (Cottiformes, Zoarcoidei). *Journal of Fish Biology* 89: 1666-1691.
- 57. \*Deary, A.L., R. Brill, B. Metscher, & E.J. Hilton. 2016. Shifts of sensory modality in early life history stage estuarine fishes (Sciaenidae) from the Chesapeake Bay using micro-computed tomography. *Environmental Biology of Fishes* 99: 361-375.

- 56. Konstantinidis, P., E.J. Hilton, & A. C. Matarese. 2016. New records of larval stages of the eel cod genus *Muraenolepis* Günther 1880 (Gadiformes: Muraenolepididae) from the Western Antarctic Peninsula. *Journal of Fish Biology* 89: 1494–1500.
- 55. Hilton, E.J. 2016. Honorary Foreign Members of the American Society of Ichthyologists and Herpetologists. *Copeia* 104: 286-292.
- 54. \*Clardy, T.R., & E. J. Hilton. 2016. Osteology of the prickleback genus *Xiphister* (Cottiformes, Zoarcoidei: Stichaeidae). *Acta Zoologica* 97:211–231.
- 53. \*Deary, A.L., & E.J. Hilton. 2016. Comparative ontogeny of the feeding apparatus of drums (Perciformes: Sciaenidae) from the Chesapeake Bay. *Journal of Morphology* 277:183–195.
- 52. Ribeiro, F. M., **E. J. Hilton**, & R. Carnegie. 2016. High prevalence and potential impacts of caligid ectoparasites on larval Atlantic croaker (*Micropogonias undulatus*) in the Chesapeake Bay. *Estuaries and Coasts* 39: 583-588.
- 51. Konstantinidis, P., P. Warth, B. Naumann, L. Olsson, B. D. Metscher, & E. J. Hilton. 2015. Development of the musculature associated with the mandibular and hyoid arches in the longnose gar, *Lepisosteus osseus* (Ginglymodi, Lepisosteiformes). *Copeia* 103:920-932.
- 50. **Hilton, E. J.,** N. K. Schnell, & P. Konstantinidis. 2015. When tradition meets technology: systematic morphology of fishes in the early 21st century. *Copeia* 103: 858-873.
- 49. \*Clardy, T.R., E.J. Hilton, & W.K. Vogelbein. 2015. Morphology and ontogeny of multiple lateral line canals in the prickleback genus *Xiphister* (Cottiformes: Zoarcoidei: Stichaeidae). *Journal of Morphology* 276: 1218-1229.
- Ribeiro, F., \*E. Hale, \*T. R. Clardy, \*A. L. Deary, E. J. Hilton, T. E. Targett, & J. E. Olney. 2015. Composition and temporal patterns of larval fish ingress in Chesapeake and Delaware Bays. *Marine Ecology Progress Series* 527:167-180.
- Dillman, C. B., & E. J. Hilton. 2015. Anatomy and development of the pectoral girdle, fin, and fin spine of sturgeons (Actinopterygii: Acipenseridae). *Journal of Morphology* 276:241– 260.
- 46. Schnell, N. K., & E. J. Hilton. 2015. Ontogeny and osteology of the wrymouths, Cryptacanthodidae (Zoarcoidei), with discussion of their systematic position. *Journal of Morphology* 276: 185-208. [cover article]
- 45. **Hilton, E. J.,** J. C. Mitchell, & D. G. Smith. 2014. Edward Drinker Cope (1840-1897): naturalist, namesake, icon. *Copiea* 2014: 747-761.
- Hilton, E.J., & G. R. Smith. 2014. The American Society of Ichthyologists and Herpetologists as an advocacy group: The Green River poisoning of 1962. *Copeia* 2014: 577-591.
- 43 Dillman, C.B., P. Zhuang, T. Zhang, L. Zhang, N. Mugue, & E. J. Hilton. 2014. Forensic investigations into a GenBank anomaly: endangered taxa and the importance of voucher specimens in molecular studies. *Journal of Applied Ichthyology* 30: 1300-1309.
- 42. \*\*Lusk, S. C., B. E. Watkins, A. Rhea, C. B. Dillman, & E. J. Hilton. 2014. Occurrence of juvenile Southern flounder (*Paralichthys lethostigma*), in the Chesapeake Bay. *Southeastern Naturalist* 13: 515-522.

- Hilton, E.J., & D. G. Smith. 2014. The second 50 years of the American Society of Ichthyologists and Herpetologists: Personal reflections on the society by Bruce B. Collette. *Copeia* 2014: 372-380.
- Hilton, E. J., W. E. Bemis, & L. Grande. 2014. Hiodontidae Mooneyes. Pages 299-312 in North American Freshwater Fishes: Evolution, Ecology, and Behavior, Volume 1. B. Burr & M. Warren (eds.). Johns Hopkins University Press.
- Hilton, E. J., P. Konstantinidis, N. K. Schnell, & C. B. Dillman. 2014. Identity of a unique cartilage in the buccal cavity of gars (Neopterygii: Lepisosteiformes: Lepisosteidae). *Copeia* 2014: 50-55. [Awarded Best Paper in Ichthyology, Copeia, 2014]
- \*McGrath, P. E., E. J. Hilton, & J. A. Musick. 2013. Temporal and spatial effects on the diet of an estuarine piscivore, longnose gar (*Lepisosteus osseus*). *Estuaries and Coasts* 36: 1292-1303.
- 37. **Hilton, E. J.**, & D. Stevenson. 2013. Osteology of the Prowfish, *Zaprora silenus* (Cottiformes: Zoarcoidei: Zaproridae). *Journal of Morphology* 274: 1143-1163.
- 36. \*McGrath, P. E., E. J. Hilton, & J. A. Musick. 2012. Seasonal distributions and movements of longnose gar (*Lepisosteus osseus*) within the York River System, Virginia. *Southeastern Naturalist* 11: 375–386.
- 35. Latour, R. J., E. J. Hilton, \*P. D. Lynch, T. D. Tuckey, B. E. Watkins, & J. E. Olney. 2012. Evaluating the current status of American shad (*Alosa sapidissima*) stocks in Virginia. *Marine and Coastal Fisheries: Dynamics, Management, and Ecosystem Science* 4: 302-311.
- 34. Hilton, E. J. & W. E. Bemis. 2012. External morphology of shortnose sturgeon, Acipenser brevirostrum (Acipenseriformes: Acipenseridae), from the Connecticut River, with notes on variation as a natural phenomenon. Pages 243-265 in Life History and Behaviour of Connecticut River Shortnose and Other Sturgeons. B. Kynard, P. Bronzi, & H. Rosenthal (eds.). Special Publication 4, World Society of Sturgeon Conservation.
- 33. \*McGrath, P. & E. J. Hilton. 2012. Sexual dimorphism in longnose gar (*Lepisosteus osseus*) from tidal rivers of Virginia. *Journal of Fish Biology* 80: 335–345.
- 32. **Hilton, E. J.,** G. D. Johnson, E. D. Houde, & R. J. Latour. 2011. John Edward Olney, Sr. [Obituary]. *Copeia* 2011: 332-341.
- Dillman, C. B., & E. J. Hilton. 2011. The cause and effect of polarization: thoughts on the "morphological vs. molecular debate" in systematics, with examples from the study of sturgeons (Actinopterygii: Acipenseridae). *Zootaxa* 2945: 79-117.
- 30. Hilton, E. J. 2011. Bony fish skeleton. Pages 434-448 in *Encyclopedia of Fish Physiology: From Genome to Environment, volume 1*, Farrell A. P. (ed.). Academic Press, San Diego.
- 29. Hilton, E. J., L. Grande, & W. E. Bemis. 2011. Skeletal anatomy of the shortnose sturgeon, *Acipenser brevirostrum* Lesueur 1818, and the systematics of sturgeons (Acipenseriformes, Acipenseridae). *Fieldiana (Life and Earth Sciences)* 3: 1-168.
- Damon-Randall, K., R. Bohl, S. Bolden, D. Fox, C. Hager, B. Hickson, E. Hilton, J. Mohler, E. Robbins, T. Savoy, & A. Spells. 2010. Atlantic sturgeon research techniques. NOAA Technical Memorandum NMFS-NE-215: 1-64.

- 27. Dahdul, W. M., J. P. Balhoff, J. Engeman, T. Grande, E. J. Hilton, C. Kothari, H. Lapp, J. G. Lundberg, P. E. Midford, T. J. Vision, M. Westerfield, & P. Mabee. 2010. Evolutionary characters, phenotypes and ontologies: curating data from the systematic biology literature. *PLoS ONE* 5(5): e10708. doi:10.1371/journal.pone.0010708
- 26. Forey, P.L. & E.J. Hilton. 2010. Two new Tertiary osteoglossid fishes (Teleostei: Osteoglossomorpha) with notes on the history of the family. Pages 215-246 in Morphology, Phylogeny, and Paleobiogeography of Fossil Fishes. D.K. Elliott, J.G. Maisey, X. Yu, & D. Miao (eds.). Verlag Dr. Friedrich Pfeil, München, Germany.
- 25. Hilton, E. J., G. D. Johnson, & W. F. Smith-Vaniz. 2010. Osteology and systematics of *Parastromateus niger* (Perciformes: Carangidae), with comments on the carangid dorsal gillarch skeleton. *Copeia* 2010:312-333. [cover article]
- 24. **Hilton, E. J.** & R. Britz. 2010. The caudal skeleton of osteoglossomorph fishes, revisited: comparisons, homologies, and characters. Pages 219-237 in *Origin and phylogenetic interrelationships of teleosts.* J. S. Nelson, H.-P. Schultze & M. V. H. Wilson (eds.). Verlag Dr. Friedrich Pfeil, München, Germany.
- 23. **Hilton, E. J.** 2009. Osteology of the Graveldiver, *Scytalina cerdale* (Perciformes: Zoarcoidei: Scytalinidae). *Journal of Morphology* 270:1475–1491.
- 22. Hilton, E. J. & P. L. Forey. 2009. Redescription of *†Chondrosteus acipenseroides* Egerton, 1858 (Acipenseriformes, Chondrosteidae) from the Lower Lias of Lyme Regis (Dorset, England), with comments on the early evolution of sturgeons and paddlefishes. *Journal of Systematic Palaeontology* 7: 427-453.
- Grande, L. & E. J. Hilton. 2009. A replacement name for *†Psammorhynchus* Grande & Hilton 2006 (Actinopterygii, Acipenseriformes, Acipenseridae). *Journal of Paleontology* 83: 317-318.
- 20. Hilton, E. J. & L. Grande. 2008. Fossil mooneyes (Teleostei, Hiodontiformes, Hiodontidae) from the Eocene of western North America, with a reassessment of their taxonomy. Pages 221-251 in *Fishes and the Break-Up of Pangea*. Cavin, L., A. Longbottom, & M. Richter (eds.). Geological Society of London, Special Publication 295.
- Mabee, P., G. Arratia, M. Coburn, M. Haendel, E. J. Hilton, J. G. Lundberg, R. L. Mayden, N. Rios & M. Westerfield. 2007. Connecting evolutionary morphology to genomics using ontologies: a case study from cypriniforms including zebrafish. *Journal of Experimental Biology: Molecular and Developmental Evolution* 308B: 655-668.
- 18. Hilton, E. J., C. Cox Fernandes, J. P. Sullivan, J. G. Lundberg, & R. Campos-da-Paz. 2007. Redescription of *Orthosternarchus tamandua* (Boulenger, 1898) (Gymnotiformes, Apteronotidae), with a review of its ecology, electric organ discharges, external morphology, osteology, and phylogenetic affinities. *Proceedings of the Academy of Natural Sciences of Philadelphia* 156:1-25.
- 17. Hilton, E. J., R. Britz, G. D. Johnson, & P. L. Forey. 2007. Clarification of the occipitovertebral region of *Arapaima gigas* (Osteoglossomorpha: Osteoglossidae) through developmental osteology. *Copeia* 2007: 218-224.

- 16. **Hilton, E. J.** & G. D. Johnson. 2007. When two equals three: developmental osteology and homology of the caudal skeleton in carangid fishes (Perciformes: Carangidae). *Evolution and Development* 9: 178-189.
- 15. Hilton, E. J. & C. Cox Fernandes. 2006. Sexual dimorphism in *Apteronotus bonapartii* (Gymnotiformes: Apteronotidae). *Copeia* 2006: 826-833.
- Grande, L. & E. J. Hilton. 2006. An exquisitely preserved skeleton representing a primitive sturgeon from the Upper Cretaceous Judith River Formation of Montana (Acipenseriformes: Acipenseridae: n. gen. and sp.). *Journal of Paleontology, Memoir 65*, supplement to 80(4): 1-39.
- Hilton, E. J. & L. Grande. 2006. Review of the fossil record of sturgeons, family Acipenseridae (Actinopterygii: Acipenseriformes), from North America. *Journal of Paleontology* 80: 672-683.
- 12. Hilton, E. J. & W. E. Bemis. 2005. Grouped tooth replacement in the oral jaws of the tripletail, *Lobotes surinamensis* (Perciformes, Lobotidae), with a discussion of its proposed relationship to *Datnioides. Copeia* 2005: 664-671.
- 11. **Hilton, E. J.** & N. J. Kley. 2005. Osteology of the quillfish, *Ptilichthys goodei* (Perciformes: Zoarcoidei: Ptilichthyidae). *Copeia* 2005: 571-584.
- Hilton, E. J. & P. L. Forey. 2005. Contributions of Walter G. Ridewood to systematic comparative anatomy, especially of the osteology of "lower" vertebrates. *Journal of Natural History* 39: 641-655.
- 9. Hilton, E. J. 2005. Observations on the skulls of sturgeons (Acipenseridae): shared similarities of *Pseudoscaphirhynchus kaufmanni* and juvenile specimens of *Acipenser stellatus*. *Environmental Biology of Fishes* 72: 135–144.
- Hilton, E. J., L. Grande, & W. E. Bemis. 2004. Morphology of †*Coccolepis bucklandi* Agassiz, 1843 (Actinopterygii) from the Solnhofen lithographic limestone deposits (Upper Jurassic, Germany). Pages 209–238 in *Mesozoic Fishes 3 – Systematics, Paleoenvironments and Biodiversity.* G. Arratia & A. Tintori (eds.). Verlag Dr. Friedrich Pfeil, München, Germany.
- Hilton, E. J. 2004. The caudal skeleton of Acipenseriformes (Actinopterygii: Chondrostei): recent advances and new observations. Pages 599–617 in *Recent Advances in the Origin and Early Radiation of Vertebrates*. G. Arratia, M. V. H. Wilson, & R. Cloutier (eds.). Verlag Dr. Friedrich Pfeil, München, Germany.
- Bemis, W. E., E. J. Hilton, B. Brown, R. Arrindell, A. M. Richmond, C. Little, L. Grande, P. L. Forey, & G. J. Nelson. 2004. Methods for preparing dry, partially articulated skeletons of osteichthyans, with notes on making Ridewood dissections. *Copeia* 2004: 603–609.
- 5. Hilton, E. J. 2003. Comparative osteology and phylogenetic systematics of fossil and living bony-tongue fishes (Actinopterygii, Teleostei, Osteoglossomorpha). *Zoological Journal of the Linnean Society* 137: 1–100.
- 4. Hilton, E. J. 2002. Osteology of the extant North American fishes of the genus *Hiodon* Lesueur 1818 (Teleostei: Osteoglossomorpha: Hiodontiformes). *Fieldiana (Zoology), new series* 100: 1–142.

- 3. Hilton, E. J. 2002. Observations on the rostral canal bones of two species of *Acipenser* (Actinopterygii, Acipenseriformes). *Copeia* 2002: 213–219.
- 2. Hilton, E. J. 2001. Tongue-bite apparatus of osteoglossomorph fishes: variation of a character complex. *Copeia* 2001: 372–382.
- Hilton, E. J. & W. E. Bemis. 1999. Skeletal variation in shortnose sturgeon (*Acipenser brevirostrum*) from the Connecticut River: implications for comparative osteological studies of fossil and living fishes. Pages 69–94 in *Mesozoic Fishes 2 Systematics and Fossil Record*. G. Arratia & H.-P. Schultze (eds.). Verlag Dr. Friedrich Pfeil, München, Germany.

#### **Edited volumes**

- Ho, H.-C., K. Koeda, & E.J. Hilton. 2019. Study on the fish taxonomy and diversity of Taiwan. Zootaxa 4702(1): 1–229.
- Ho, H.-C, W. Holleman, E.J. Hilton, D.G. Smith, & J. McCosker. 2018. Systematics and biodiversity of eels (orders Anguilliformes and Saccopharyngiformes) of Taiwan (II). Zootaxa 4454(1): 1–237.

#### **Reviews of books**

- Hilton, E.J. 2021. [BOOK REVIEW] *The Lost Species: Great Expeditions in the Collections of Natural History Museums* by Christopher Kemp. *Bibliotheca Herpetologica* 15(4):29–30.
- Bemis, K.E., and E.J. Hilton. 2020. A Bridge Between Worlds: Review of Collette and Graves, *Tunas and Billfishes of the World*. Illustrated by Val Kells. *Environmental Biology of Fishes*. doi.org/10.1007/s10641-019-00942-y (3 pages).
- Hilton, E.J. 2019. Review of *Marine Fishes of the Arctic Region* (Mecklenburg et al. 2018). *Zootaxa* 4577(2): 395-400.
- Hilton, E.J. 2015. [REVIEW OF] Mesozoic Fishes 5 Global Diversity and Evolution. G. Arratia, H.-P. Schultze, & M. V. H. Wilson (eds.). *Journal of Vertebrate Paleontology* 35: e902848 (2 pages).
- Hilton, E. J. 2011. [REVIEW OF] Gonorynchiformes and Ostariophysan Relationships: A Comprehensive Review. T. Grande, F. J. Poyato-Ariza, & R. Diogo (eds.). *Copeia* 2011: 177-180.
- Hilton, E. J. 2002. [REVIEW OF] Mesozoic Fishes: Systematics and Paleoecology (Proceedings of the International Meeting, Eichstätt, 1993), G. Arratia & G. Viohl (eds.). *Copeia* 2002: 539–542.

#### Work submitted or in progress

#### Manuscripts in review (\*graduate student paper):

- \*Marin Martinez, C.M., R.J. Latour, M.C. Fabrizio, E.D. Houde, & E.J. Hilton. Larval fish assemblage dynamics in the York River Estuary, Virginia, U.S.A. Submitted to *NOAA Professional Papers*. 28 text pages, 2 tables, 5 figures.
- Allen, D.M., J.J. Govoni, K.W. Able, J.A. Buckel, E. Hale, **E.J. Hilton**, T. Kellison, T.E. Targett, J.C. Taylor, & H.J. Walsh. Temporal and spatial dynamics of planktonic stages of

Spot (*Leiostomus xanthurus*) in the Western Atlantic: origins, ingress, phenology, and relations to climate change. Submitted to *Estuaries and Coasts*. 45 pages, 6 tables, 9 figures.

Hilton, E.J., M. During, P.E. Ahlberg, & L. Grande. New paddlefishes (Acipenseriformes, Polyodontidae) from the Tanis Site of the Hell Creek Formation (Late Cretaceous, North Dakota, U.S.A.). Submitted to *Journal of Paleontology*. 39 pages, 19 figures.

#### Manuscripts in preparation with near final drafts, available upon request (\*student paper):

- Hilton, E.J. & P. Konstantinidis. Morphology, osteology, and larval development of the Quillfish, *Ptilichthys goodei* (Zoarcoidei: Ptilichthyidae). To be submitted to *The Northwestern Naturalist*. c. 20 text pages, 12 figures.
- Hilton, E.J. & J.M. Martin. Desmodema polystictum (Ogilby 1898) (Actinopterygii, Teleostei, Lampridiformes, Trachipteridae): proposed conservation of the specific name by reversal of precedence with Trachypterus trachyurus Poey 1861. To be submitted to the Bulletin of Zoological Nomenclature. 5 text pages.
- **Hilton, E.J.**, L. Grande, & P.L. Forey. Osteology of the Eocene clupeomorph †*Diplomystus dentatus* (Clupeomorpha, Ellimmichthyiformes), with notes on other members of the genus. To be submitted to *Journal of Systematic Palaeontology*.
- \*Vaz, D.B., **E.J. Hilton**, & A.P. Summers. The intermuscular series of Batrachoidiformes (Teleostei: Percomorphacea), with discussion of the homology of the intermuscular elements of acanthomorph fishes. To be submitted to *Breviora*.
- \*Bemis, K.E., J.C. Tyler, **E.J. Hilton**, & W.E. Bemis. Comparative anatomy and ontogeny of Ocean Sunfishes (Tetraodontiformes: Tetraodontoidea: Molidae). To be submitted to *NOAA Professional Papers*.
- Dillman, C.B. & E.J. Hilton. Can nuclear DNA Sequences provide a new, clear perspective on sturgeon phylogeny? A test case based on the North American River Sturgeons (Acipenseridae: *Scaphirhynchus*). To be submitted to *Ichthyology and Herpetology*.
- \*Parsons, K.T., E.J. Hilton, J.R. McDowell, H.L. Brightman, & R.L. Latour. A new species of butterfly ray, genus *Gymnura* (Myliobatiformes: Gymnuridae), from the western North Atlantic Ocean, with comments on the taxonomy of *G. micrura* (Bloch & Schneider 1801) and *G. lessae* (Yokota & Carvalho, 2017). To be submitted to *Zootaxa*.
- **Hilton, E.J.** It's all about fishing: Robert Ellis Jenkins and his life among the suckers and freshwater fishes of Virginia. To be submitted to *Ichthyology and Herpetology*.

#### Notable unrefereed publications (Editor Reviewed)

- Hilton, E.J. & B. Mundy. 2021. H. Geoffrey Moser (1938-2021) [Obituary]. *Stages (Newsletter of the Early Life History Section of the American Fisheries Society)* 42(3): 22-26 [Editor-Only Review]
- Prathapan, K. D., R. Pethiyagoda, K. S. Bawa, P. H. Raven, P. Dharma Rajan and 172 cosignatories from 35 countries (E.J. Hilton included). 2018. The Convention on Biological Diversity and its Nagoya Protocol is crippling biodiversity research. *Science* 360 (6396), 1405-1406. June 29, 2018.

- Richter, M., D. Vane-Wright, Z. Johanson, B. G. Gardiner, H.-P. Schultze, J. Maisey, P. Janvier, J. Hooker, L. Cavin, D. Williams, B. Rosen, J. Darrell, P. Barrett, J. Long, E. Bernard, S. Chapman, A. Lopez-Arbarello, A. Longbottom, E.J. Hilton, & P. Brito. 2016. Passing of Peter Lawrence Forey. *Society of Vertebrate Paleontology Newsletter*, Spring 2016: 7–10. Bethesda, MD.
- Hilton, E. J., S. Huber, & P. Konstantinidis. 2016. Larval Fish Workshop at the Virginia Institute of Marine Science's Nunnally Ichthyology Collection. *Stages (Newsletter of the Early Life History Section of the American Fisheries Society)* 37 (1): 3-4, 6.

#### Significant research reports from grant or contract work

- Hilton, E. J., P.E. McGrath, B. Watkins, & A. Magee. 2022. Monitoring relative abundance of American shad and river herring in Virginia's rivers. 2021 Annual report to the Virginia Marine Resources Commission, Contract No. F-116-R-24, 21 January 2022. 111 pp.
- Hilton, E. J., P.E. McGrath, B. Watkins, & A. Magee. 2021. *Monitoring relative abundance of American shad and river herring in Virginia's rivers*. 2020 Annual report to the Virginia Marine Resources Commission, Contract No. F-116-R-23, 21 January 2021. 112 pp.
- Hilton, E. J., R. Latour, P.E. McGrath, B. Watkins, & A. Magee. 2020. Monitoring relative abundance of American shad and river herring in Virginia's rivers. 2019 Annual report to the Virginia Marine Resources Commission, Contract No. F-116-R-22, 24 January 2020. 108 pp.
- Hilton, E. J., R. Latour, P.E. McGrath, B. Watkins, & A. Magee. 2019. *Monitoring relative abundance of American shad and river herring in Virginia's rivers*. 2018 Annual report to the Virginia Marine Resources Commission, Contract No. F-116-R-21, 15 April 2019. 110 pp.
- Hilton, E. J., R. Latour, P.E. McGrath, B. Watkins, & A. Magee. 2018. Monitoring relative abundance of American shad and river herring in Virginia's rivers. 2017 Annual report to the Virginia Marine Resources Commission, Contract No. F-116-R-20, 15 April 2018.110 pp.
- Hilton, E. J., R. Latour, P.E. McGrath, B. Watkins, & A. Magee. 2017. *Monitoring relative abundance of American shad and river herring in Virginia's rivers*. 2016 Annual report to the Virginia Marine Resources Commission, Contract No. F-116-R-19, 15 April 2017.
- McGrath, P.E. & E.J. Hilton. 2017. *Temperature selectivity and movement patterns of speckled trout*. Report to the Virginia Marine Resources Commission, Marine Recreational Fishing Advisory Board Contract RF-15-16, 1 March 2017.
- Hilton, E. J., R. Latour, P.E. McGrath, B. Watkins, & A. Magee. 2016. *Monitoring relative abundance of American shad and river herring in Virginia's rivers*. 2015 Annual report to the Virginia Marine Resources Commission, Contract No. F-116-R-18, 15 April 2016.
- Hilton, E. J., R. Latour, B. Watkins, & A. Magee. 2015. *Monitoring relative abundance of American shad and river herring in Virginia's rivers*. 2014 Annual report to the Virginia Marine Resources Commission, Contract No. F-116-R-17, 15 April 2015.

- Hilton, E. J., R. Latour, B. Watkins, & A. Rhea. 2014. *Monitoring relative abundance of American shad in Virginia's rivers*. 2013 Annual report to the Virginia Marine Resources Commission, Contract No. F-116-R-16, 15 April 2014.
- Hilton, E. J., R. Latour, B. Watkins, & A. Rhea. 2013. *Monitoring relative abundance of American shad in Virginia's rivers*. 2012 Annual report to the Virginia Marine Resources Commission, Contract No. F-116-R-15, 15 April 2013.
- Hilton, E. J., R. Latour, B. Watkins, & A. Rhea. 2012. *Monitoring relative abundance of American shad in Virginia's rivers*. 2011 Annual report to the Virginia Marine Resources Commission, Contract No. F-116-R-14, 15 April 2012.
- Hilton, E. J., R. Latour, B. Watkins, & A. Rhea. 2011. *Monitoring relative abundance of American shad in Virginia's rivers*. 2010 Annual report to the Virginia Marine Resources Commission, Contract No. F-116-R-13, 15 April 2011.
- Olney, J. E., B. Watkins, & E. J. Hilton. Olney, J. E., B. Watkins, & E. J. Hilton. 2010. Monitoring relative abundance of American shad in Virginia's rivers. 2009 Annual report to the Virginia Marine Resources Commission, Contract No. F-116-R-12, 12 March 2009.

# Other scholarly activity, including papers presented at professional meetings and publications of abstracts

#### **Professional development activities**

Presenting Data & Information Workshop with Edward Tufte, February 2020. Arlington VA

William & Mary Provost Leadership Initiative, 2016

#### **Reports to Atlantic States Marine Fisheries Commission:**

- Hilton, E.J., P.E. McGrath, A. Magee & T. Hoyt. 2021. Assessment of the 2020 Virginia bycatch of American shad and the status of the Virginia stocks. Report to the Atlantic States Marine Fisheries Commission, 1 October 2021.
- Hilton, E.J., A. Weaver, C. Morgeson, & A. Galvan. 2021. Commonwealth of Virginia American Shad Habitat Plan. Report to the Atlantic States Marine Fisheries Commission, 19 October 2021.
- Hilton, E., P.E. McGrath, B. Watkins & A. Magee. 2021. Assessment of the 2020 Virginia bycatch of American shad and the status of the Virginia stocks. Report to the Atlantic States Marine Fisheries Commission, 1 October 2021.
- Hilton, E., P. E. McGrath, B. Watkins, A. Magee, A. Kretsch, J. Ramsey, & L.A. Weaver. 2021. A summary of Virginia's American shad fisheries in 2020 and results of monitoring programs. Annual Compliance Report to the Atlantic States Marine Fisheries Commission, 1 July 2021.
- Hilton, E., P. E. McGrath, B. Watkins, A. Magee, D.A. Hopler, Jr., J. Ramsey, & L.A. Weaver. 2021. A summary of Virginia's river herring fisheries in 2020 and results of monitoring programs. Annual Compliance Report to the Atlantic States Marine Fisheries Commission, 1 July 2021.

- Hilton, E., R. Latour, P.E. McGrath, B. Watkins & A. Magee. 2020. Assessment of the 2019 Virginia by-catch of American shad and the status of the Virginia stocks. Report to the Atlantic States Marine Fisheries Commission, 1 October 2020.
- Hilton, E., P. E. McGrath, B. Watkins, A. Magee, A. Kretsch, J. Ramsey, & L.A. Weaver. 2020. A summary of Virginia's American shad fisheries in 2019 and results of monitoring programs. Annual Compliance Report to the Atlantic States Marine Fisheries Commission, 1 July 2020.
- Hilton, E., P. E. McGrath, B. Watkins, A. Magee, D.A. Hopler, Jr., J. Ramsey, & L.A. Weaver. 2020. A summary of Virginia's river herring fisheries in 2019 and results of monitoring programs. Annual Compliance Report to the Atlantic States Marine Fisheries Commission, 1 July 2020.
- Hilton, E.J. 2019. Status of American Shad Stocks in Virginia. American Shad Stock Assessment Report Materials; Report to the Atlantic States Marine Fisheries Commission, 18 December 2019. 50 pp. Materials incorporated into ASMFC 2020: 225-255: American Shad Benchmark Stock Assessment and Peer Review Report. August 4, 2020. 1188 pp.
- Hilton, E., R. Latour, P.E. McGrath, B. Watkins & A. Magee. 2019. Assessment of the 2018 Virginia by-catch of American shad and the status of the Virginia stocks. Report to the Atlantic States Marine Fisheries Commission, 1 October 2019.
- Hilton, E., P. E. McGrath, B. Watkins, A. Magee, S. Alhale, J. Ramsey, E. M. Brittle, & L.A. Weaver. 2019. A summary of Virginia's American shad fisheries in 2018 and results of monitoring programs. Annual Compliance Report to the Atlantic States Marine Fisheries Commission, 1 July 2019.
- Hilton, E., P. E. McGrath, B. Watkins, A. Magee, J. Ramsey, E. M. Brittle & L.A. Weaver. 2019. A summary of Virginia's river herring fisheries in 2018 and results of monitoring programs. Annual Compliance Report to the Atlantic States Marine Fisheries Commission, 1 July 2019.
- Hilton, E., R. Latour, P.E. McGrath, B. Watkins & A. Magee. 2018. Assessment of the 2018 Virginia by-catch of American shad and the status of the Virginia stocks. Report to the Atlantic States Marine Fisheries Commission, 1 October 2018.
- Hilton, E., P. E. McGrath, B. Watkins, A. Magee, S. Alhale, J. Ramsey, E. M. Brittle, & L.A. Weaver. 2018. A summary of Virginia's American shad fisheries in 2017 and results of monitoring programs. Annual Compliance Report to the Atlantic States Marine Fisheries Commission, 1 July 2018.
- Hilton, E., P. E. McGrath, B. Watkins, A. Magee, J. Ramsey, E. M. Brittle & L.A. Weaver. 2018. A summary of Virginia's river herring fisheries in 2017 and results of monitoring programs. Annual Compliance Report to the Atlantic States Marine Fisheries Commission, 1 July 2018.
- Hilton, E., R. Latour, P.E. McGrath, B. Watkins & A. Magee. 2017. Assessment of the 2017 Virginia by-catch of American shad and the status of the Virginia stocks. Report to the Atlantic States Marine Fisheries Commission, 1 October 2017.
- Hilton, E., P. E. McGrath, B. Watkins, A. Magee, J. Ramsey, E. M. Brittle, & L.A. Weaver. 2017. A summary of Virginia's American shad fisheries in 2016 and results of monitoring

*programs*. Annual Compliance Report to the Atlantic States Marine Fisheries Commission, 1 July 2017.

- Hilton, E., P. E. McGrath, B. Watkins, A. Magee, J. Cimino, & E. M. Brittle. 2017. *A summary* of Virginia's river herring fisheries in 2016 and results of monitoring programs. Annual Compliance Report to the Atlantic States Marine Fisheries Commission, 1 July 2017.
- Hilton, E., R. Latour, P.E. McGrath, B. Watkins & A. Magee. 2016. Assessment of the 2016 Virginia by-catch of American shad and the status of the Virginia stocks. Report to the Atlantic States Marine Fisheries Commission, 1 October 2016.
- Hilton, E., P. E. McGrath, B. Watkins, A. Rhea, J. Ramsey, E. M. Brittle, & L.A. Weaver. 2016. A summary of Virginia's American shad fisheries in 2015 and results of monitoring programs. Annual Compliance Report to the Atlantic States Marine Fisheries Commission, 1 July 2016.
- Hilton, E., P. E. McGrath, B. Watkins, A. Rhea, J. Cimino, & E. M. Brittle. 2016. A summary of Virginia's river herring fisheries in 2015 and results of monitoring programs. Annual Compliance Report to the Atlantic States Marine Fisheries Commission, 1 July 2016.
- Hilton, E., R. Latour, P.E. McGrath, B. Watkins & A. Rhea. 2015. *Assessment of the 2015 Virginia by-catch of American shad and the status of the Virginia stocks*. Report to the Atlantic States Marine Fisheries Commission, 1 October 2015.
- Hilton, E., P. E. McGrath, B. Watkins, A. Rhea, J. Cimino, & E. M. Brittle. 2015. *A summary of Virginia's American shad fisheries in 2014 and results of monitoring programs*. Annual Compliance Report to the Atlantic States Marine Fisheries Commission, 1 July 2015.
- Hilton, E., P. E. McGrath, B. Watkins, A. Rhea, J. Cimino, & E. M. Brittle. 2015. *A summary of Virginia's river herring fisheries in 2014 and results of monitoring programs*. Annual Compliance Report to the Atlantic States Marine Fisheries Commission, 1 July 2015.
- Hilton, E., R. Latour, B. Watkins & A. Rhea. 2014. Assessment of the 2014 Virginia by-catch of American shad and the status of the Virginia stocks. Report to the Atlantic States Marine Fisheries Commission, 1 October 2014.
- Hilton, E., B. Watkins, A. Rhea, A. Ehlen, & E. M. Brittle. 2014. *A summary of Virginia's American shad fisheries in 2013 and results of monitoring programs*. Annual Compliance Report to the Atlantic States Marine Fisheries Commission, 1 July 2014.
- Hilton, E., B. Watkins, A. Rhea, J. Cimino, & E. M. Brittle. 2014. *A summary of Virginia's river herring fisheries in 2013 and results of monitoring programs*. Annual Compliance Report to the Atlantic States Marine Fisheries Commission, 1 July 2014.
- Hilton, E.J., J. Cimino, & A. Weaver. 2014. *Commonwealth of Virginia American Shad Habitat Plan.* Report to the Atlantic States Marine Fisheries Commission, 10 January 2014.
- Hilton, E., R. Latour, B. Watkins & A. Rhea 2013. Assessment of the 2013 Virginia by-catch of American shad and the status of the Virginia stocks. Report to the Atlantic States Marine Fisheries Commission, 27 September 2013.
- Hilton, E., B. Watkins, A. Rhea, J. Cimino, & E. M. Brittle. 2013. *A summary of Virginia's American shad fisheries in 2012 and results of monitoring programs*. Annual Compliance Report to the Atlantic States Marine Fisheries Commission, 1 July 2013.

- Hilton, E., B. Watkins, A. Rhea, J. Cimino, & E. M. Brittle. 2013. *A summary of Virginia's river herring fisheries in 2012 and results of monitoring programs*. Annual Compliance Report to the Atlantic States Marine Fisheries Commission, 1 July 2013.
- Hilton, E., R. Latour, B. Watkins & A. Rhea 2012. Assessment of the 2012 Virginia by-catch of American shad and the status of the Virginia stocks. Report to the Atlantic States Marine Fisheries Commission, 9 October 2012.
- Hilton, E., B. Watkins, A. Rhea, J. Cimino, & E. M. Brittle. 2012. *A summary of Virginia's American shad fisheries in 2011 and results of monitoring programs*. Annual Compliance Report to the Atlantic States Marine Fisheries Commission, 1 July 2012.
- Hilton, E., B. Watkins, A. Rhea, J. Cimino, & E. M. Brittle. 2012. *A summary of Virginia's river herring fisheries in 2011 and results of monitoring programs*. Annual Compliance Report to the Atlantic States Marine Fisheries Commission, 1 July 2012.
- Lee, L., J. E. Olney, B. Watkins, E. J. Hilton, J. Cimino, & A. Weaver. 2012 (updated June 2017 by EJH for stock assessment update). *Status of river herring in Virginia*. In: River Herring Benchmark Stock Assessment. Stock Assessment Report of the Atlantic States Marine Fisheries Commission no 12-02.
- Hilton, E., R. Latour, & B. Watkins. 2011. Assessment of the 2010 Virginia by-catch of American shad and the status of the Virginia stocks. Report to the Atlantic States Marine Fisheries Commission, 4 October 2010.
- Hilton, E., B. Watkins, & J. Cimino. 2011. A summary of Virginia's American shad fisheries in 2010 and results of monitoring and restoration programs. Annual Compliance Report to the Atlantic States Marine Fisheries Commission, 1 July 2011.
- Hilton, E., R. Latour, & B. Watkins. 2010. Assessment of the 2010 Virginia by-catch of American shad and the status of the Virginia stocks. Report to the Atlantic States Marine Fisheries Commission, 1 October 2010.
- Hilton, E., B. Watkins, J. Cimino, & R. O'Reilly. 2010. A summary of Virginia's American shad fisheries in 2009 and results of monitoring and restoration programs. Annual Compliance Report to the Atlantic States Marine Fisheries Commission, 1 July 2010.

#### **Published abstracts (\*\*undergraduate student abstract):**

- Hilton, E.J. 2006. The sister-group of Acipenseriformes: Past problems and potential possibilities. *Journal of Vertebrate Paleontology* 26 (supplement to 3): 76A.
- Hilton, E.J. & P. L. Forey. 2005. Osteology, systematics, and biogeography of fossil and living osteoglossid fishes (Teleostei: Osteoglossomorpha), with a description of new forms and a review of the biogeographic relationships of the clade members. *Journal of Vertebrate Paleontology* 25 (supplement to 3): 70A.
- \*\*Williston, A., A. Whynot, E.J. Hilton, & W. E. Bemis. 2005. Observations on the pattern and microanatomy of platelets and caudal scales of *Acipenser brevirostrum*. Pages 273–274 in *Fourth International Meeting on Mesozoic Fishes – Systematics, Homology, and Nomenclature, Extended Abstracts*. F. J. Poyato-Ariza (ed.). Servicio de Publicaciones de la Universidade Autónoma de Madrid, Madrid, Spain.

- \*\*Whynot, A., A. Williston, E.J. Hilton, & W. E. Bemis. 2005. Ossifications associated with the trunk lateral line canal of *Acipenser brevirostrum*, with comparisons to dorsal and ventral scute rows. Pages 267–268 in *Fourth International Meeting on Mesozoic Fishes Systematics, Homology, and Nomenclature, Extended Abstracts.* F. J. Poyato-Ariza (ed.). Servicio de Publicaciones de la Universidade Autónoma de Madrid, Madrid, Spain.
- Hilton, E.J. 2005. The sister-group of Acipenseriformes: A review of possible candidates. Pages 127–131 in Fourth International Meeting on Mesozoic Fishes Systematics, Homology, and Nomenclature, Extended Abstracts. F. J. Poyato-Ariza (ed.). Servicio de Publicaciones de la Universidade Autónoma de Madrid, Madrid, Spain.
- Hilton, E.J., L. Grande, & W. E. Bemis. 2004. Developmental, descriptive, and comparative osteology of sturgeons (Actinopterygii, Acipenseriformes, Acipenseridae). *Journal of Morphology* 203(3): 298–299.
- Hilton, E.J. & L. Grande. 2003. The fossil record of sturgeons (Actinopterygii: Acipenseriformes: Acipenseridae). *Journal of Vertebrate Paleontology* 23 (supplement to 3): 61A.
- Kley, N. J., E.J. Hilton, & A. M. Richmond. 2002. Comparative morphology of the pelvic apparatus of snakes. *Integrative and Comparative Biology* 42(6): 1257.
- Hilton, E.J. 2002. Phylogeny of fossil and living osteoglossomorph fishes. *Journal of Vertebrate Paleontology* 22 (supplement to 3): 65A.
- Hilton, E.J. & L. Grande. 2001. Osteology of *Eohiodon* (Teleostei: Hiodontiformes) based on new acid-prepared specimens from the Green River Formation (Eocene) of Wyoming. *Journal of Vertebrate Paleontology* 21 (supplement to 3): 61A–62A.
- Hilton, E.J. 1999. Post-larval ontogeny of the skull of *Hiodon* (Teleostei: Osteoglossomorpha). *Journal of Vertebrate Paleontology* 19 (supplement to 3): 51A.
- Bemis, W. E. & **E.J. Hilton.** 1998. Observations on the functional morphology of the lookdown, *Selene vomer* (Perciformes: Carangidae). *American Zoologist* 38(5): 68A.
- Hilton, E.J. 1998. Comparative morphology of the "parasphenoid-tongue bite" in basal teleost fishes. *American Zoologist* 38(5): 199A.
- Hilton, E.J. & W. E. Bemis. 1997. Variation in some dermal and chondral components of the skeleton of shortnose sturgeons (*Acipenser brevirostrum*). *American Zoologist* 37(5): 133A.

#### Invited scholarly papers and talks (Note: Hilton presenter, unless otherwise stated)

#### Symposia and sessions organized for national and international conferences.

- 2019. *The Expanding Role of Natural History Collections*. Joint Meeting of Ichthyologists and Herpetologists: funded by American Society of Ichthyologists and Herpetologists, Society for the Study of Amphibians and Reptiles, and the Herpetologists League. July 2019, Snowbird, UT Symposium Committee: **Hilton, E.J.,** G. Watkins-Colwell, & S.K. Huber. 19 symposium participants.
- 2017. Integrative Approaches in Understanding Fish Diversity: Morphology, Systematics, Taxonomy, and Biogeography. Tenth Indo-Pacific Fish Conference (IPFC 10), Papeete,

Tahiti, French Polynesia. (October 2017) Organizing committee: **E.J. Hilton** and Z. Jaafar (co-chairs); H. Motomura; H. Larson; N. Schnell.

2016. ASIH at 100: Setting the stage for the next 100 years. American Society of Ichthyologists and Herpetologists (ASIH), New Orleans, LA. Symposium committee: E.J. Hilton, chair; M.L. Crump, W. Matthews, and B. Shaffer, members. 21 symposium participants.

# Invited contributions to symposia at national and international meetings (all sole authored and presented by Hilton, unless otherwise indicated):

- 2022. Fishes from the Day the Dinosaurs Died: Sturgeons and Paddlefishes from the Late Cretaceous. 2022 Poetry-Science Symposium, November 2022, Friday Harbor Labs, University of Washington, Friday Harbor, WA. [oral].
- 2021. Long-term Monitoring of American Shad, Alewife, and Blueback Herring in the Virginian Tributaries of the Chesapeake Bay. An invited presentation for the symposium *Highlighting Fisheries Successes along the Atlantic Coast – Conserving America's Fish and Wildlife and Connecting People to* Nature at the annual meeting of the American Fisheries Society. November 2021, Baltimore, MD/virtual. Authored by McGrath, P.E., A. Magee, B.E. Watkins, & E.J. Hilton. [oral, delivered by P.E. McGrath].
- 2021. Comparative Anatomy and Ontogeny of Ocean Sunfishes (Tetraodontiformes: Molidae). An invited presentation for *The Ocean Sunfish Symposium*. Online. February 2021. Authored by Bemis K.E., J. Tyler, **E.J. Hilton**, & Bemis, W.E. [oral, delivered by K.E. Bemis].
- 2019. The Expanding Role of Natural History Collections. An invited presentation for the symposium *The Expanding Role of Natural History Collections* at the Joint Meeting of Ichthyologists and Herpetologists. July 2019, Snowbird, UT. Authored by **Hilton, E.J.,** G. Watkins-Colwell, & S.K. Huber. [oral].
- 2019. Dentition of living and fossil Porcupinefishes (Tetraodontiformes: Diodontidae) studied using CT scanning: Implications for systematics of isolated fossil jaws. An invited presentation for the symposium *The Expanding Role of Natural History Collections* at the Joint Meeting of Ichthyologists and Herpetologists. July 2019, Snowbird, UT. Authored by \*Bemis, K.E., J. Tyler, E. Stanley, & E.J. Hilton. [oral, delivered by Bemis].
- 2017. The limitations of naming laterosensory-system pores in comparative morphological studies: examples from Neotropical fishes. An invited presentation at *The Second International Symposium on the Phylogeny and Classification of Neotropical Fishes*. Londrina, Brazil, coauthored by P.P Rizzato, M.N.L. Pasanta, E.J. Hilton, & F.A. Bockmann [oral, presented by Rizzato;]
- 2017. Morphology, osteology, and systematics of fossil and living bony tongue fishes, Osteoglossomorpha. An invited presentation at *The Second International Symposium on the Phylogeny and Classification of Neotropical Fishes*. Londrina, Brazil. [oral]
- 2016. ASIH History, Personal Reminisces, and an Introduction to the Symposium: Setting the Stage for the Next 100 Years. An invited presentation for the symposium "ASIH at 100: Setting the stage for the next 100 years." American Society of Ichthyologists and Herpetologists (ASIH), New Orleans, LA. [oral].

- 2013. Morphology of fishes: life at the intersection of staunch tradition and cutting-edge approaches. An invited presentation for the symposium "*Fishes and Morphology Today*," co-authored by **E.J. Hilton**, N.K. Schnell & P. Konstantinidis. American Society of Ichthyologists and Herpetologists. Albuquerque, NM [oral].
- 2013. The early development of the cranial musculature of the longnose gar. An invited presentation for the symposium "*Fishes and Morphology Today*", co-authored by P. Konstantinidis, **E.J. Hilton**, L. Olsson, & B. Metscher. American Society of Ichthyologists and Herpetologists. Albuquerque, NM [oral; Konstantinidis presented].
- 2010. Evaluating restoration efforts of American shad in Virginia. An invited presentation for the symposium "*Restoration of American Shad and river herring*", co-authored by Latour, R. J., E.J. Hilton, B. E. Watkins, T. D. Tuckey, P. D. Lynch, & J. E. Olney. American Fisheries Society. Pittsburgh, Pennsylvania. [oral; Latour presented].
- 2009. History of marine ichthyology of Virginia. An invited presentation for the symposium *"Historical Explorations into Virginia's Natural History;"* co-authored by **E.J. Hilton &** J. Musick. Virginia Natural History Society. Martinsville, VA. [oral]
- 2009. Darwin's fossils. An invited presentation for the symposium "*Darwin at 200: A view from Ichthyology and Herpetology*." American Society of Ichthyologists and Herpetologists. Portland, OR. [oral]
- 2009. Ontogeny and systematics of the drums, family Sciaenidae (Perciformes). An invited presentation for the symposium "Ontogeny and Systematics of Fishes;" co-authored by E.J. Hilton & J. E. Olney. Eighth Indo-Pacific Fish Conference. Perth, Australia. [oral]
- 2007. The caudal skeleton of osteoglossomorph fishes revisited: comparisons, homologies, and characters. An invited presentation for "*Origin and Phylogenetic Interrelationships of Teleosts*;" co-authored by **E.J. Hilton** & R. Britz. American Society of Ichthyologists and Herpetologists. St. Louis, MO. [oral]
- 2006. Figure conceptualization and electronic illustration. American Elasmobranch Society (AES) Student Workshop *Better Scientific Illustrations and Visual Aids*. AES Annual Meeting, New Orleans, LA. [oral]
- 2005. Osteology, systematics, and biogeography of fossil and living osteoglossid fishes (Teleostei: Osteoglossomorpha), with a description of new forms and a review of the biogeographic relationships of the clade members. An invited presentation for "Morphology, Phylogeny and Biogeography of Fossil Fishes - A Symposium in Honor of Mee-Mann Chang;" co-authored by E.J. Hilton & P. L. Forey. Society of Vertebrate Paleontology. Mesa, AZ. [oral].
- 2004. Comparative anatomy of fishes from the Gulf of Mexico: a twenty-year study based on specimens from The Alabama Deep Sea Fishing Rodeo. An invited oral presentation for the symposium "Contributions to Systematic Ichthyology by Bruce B. Collette and Celebration of the 70<sup>th</sup> Anniversary of his Birth;" co-authored by Bemis, W. E., C. D. Little, E. J. Hilton, R. L. Shipp, B. Brown, R. Arrindell, P. L. Forey, & G. Nelson; American Society of Ichthyologists and Herpetologists. Norman, OK [oral; delivered by W. E. Bemis].

1999. Post-larval ontogeny of the skull in *Hiodon* (Teleostei: Osteoglossomorpha). Invited presentation for the symposium "*Fish Heads: Evolutionary Patterns*." Society of Vertebrate Paleontology. Denver, CO. [poster]

#### Invited professional seminars:

- 2021. From the star of sturgeons to false cusks: an ichthyological reflection on 2020. Smithsonian Institution Virtual Ichthyology Seminar Series, January, 2021.
- 2018. The Morphology and Systematics of Fishes: A Renaissance. Fall Seminar Series, Ecosystems and Fisheries-Oceanography Coordinated Investigations, NOAA Western Regional Center Seattle, Washington, October 2018.
- 2018. Fishes and the New Golden Age of Morphology. Keynote address, Gilbert Ichthyological Society, 30<sup>th</sup> Annual Meeting, H.J. Andrewes Experimental Forest, Oregon, October 2018.
- 2018. Fishes and the New Golden Age of Morphology. Department of Ecology and Evolutionary Biology, Cornell University, March 2018.
- 2017. Anatomy of Fishes in the 21<sup>st</sup> Century. Café com Ciência, Universidade de São Paulo, *campus* de Ribeirão Preto, Brazil, October, 2017.
- 2017. American shad and river herring in Virginia (and beyond): trends and prospects. Pamunkey Tribe, Pamunkey Indian Reservation, Virginia, February, 2017.
- 2015. Evolution of sturgeons and the status of Atlantic sturgeon in Virginia. Virginia Association of Wetland Professionals, Annual Meeting, Virginia Institute of Marine Science, June, 2015.
- 2012. Morphology, systematics, and evolution of sturgeons, an endangered family of fishes. Shanghai Ocean University, Shanghai, China.
- 2012. Morphology, systematics, and evolution of sturgeons, an endangered family of fishes. East China Sea Fishery Research Institute, Chinese Academy of Fishery Science, Shanghai, China.
- 2012. Bones, rocks, and DNA: systematics and evolution of sturgeons, an endangered family of fishes. Student Chapter of the American Fisheries Society, Virginia Tech, Blacksburg, VA.
- 2007. Renaissance of comparative morphology: examples from the systematic ichthyology of ray-finned fishes. Department of Fisheries Science, Virginia Institute of Marine Science, Gloucester Point, VA.
- 2007. Ancient fishes in modern times: The comparative anatomy and evolution of sturgeons. Division of Biodiversity and Ecological Entomology, Illinois Natural History Survey, Champaign, IL.
- 2006. The evolution of sturgeons and a synthetic approach to comparative biology: A royal tale. Department of Zoology, The Field Museum, Chicago, IL.
- 2006. New developments in the comparative anatomy, systematics, and biogeography of bonytongue fishes. A. Watson Armour Research Seminar Series, The Field Museum, Chicago, IL.
- 2006. Old fishes, new fossils: The osteology, paleontology, and evolution of sturgeons. Department of Biology, St. Louis University, St. Louis, MO.

- 2006. Royal fishes and faulty paradigms: studies on fossil and living ray-finned fishes. Department of Palaeontology, The Natural History Museum, London, England.
- 2006. Old fishes, new fossils The comparative osteology and paleontology of ray-finned fishes. Biology Department, Central Michigan University, Mt. Pleasant, MI.
- 2004. Studies on the comparative osteology of actinopterygian fishes: a research program in systematic ichthyology. Biology Department, University of Louisiana at Lafayette, LA.
- 2004. Neontology, paleontology, and the evolution of sturgeons. Department of Biological Sciences, East Stroudsburg University, PA.
- 2004. A new look at old fishes: comparative anatomy, paleontology, and evolution of sturgeons. Evolutionary Morphology Seminar Series, University of Chicago, Chicago, IL.
- 2003. Renaissance of comparative anatomy: perspectives from a research program in systematic ichthyology. Department of Zoology, The Natural History Museum, London, England.
- 2001. Osteology of goldeyes and mooneyes and the phylogeny of bony-tongue fishes. Geology Department, The Field Museum, Chicago, IL.
- 2001. There's more than one way to skin a fish: Field collection of skeletons at the Alabama Deep-Sea Fishing Rodeo. Geology Department, The Field Museum, Chicago, IL.

#### Departmental seminars (Department of Fisheries Science, VIMS)

- 2021. 65 Million-year-old "new" species, and other ichthyological adventures
- 2020. Musings on dead fishes, part XIV.
- 2019. The expanding role of natural history collections.
- 2018. Why build and maintain collections, and how you at VIMS can do it responsibly.
- 2017. The VIMS Nunnally Ichthyology Collection and the importance of natural history collections in marine science.
- 2016. What can you do with a dead fish?
- 2014. An ichthyologist looks at 40: stories about fish anatomy and the history of a taxon-oriented academic society.
- 2012. From Gloucester Point to Shanghai: continued musings on the anatomy and evolution of sturgeons.
- 2011. From Russia (and Romania and France) with love, and sturgeons.
- 2010. Ichthyological miscellany.
- 2007. Bones, rocks, and context: from whence did sturgeons come?

#### Contributed scholarly papers and talks

Contributed presentations (invited contributions to symposia are listed above; \*graduate student presentations; \*\* undergraduate student presentations):

- **Hilton, E.J.,** & L. Grande. 2021. New sturgeons from the Late Cretaceous of North America, with notes on the Cretaceous record of the family Acipenseridae. Society of Vertebrate Paleontology. November 2021 [oral, delivered virtually by Hilton].
- Kellogg, M.L., S.C. Muffelman, & E.J. Hilton. 2021. RecFish: Engaging Recreational Anglers as Community Scientists Using a Cutting-Edge Mobile App. Organization of Fisheries and Wildlife Managers meeting to present RecFish. Virtual Conference [oral, delivered virtually by Kellogg].
- **Hilton, E.J.,** & L. Grande. 2021. New sturgeons from the Late Cretaceous of North America, with notes on the Cretaceous record of the family Acipenseridae. Joint Meeting of Ichthyologists and Herpetologists. July 2021 Phoenix/Virtual [oral, delivered virtually by Hilton].
- Russell, K.,\* and E.J. Hilton. 2021. Rapid morphological divergence in three introduced cichlid species. Joint Meeting of Ichthyologists and Herpetologists. July 2021 Phoenix/Virtual [oral, delivered virtually by Russell].
- Nelson, L.,\* **E.J. Hilton,** C. Jones, and J. McDowell. 2021. No bones about it; variation in the skeletal counts of Clearnose Skates using x-ray radiography. July 2021 Phoenix/Virtual [Poster, delivered virtually by Nelson].
- Vaz, D.F.B., & E. J. Hilton. 2021. Stick together and act as if you belong: ontogeny and evolution of gill arches of Batrachoidiformes. Society for Integrative and Comparative Biologists 2021 Virtual Annual Meeting.
- McGrath, P.E., **E.J. Hilton**, B.E. Watkins, and A. Magee. 2020, American Shad on a diet? Longterm monitoring has revealed a decrease in body condition for spawning stocks in Virginia. Presentation at the 2020 Virtual American Fisheries Society Conference, September 2020.
- Vaz, D.F.B.,\* & E. J. Hilton. 2020. When Five Means Four (and Something Else): Ontogeny of the Pectoral Fin of the Plainfin Midshipmen, *Porichthys notatus* (Batrachoididae: Batrachoidiformes), with implications to evolution of Batrachoidiformes. Society of Integrative and Comparative Biologists. January 2020, Austin, TX [oral, delivered by Vaz].
- Bemis, W.E., K.E. Bemis\*, J. Tyler, E.J. Hilton. 2019. Comparative Anatomy and Ontogeny of Ocean Sunfishes (Tetraodontiformes: Tetraodontoidea: Molidae Joint Meeting of Ichthyologists and Herpetologists. July 2019, Snowbird, UT [poster, delivered by W.E. Bemis].
- Vaz, D.F.B.,\* & E. J. Hilton. 2019. Ontogeny of the Plainfin Midshipmen, *Porichthys notatus* (Batrachoididade: Batrachoidiformes). Joint Meeting of Ichthyologists and Herpetologists. July 2019, Snowbird, UT [oral, delivered by Vaz].
- Corso, A.,\* D.K. Steinberg, S.K. Huber, J.S. Cope, M.R. Gleiber, & **E.J. Hilton**. 2019. The impacts of climate change on Antarctic larval fishes. Early Life History Section, American Fisheries Society (AFS), Palma de Mallorca [oral, delivered by Corso].
- Vaz, D.F.B.\*, & E.J. Hilton. 2019. Ontogeny of the Plainfin Midshipmen, *Porichthys notatus* (Batrachoididae: Batrachoidiformes). Society of Integrative and Comparative Biologists. January 2019, Tampa, FL. [oral, delivered by Vaz].

- Bemis, K. E.,\* & E. J. Hilton. 2019. Tooth development, attachment and replacement in the Longnose Lancetfish, *Alepisaurus ferox*. Society of Integrative and Comparative Biologists. January 2019, Tampa, FL. [oral, delivered by Bemis].
- Warth, P.,\* **E.J. Hilton**, B. Naumann, L. Olsson, & P. Konstantinidis. 2018. Neue Techniken alte Fragen neue Antworten: Homologie und Evolution innerhalb der Actinopterygii. German Society for Ichthyology annual meeting. Jena, Germany. [oral, delivered by Warth].
- \*Bemis, K.E., & **E.J. Hilton** 2018. Tooth Morphology, Development, and Replacement in the Longnose Lancetfish, *Alepisaurus ferox* (Aulopiformes, Alepisauridae). American Society of Ichthyologists and Herpetologists (ASIH), Rochester, NY. [oral, delivered by Bemis].
- \*Rizzato, P., F. Bockmann, & E.J. Hilton. 2018. Development of Bones associated with Lateral-Line Canals in *Acipenser fulvescens* and *Polyodon spathula* (Actinopterygii: Chondrostei: Acipenseriformes). American Society of Ichthyologists and Herpetologists (ASIH), Rochester, NY. [oral, delivered by Rizzato].
- Dillman, C., & E.J. Hilton. 2018. Nuclear DNA Sequences and their Bearing on our Understanding of the History and Relationships of Sturgeons (Acipenseriformes: Acipenseridae). American Society of Ichthyologists and Herpetologists (ASIH), Rochester, NY. [oral, delivered by Dillman].
- \*Vaz, D., & **E.J. Hilton**. 2018. Comparative Anatomy of the Jaws, Suspensorium, and Gill Arches of Toadfishes (Batrachoidiformes). American Society of Ichthyologists and Herpetologists (ASIH), Rochester, NY. [oral, delivered by Vaz].
- \*Rizzato, P., E.J. Hilton, & F. Bockmann. 2018. A Review on the Lateral-Line System of Polypterids (Actinopterygii: Cladistii: Polypteriformes). American Society of Ichthyologists and Herpetologists (ASIH), Rochester, NY. [poster, delivered by Rizzato].
- Huber, S.K., K. Maslenikov, A. Williston, **E.J. Hilton**, A. Summers, & D. Blackburn. 2018. oVert Deep Dive: Ontogenetic Series of Fishes. American Society of Ichthyologists and Herpetologists (ASIH), Rochester, NY. [poster, delivered by Huber].
- Blackburn, D. and 29 co-authors (including E.J. Hilton). 2018. The oVert Thematic Collections Network. American Society of Ichthyologists and Herpetologists (ASIH), Rochester, NY. [poster, delivered by Blackburn].
- Parsons, K., E. J. Hilton, J. R. McDowell, H. L. Brightman, & R. J. Latour. 2018. Natural history and taxonomy of the smooth butterfly ray (Myliobatiformes: Gymnuridae) reveals cryptic species in the Western North Atlantic. Sharks International, João Pessoa, Brazil. [oral, delivered by Parsons].
- \*Corso, A., D. Steinberg, S. Huber, J. Cope, & E. J. Hilton. 2018. A time-series analysis of the larval fish assemblage of the Western Antarctic Peninsula. Early Life History Section, American Fisheries Society (AFS), Victoria, B.C. [oral, delivered by Corso].
- \*\*Aguiar Gabaldo, K., K.T. Parsons, & E. J. Hilton. 2018. Comparative anatomy of gill arches and associated structures of *Squalus acanthius* across ontogeny. Sharks International, João Pessoa, Brazil. [oral, delivered by Aguiar Gabaldo].
- \*\*Keefe, R., **E.J. Hilton**, and C. Cox Fernandez. 2017. Morphology and Osteology of the Cranial Sexual Dimorphism in the Amazonian Electric Knifefish *Compsaraia samueli*. The

Second International Symposium on the Phylogeny and Classification of Neotropical Fishes. Londrina, Brazil. [poster, delivered by Cox Fernandez].

- \*Bemis, K.E., J.C. Tyler, W. E. Bemis, & **E.J. Hilton**. 2017. Ontogeny of Tooth Replacement of Molidae (Ocean Sunfishes) and Diodontidae (Porcupinefishes): Tenth Indo-Pacific Fish Conference, Papeete, Tahiti, French Polynesia [oral, delivered by Bemis].
- \*Vaz, D.F.B., **E.J. Hilton** & A.P. Summers. 2017. The Intermuscular Bones and Ligaments of Batrachoidiformes (Percomorphacea: Teleostei). Tenth Indo-Pacific Fish Conference, Papeete, Tahiti, French Polynesia [oral, delivered by Vaz].
- **Hilton, E.J.** 2017, Overview of the Skeletal Anatomy and Systematics of Zoarcoidei (Cottiformes). Tenth Indo-Pacific Fish Conference, Papeete, Tahiti, French Polynesia [oral].
- \*Bemis, K.E., J.C. Tyler, W. E. Bemis, & **E.J. Hilton**. 2017. Comparative Anatomy of the Dentition of Molidae (Ocean Sunfishes) and Diodontidae (Porcupinefishes): New Insights from Ontogeny and Patterns of Tooth Replacement. American Society of Ichthyologists and Herpetologists (ASIH), Austin, TX. [oral, delivered by Bemis].
- Bemis, W.E., E.J. Hilton, & G.P. Naylor. 2017. Anatomy of the Small Tooth Sand Tiger Shark, Odontaspis ferox (Lamniformes) – results from a dissection party, with comments on the systematics of Lamniformes. American Society of Ichthyologists and Herpetologists (ASIH), Austin, TX. [poster, delivered by Bemis].
- Hilton, E.J., A.C. Matarese, & D.E. Stevenson. 2017. Osteology of the Northern Ronquil, *Ronquilus jordani*, and the comparative development of the skeleton of Bathymasteridae (Zoarcoidei): insights into systematic relationships. American Society of Ichthyologists and Herpetologists (ASIH), Austin, TX. [oral, delivered by Hilton].
- \*\*Keefe, R., E.J. Hilton, and C. Cox Fernandez. 2017. Morphology and Osteology of the Cranial Sexual Dimorphism in the Amazonian Electric Knifefish *Compsaraia samueli*. American Society of Ichthyologists and Herpetologists (ASIH), Austin, TX. [poster, delivered by Cox Fernandez].
- \*Parsons, K.T., J.M. McDowell, H.L. Brightman, **E.J. Hilton**, & R.J. Latour. 2017. Two new species of Butterfly Ray (Myliobatiformes: Gymnuridae) from the U.S. Atlantic and Gulf of Mexico coasts. American Society of Ichthyologists and Herpetologists (ASIH), Austin, TX. [poster, delivered by Parsons].
- \*Rizzato, P.P., A. Pospíšilová, F.A. Bockmann, & E.J. Hilton. Ontogeny and homology of dermal bones associated with the laterosensory canal system in the skull of Polypteridae (Cladistii: Polypteriformes). 2017. American Society of Ichthyologists and Herpetologists (ASIH), Austin, TX. [oral, delivered by Rizzato].
- \*Rizzato, P.P., F.A. Bockmann, & **E.J. Hilton**. 2017. 'Say my name': a review of the nomenclature of the cranial bones in Polypteridae (Cladistii: Polypteriformes). American Society of Ichthyologists and Herpetologists (ASIH), Austin, TX. [poster, delivered by Rizzato].
- \*Roa-Varón, A., E.J. Hilton, & C. Li. 2017. Using Phylogenomics to Study the Interrelationships of Gadiformes. American Society of Ichthyologists and Herpetologists (ASIH), Austin, TX. [oral, delivered by Roa-Varón].

- \*Vaz, D.F.B. & **E.J. Hilton**. 2017. Morphological Variation of the Swimbladder of Toadfishes (Percomorphacea: Batrachoidiformes). American Society of Ichthyologists and Herpetologists (ASIH), Austin, TX. [poster, delivered by Vaz].
- \*Vaz, D.F.B., **E.J. Hilton** & A.P. Summers. 2017. The Intermuscular Bones and Ligaments of Batrachoidiformes (Percomorphacea: Teleostei). American Society of Ichthyologists and Herpetologists (ASIH), Austin, TX. [oral, delivered by Vaz].
- \*Vaz, D.B., A.P. Summers, & **E.J. Hilton**. 2017. Systematic inferences of the post-cranial skeleton of Batrachoidiformes. Society of Integrative and Comparative Biology (SICB), New Orleans, LA. [oral, delivered by Vaz].
- Loose, E., **E.J. Hilton**, J. Graves. 2016. Comparative scale morphology of white marlin (*Kajikia albida*) and roundscale spearfish (*Tetrapturus georgii*). Sixth International Billfish Symposium, Dania Beach, FL. [oral, delivered by Loose].
- Hilton, E.J., A. C. Matarese, & D. E. Stevenson. 2016. Development of the skeleton of the Northern Ronquil, *Ronquilus jordani*, with notes on the ontogeny and osteology of other members of the family Bathymasteridae (Zoarcoidei). American Society of Ichthyologists and Herpetologists (ASIH), New Orleans, LA. [poster, delivered by Hilton].
- Huber, S.K., P. Konstantinidis, E.J. Hilton, & D.K. Steinberg. 2016. Lessons learned from the larval fish workshop at the Virginia Institute of Marine Science's Nunnally Ichthyology Collection. American Society of Ichthyologists and Herpetologists (ASIH), New Orleans, LA. [poster, delivered by Huber].
- \*Martinez, C. M. & **E.J. Hilton.** 2016. Larval fish assemblage dynamics in the York River estuary. American Society of Ichthyologists and Herpetologists (ASIH), New Orleans, LA. [oral, delivered by Martinez].
- McGrath, P.E. & **E.J. Hilton.** 2016. Age and growth of Alewife (*Alosa pseudoharengus*) and Blueback Herring (*Alosa aestivalis*) from Virginia. American Society of Ichthyologists and Herpetologists (ASIH), New Orleans, LA. [oral, delivered by McGrath].
- \*Parsons, K.T., **E.J. Hilton**, J.M. McDowell, H.L. Brightman, R.J. Latour. 2016. Taxonomic review of the Smooth Butterfly Ray, *Gymnura micrura* (Myliobatiformes: Gymnuridae) reveals a species complex in the western North Atlantic Ocean. American Society of Ichthyologists and Herpetologists (ASIH), New Orleans, LA. [oral, delivered by Parsons].
- \*Roa-Varon, A, C. Li & E.J. Hilton. 2016. Phylogenetic relationships within the family Merlucciidae (Gadiformes) using genome-wide protein coding genes. American Society of Ichthyologists and Herpetologists (ASIH), New Orleans, LA. [oral, delivered by Roa-Varon].
- \*Vaz, D. F. B. & E. J. Hilton. 2016. The caudal-fin skeleton of Batrachoidiformes (Teleostei: Percomorphacea) and its implications for the systematics of the order . American Society of Ichthyologists and Herpetologists (ASIH), New Orleans, LA. [oral, delivered by Vaz].
- \*Naumann, B., P. Konstantinidis, P. Warth\*, N. Hartmann, C. Englert, E. J. Hilton, B. Metscher, & L. Olsson. 2016. The development and evolution of cranial nerves and head muscles in two actinopterygian taxa, the Longnose Gar (*Lepisosteus osseus*) and the Turquoise killifish (*Nothobranchius furzeri*). International Congress of Vertebrate Morphology. Bethesda, MD [oral, delivered by Naumann].

- \*Warth, P., P. Konstantinidis, E. J. Hilton, B. Naumann\*, & L. Olsson. 2016. Comparison of cranial development of Siberian sturgeon, *Acipenser baerii* and Russian sturgeon, *Acipenser gueldenstaedtii* (Acipenseriformes: Acipenseridae). International Congress of Vertebrate Morphology. Bethesda, MD [oral, delivered by Warth].
- Hilton, E.J. 2016. What is an "ontogenetic character" in systematics? Early Life History Section, American Fisheries Society (AFS), Solomons, MD. [oral, delivered by Hilton].
- Hilton, E. J., A. C. Matarese, & D. E. Stevenson. 2016. Development of the skeleton of the Northern Ronquil, *Ronquilus jordani*, with notes on the ontogeny and osteology of other members of the family Bathymasteridae (Zoarcoidei). Early Life History Section, American Fisheries Society (AFS), Solomons, MD. [poster, delivered by Hilton].
- Huber, S.K., P. Konstantinidis, E. J. Hilton, & D. K. Steinberg. 2016. Lessons learned from larval fish workshops at the Virginia Institute of Marine Science's Nunnally Ichthyology Collection. Early Life History Section, American Fisheries Society (AFS), Solomons, MD. [poster, delivered by Hilton].
- Martin, J.M., & E.J. Hilton. 2016. Phylogenetic relationships of the Inkfishes *Lophotus*, *Eumecichthys*, and *Radicephalus* (Lampridiformes) based on new adult and ontogenetic characters. Early Life History Section, American Fisheries Society (AFS), Solomons, MD. [oral, delivered by Martin].
- Ribeiro, F., \*E. Hale, \*T. R. Clardy, \*A. L. Deary, **E. J. Hilton**, T. E. Targett, & J. E. Olney. 2015. Composition and temporal patterns of larval fish communities in Chesapeake and Delaware Bays. European Congress of Ichthyology. Porto, Portugal. [poster, delivered by Ribeiro].
- \*Laumann, K.M., C.B. Dillman, & E.J. Hilton. 2015. Comparative ontogeny of the jaws and feeding behavior in five sturgeons, with a note on applications to phylogenetics. American Fisheries Society. Portland, Oregon. [poster, delivered by Laumann].
- \*Laumann, K.M., **E.J. Hilton**, C.B. Dillman, T. Sado, & M. Miya. 2015. Sturgeon phylogenetics: a whole mitogenome approach. American Fisheries Society. Portland, Oregon. [oral, delivered by Laumann].
- \*Deary, A.L. & **E.J. Hilton**. 2015. Niche partitioning and ecomorphology in early life history stage drums (family Sciaenidae) from the Chesapeake Bay. Early Life History Section, American Fisheries Society (AFS). Vienna, Austria [oral, delivered by Deary].
- **Hilton, E. J.,** A. Williston, & P. Konstantinidis. 2015. Osteology of *Parabrotula plagiophthalma* (Parabrotulidae) based on cleared and stained specimens and x-ray computed tomography. American Society of Ichthyologists and Herpetologists. Reno, Nevada. [oral].
- Huber, S.K., P. Konstantinidis, E. J. Hilton, & D. K. Steinberg. 2015. Organization, Expansion, and Digitization of the Larval Fish Collection at the Virginia Institute of Marine Science. American Society of Ichthyologists and Herpetologists. Reno, Nevada. [poster, delivered by Hilton].
- Konstantinidis, P., E. J. Hilton, S. K. Huber, & D. K. Steinberg. 2015. Antarctic Ichthyoplankton in the Virginia Institute of Marine Science Nunnally Ichthyology Collection. American Society of Ichthyologists and Herpetologists. Reno, Nevada. [poster, delivered by Konstantinidis].

- Huber, S.K., P. Konstantinidis, E. J. Hilton, & D. K. Steinberg. 2015. Organization, Expansion, and Digitization of the Larval Fish Collection at the Virginia Institute of Marine Science Society for the Preservation of Natural History Collection. Gainesville, Florida. [poster, delivered by Huber].
- \*\*Sweetser, P.W., & **E.J. Hilton**. 2015. Osteology of the crescent gunnel, *Pholis laeta*, as a baseline for an analysis of the phylogenetic relationships among species of the family Pholidae (Cottiformes: Zoarcoidei). Society of Integrative and Comparative Biology. West Palm Beach, Florida. [poster, delivered by Sweetser].
- \*Deary, A.L., B. Metscher, & **E.J. Hilton**. 2014. Ontogenetic changes to sensory modality in early life history stage drums (family Sciaenidae) from the Chesapeake Bay. Early Life History Section, American Fisheries Society (AFS). Quebec, Canada [oral, delivered by Deary; won the Sally Richardson Award, Best Student Paper].
- \*Deary, A.L. & **E.J. Hilton**. 2014. Ontogenetic diet shifts in early life history stage estuarine fishes (Family Sciaenidae) from the Chesapeake Bay. Early Life History Section, AFS. Quebec, Canada. [oral, delivered by Deary].
- \*Clardy, T.R., & **E.J. Hilton**. 2014. Phylogenetic systematics of the prickleback family Stichaeidae (Cottiformes: Zoarcoidei) based on morphological data. American Society of Ichthyologists and Herpetologists. Chattanooga, Tennessee. [oral, delivered by Clardy].
- \*Deary, A.L., & E.J. Hilton. 2014. Using phylogeny to address ecomorphology, development of feeding structures, and dietary shifts of early life history stage drums (family Sciaenidae) from the Chesapeake Bay. American Society of Ichthyologists and Herpetologists. Chattanooga, Tennessee. [oral, delivered by Deary].
- Dillman, C.B., & **E.J. Hilton**. 2014. Nuclear DNA sequences and their bearing on our understanding of the phylogenetic relationships of sturgeons. American Society of Ichthyologists and Herpetologists. Chattanooga, Tennessee. [oral, delivered by Dillman].
- **Hilton, E.J.** 2014. Osteology of wolffishes (Zoarcoidei: Anarhichadidae): historical context and preliminary comparisons. American Society of Ichthyologists and Herpetologists. Chattanooga, Tennessee. [oral].
- Huber, S.K., & **E.J. Hilton**. 2014. The Nunnally Ichthyology Collection at the Virginia Institute of Marine Science: history, current status, and future prospects. American Society of Ichthyologists and Herpetologists. Chattanooga, Tennessee. [poster, delivered by Huber].
- \*Laumann, K.M., **E.J. Hilton**, C.B. Dillman, T. Sado, & M. Miya. 2014. Sturgeon phylogenetics: a whole mitogenome approach. American Society of Ichthyologists and Herpetologists. Chattanooga, Tennessee. [oral, delivered by Laumann].
- \*Martin, J., & E.J. Hilton. 2014. Ontogeny and biogeography of the ribbonfish genus Zu (Lampridiformes: Trachipteridae): a revision. American Society of Ichthyologists and Herpetologists. Chattanooga, Tennessee. [oral, delivered by Martin].
- \*Warth, P., **E.J. Hilton**, and P. Konstantinidis. 2014. Ontogeny of skeletal elements in two species of sturgeon. American Society of Ichthyologists and Herpetologists. Chattanooga, Tennessee. [poster, delivered by Warth].

- \*Deary A.L. & E.J. Hilton. 2014. Ontogenetic diet shifts in early life history stage estuarine fishes (Family Sciaenidae) from the Chesapeake Bay. Southern Division, AFS. Charleston, South Carolina [oral, delivered by Deary].
- \*Clardy, T.R., E. J. Hilton, & W. K. Vogelbein. 2014. Morphology and ontogeny of multiple lateral line canals in the prickleback genus *Xiphister* (Cottiformes: Zoarcoidei: Stichaeidae). Society for Integrative and Comparative Biology. Austin, Texas. [oral, delivered by Clardy].
- **Hilton, E.J.,** & C.B. Dillman. 2013. Comparative anatomy, molecular systematics, and taxonomy of sturgeons: purpose, progress, and potential. 7<sup>th</sup> International Symposium on Sturgeon. Nanaimo, BC, Canada. [oral].
- Hilton, E.J., C.B. Dillman, M. Paraschiv, & R. Suciu. 2013. Comparative osteology and morphology of the skull of the stellate sturgeon, *Acipenser stellatus*, with comparisons to other sturgeons (Acipenseridae). 7<sup>th</sup> International Symposium on Sturgeon. Nanaimo, BC, Canada. [poster].
- Hilton, E.J., C. Dillman, T. Zhang, L. Zhang, P. Zhuang. 2013. Skeletal anatomy of the head of the Chinese sturgeon, *Acipenser sinensis* (Acipenseriformes, Acipenseridae) 7<sup>th</sup> International Symposium on Sturgeon. Nanaimo, BC, Canada. [poster].
- Dillman, C.B. & E.J. Hilton. 2013. Nuclear DNA sequences and their bearing on our understanding of the phylogenetic relationships of sturgeons. 7<sup>th</sup> International Symposium on Sturgeon. Nanaimo, BC, Canada. [oral, delivered by Dillman].
- \*Laumann, K.M., C.B. Dillman, & E.J. Hilton. 2013. Comparative ontogeny of the jaws and feeding behavior in two sturgeons, *Acipenser transmontanus* and *A. oxyrinchus*. 7<sup>th</sup> International Symposium on Sturgeon. Nanaimo, BC, Canada. [poster, delivered by Dillman].
- \*Clardy, T.R. & E.J. Hilton. 2013. Systematic relationships of the prickleback family Stichaeidae (Cottiformes: Zoarcoidei) using morphological data. American Society of Ichthyologists and Herpetologists. Albuquerque, NM [poster, delivered by Clardy].
- \*Clardy, T.R., **E.J. Hilton**, & W. K. Vogelbein. 2013. Morphology and ontogeny of multiple lateral lines in the prickleback genus *Xiphister*. American Society of Ichthyologists and Herpetologists. Albuquerque, NM [oral, delivered by Clardy].
- Dillman, C., P. Zhuang, T. Zhang, L. Zhang, N. Mugue, & E. J. Hilton. 2013. Forensic investigations into a Genbank anomaly: endangered taxa and missing vouchers. American Society of Ichthyologists and Herpetologists. Albuquerque, NM [oral, delivered by Dillman].
- \*Laumann, K.M., C.B. Dillman, & E.J. Hilton. 2013. Comparative ontogeny of the jaws and feeding behavior in two sturgeons, *Acipenser transmontanus* and *A. oxyrinchus*. American Society of Ichthyologists and Herpetologists. Albuquerque, NM [poster, delivered by Dillman].
- Hilton, E.J., C. Dillman, T. Zhang, L. Zhang, P. Zhuang. 2013. Skeletal anatomy of the head of the Chinese sturgeon, *Acipenser sinensis*. American Society of Ichthyologists and Herpetologists. Albuquerque, NM [poster].

- \*Roa-Varón, J.R. McDowell, & E J. Hilton. 2013. Back from the dead or alive and well all along? the family Lyconidae (Gadiformes). American Society of Ichthyologists and Herpetologists. Albuquerque, NM [poster].
- Konstantinidis, P., L. Olsson, & **E.J. Hilton**. 2013. Homology and the importance of larval fishes for morphological and phylogenetic studies, with examples from the jaw musculature of actinopterygian fishes. 37<sup>th</sup> Annual Larval Fish Conference. Miami, FL. [oral, delivered by Konstantinidis].
- \*Deary, A.L. & E. J. Hilton. 2013. Development of the pharyngeal jaws in the drums (Sciaenidae) of the Chesapeake Bay with comparisons to other members of the family. 37<sup>th</sup> Annual Larval Fish Conference. Miami, FL. [oral, delivered by Deary].
- \*Roa-Varón, A. G. Orti, & E. J. Hilton. 2013. Sistemática de los Gadiformes: pasado, presente y futuro. XII Congreso Colombiano de Ictiologia y III encuentro de ictiólogos suramericanos. Bogata, Columbia [oral, delivered by Roa-Varón].
- Hilton, E. J., C. B. Dillman, M. Paraschiv, & R. Suciu. 2012. The skull and pectoral girdle and fin of the stellate sturgeon, *Acipenser stellatus*, with comparisons to other sturgeons (Acipenseridae). American Society of Ichthyologists and Herpetologists. Vancouver, BC, Canada [oral].
- Dillman, C., & E. J. Hilton. 2012. Development of the pectoral fin spine in Acipenseridae (Actinopterygii: Acipenseriformes). American Society of Ichthyologists and Herpetologists. Vancouver, BC, Canada [oral; delivered by Dillman].
- Dillman, C., Laumann, K. M., & E. J. Hilton. 2012. Nuclear DNA perspectives and problems in estimating relationships among Acipenseriformes. American Society of Ichthyologists and Herpetologists. Vancouver, BC, Canada [poster; delivered by Dillman].
- \*Deary, A. L., & E. J. Hilton. 2012. Development of the pharyngeal jaws in drums (Sciaenidae) of the Chesapeake Bay with comparisons to other members of the family. American Society of Ichthyologists and Herpetologists. Vancouver, BC, Canada [oral; delivered by Deary].
- Konstantinidis, P., L. Olsson, & E. J. Hilton. 2012. Comparative ontogeny of the musculoskeletal systems of the head in non-teleostean actinopterygians. American Society of Ichthyologists and Herpetologists. Vancouver, BC, Canada [oral; delivered by Konstantinidis].
- Konstantinidis, P., C. B. Dillman, B. Metscher, L. Olsson, & E.J. Hilton. 2012. Developmental origins of different feeding morphologies in the North American paddlefish, *Polyodon spathula*, and the white sturgeon, *Acipenser transmontanus*. American Society of Ichthyologists and Herpetologists. Vancouver, BC, Canada [poster; delivered by Konstantinidis].
- \*Laumann, K. M., C. B. Dillman, & **E. J. Hilton**. 2012. Phylogenetic systematics of sturgeons (Acipenseridae) based on mitochondrial DNA data. American Society of Ichthyologists and Herpetologists. Vancouver, BC, Canada [poster; delivered by Laumann].
- \*Clardy, T. & E. J. Hilton. 2012. A preliminary look at the systematic relationships of the prickleback family Stichaeidae (Cottiformes: Zoarcoidei) based on morphological data. American Society of Ichthyologists and Herpetologists. Vancouver, BC, Canada [oral; delivered by Clardy].

- \*Deary, A. L., & E. J. Hilton. 2012. Development of the pharyngeal jaws in the drums (Sciaenidae) of the Chesapeake Bay with comparisons to other members of the family. 36<sup>th</sup> Larval Fish Conference, Bergen, Norway. [poster; delivered by Deary; awarded Blaxter Award, Best Student Poster].
- \*Deary, A. L., & E. J. Hilton. 2012. Functional morphology in early life history stage drums (family Sciaenidae) of the Chesapeake Bay: comparison of diet and lever mechanics of the lower jaw during ontogeny. 36<sup>th</sup> Larval Fish Conference, Bergen, Norway. 36<sup>th</sup> Larval Fish Conference, Bergen, Norway. [oral; delivered by Deary].
- \*Deary, A. L., & E. J. Hilton. 2012. Comparison of lower jaw levers in the oral jaws of early life history stage drums (Family Sciaenidae) of the Chesapeake Bay. Society of Integrative and Comparative Biology. Charleston, SC [oral; delivered by Deary].
- \*Deary, A. L., & E. J. Hilton. 2011. Comparative ontogeny of the oral jaws in the drums (Sciaenidae) of the Chesapeake Bay with comparisons to the freshwater drum, *Aplodinotus grunniens*. American Society of Ichthyologists and Herpetologists. Minneapolis, MN [oral; delivered by Deary].
- Dillman, C., K. M. Laumann, & E. J. Hilton. 2011. A novel molecular approach to the systematics of Acipenseriformes. American Society of Ichthyologists and Herpetologists. Minneapolis, MN [poster; delivered by Dillman].
- Dillman, C., K. M. Laumann, & E. J. Hilton. 2011. Developmental ossification of the dermal skeleton in sturgeons (Acipenseridae) and its relation to behavior of early life history stages. American Society of Ichthyologists and Herpetologists. Minneapolis, MN [oral; delivered by Dillman].
- Hilton, E. J., & N. K. Schnell. 2011. Osteology and ontogeny of the wrymouth *Cryptacanthodes maculatus* and the dwarf wrymouth *C. aleutensis* (Perciformes: Zoarcoidei: Cryptacanthodidae). American Society of Ichthyologists and Herpetologists. Minneapolis, MN [oral].
- \*Laumann, K. M., C. Dillman, & E. J. Hilton. 2011. Development of the jaws of the white sturgeon, *Acipenser transmontanus* (Acipenseridae). American Society of Ichthyologists and Herpetologists. Minneapolis, MN [poster; delivered by Laumann].
- \*Martin, J. & E. J. Hilton. 2011. A taxonomic revision of lampridiform genera. American Society of Ichthyologists and Herpetologists. Minneapolis, MN [poster; delivered by Martin].
- \*Deary, A. L., & E. J. Hilton. 2011. Diet and habitat use of larval drums (Sciaenidae) in the Chesapeake Bay: relationship to the development of the oral jaws with comparisons to the freshwater drum, *Aplodinotus grunniens*. 35th Annual Larval Fish Conference, Wilmington, NC [oral; delivered by Deary; Sally Richardson Best Student Paper Award runner-up].
- Ribeiro, F., **E. J. Hilton, &** R. Carnegie. 2011. Prevalence and potential impacts of crustacean ectoparasites on larval Atlantic croaker (*Micropogonias undulatus*) in the Chesapeake Bay. 35th Annual Larval Fish Conference, Wilmington, NC [poster; delivered by Ribeiro].
- Schnell, N. K., & E. J. Hilton. 2011. Osteology and ontogeny of the wrymouth *Cryptacanthodes maculatus* and the dwarf wrymouth *C. aleutensis* (Perciformes: Zoarcoidei: Cryptacanthodidae). 35th Annual Larval Fish Conference, Wilmington, NC [poster; delivered by Schnell].

- Ribeiro, F., T. Clardy, A. Deary, E. J. Hilton, & J. E. Olney. 2011. Fish larvae in the York river: the ongoing saga of the Ingress Project. York River Symposium. Chesapeake Bay National Estuarine Research Reserve at VIMS. [oral; delivered by Ribeiro].
- Latour, R. J., E. J. Hilton, P. D. Lynch, T. D. Tuckey, B. E. Watkins, & J. E. Olney. 2011. Evaluating the current status of American shad (*Alosa sapidissima*) stocks in Virginia. York River Symposium. Chesapeake Bay National Estuarine Research Reserve at VIMS. [oral; delivered by Latour].
- Hilton, E. J., & D. Stevenson. 2010. Morphology and developmental osteology of the Prowfish *Zaprora silenus* (Zoarcoidei: Zaproridae), with comparisons to other zoarcoid fishes. American Society of Ichthyologists and Herpetologists. Providence, RI. [oral].
- Ribeiro, F., E. Hale, T. Clardy, A. Deary, **E. J. Hilton**, T. E. Targett, & J. E. Olney. 2010 Patterns of early life stage fish ingress into Chesapeake and Delaware Bay. American Society of Ichthyologists and Herpetologists. Providence, RI. [oral; delivered by Ribeiro].
- \*Clardy, T., & E. J. Hilton. 2010. Oteology of the prickleback genus *Xiphister* Perciformes: Zoarcoidei: Stichaeidae) with comparisons to other stichaeids. American Society of Ichthyologists and Herpetologists. Providence, RI. [poster; delivered by Clardy].
- \*Martin, J., & E. J. Hilton. 2010. Distribution of taeniosomous Lampridiformes in Australian and New Zealand waters. American Society of Ichthyologists and Herpetologists. Providence, RI. [poster; delivered by Martin].
- \*Deary, A. L., & E. J. Hilton. 2010. Comparative ontogeny of the oral jaws in the drums (Sciaenidae) of Chesapeake Bay: relationship with diet and habitat use. American Society of Ichthyologists and Herpetologists. Providence, RI. [poster; delivered by Deary].
- Dillman, C. B., & E. J. Hilton. 2010. Towards a predictive taxonomy of sturgeons (Acipenseridae): the preliminary study of morphological and molecular datasets. American Society of Ichthyologists and Herpetologists. Providence, RI. [poster; delivered by Dillman].
- Hilton, E. J. & C. B. Dillman. 2009. Phylogeny of sturgeons (Acipenseridae): A status report. 6<sup>th</sup> International Symposium on Sturgeons. World Society for Conservation of Sturgeon. Wuhan, Hubei, China. [oral].
- **Hilton, E. J.,** G. D. Johnson, & W. F. Smith-Vaniz. 2008. Osteology of *Parastromateus niger*, with comments on its systematic affinities and the gill arches of the family Carangidae. American Society of Ichthyologists and Herpetologists. Montreal, QC, Canada. [oral].
- Campos da Paz, R., E. Hilton, C. Cox Fernandes, J. P. Sullivan, & J. G. Lundberg. 2007.
  Redescrição de *Orthosternarchus tamandua* (Boulenger, 1898) (Apteronotidae:
  Gymnotiformes), com informações sobre sua anatomia, ecologia, descargas do órgão elétrico e afinidades filogenéticas. XVII Encontro Brasileiro de Ictiologia, UNIVALI Itajaí SC [poster; delivered by R. Campos-da Paz].
- Hilton, E. J. 2006. The sister-group of Acipenseriformes: Past problems and potential possibilities. Society of Vertebrate Paleontology. Ottawa, ON, Canada. [poster].
- **Hilton, E. J.** & P. L. Forey. 2006. Fossil marine arowanas and the biogeography of the family Osteoglossidae. American Society of Ichthyologists and Herpetologists. New Orleans, LA. [oral].

- Mabee, P., M. Westerfield, M. Haendel, M. Coburn, E. Hilton, J. Lundberg, C. Lushbough, R. Mayden, N. Rios, & G. Arratia. 2005. Relating evolutionary and model organism phenotypes using ontologies. First International Biocurator Meeting (Genetics Society of America). Pacific Grove, CA. [poster; delivered by P. Mabee].
- \*Williston, A., A. Whynot, E. J. Hilton, & W. E. Bemis. 2005. Observations on the pattern and microanatomy of platelets and caudal scales of *Acipenser brevirostrum*. Fourth International Meeting on Mesozoic Fishes – Systematics, Homology, and Nomenclature. Madrid, Spain. [poster; delivered by A. Williston].
- \*Whynot, A., A. Williston, E. J. Hilton, & W. E. Bemis. 2005. Ossifications associated with the trunk lateral line canal of *Acipenser brevirostrum*, with comparisons to dorsal and ventral scute rows. Fourth International Meeting on Mesozoic Fishes – Systematics, Homology, and Nomenclature. Madrid, Spain. [poster; delivered by A. Whynot].
- Hilton, E. J. & G. D. Johnson. 2005. Ontogeny and primary homology: an example from the developmental osteology of the caudal skeleton of carangid fishes. Fourth International Meeting on Mesozoic Fishes – Systematics, Homology, and Nomenclature. Madrid, Spain. [oral]; unscheduled replacement talk.
- **Hilton, E. J.** 2005. The sister-group of Acipenseriformes: a review of possible candidates. Fourth International Meeting on Mesozoic Fishes – Systematics, Homology, and Nomenclature. Madrid, Spain. [oral].
- **Hilton, E. J.** & G. D. Johnson. 2005. Developmental osteology of the caudal skeleton of *Caranx crysos*. American Society of Ichthyologists and Herpetologists. Tampa, FL. [oral].
- Cox Fernandes, C., E. J. Hilton, R. Campos-da-Paz, J. Sullivan, & J. Lundberg. 2005. Biology and morphology of the enigmatic South American electric knifefish *Orthosternarchus tamandua*. American Society of Ichthyologists and Herpetologists. Tampa, FL. [oral; delivered by C. Cox Fernandes].
- Cox Fernandes, C. & E. J. Hilton. 2005. Dimorphismo sexual em *Apteronotus bonapartii* (Castelnau) (Gymnotiformes): morfometria e osteologia. Sixteenth Congress of Brazilian Ichthyology, Sociedade Brasileira de Ictiologia. João Pessoa, Brazil [poster].
- Hilton, E. J., L. Grande, & W. E. Bemis. 2004. Developmental, descriptive, and comparative osteology of sturgeons (Actinopterygii, Acipenseriformes, Acipenseridae). Seventh International Congress of Vertebrate Morphology. Boca Raton, FL. [oral].
- Hilton, E. J., L. Grande, & W. E. Bemis. 2004. Comparative skeletal anatomy and evolution of sturgeons (Acipenseridae). American Society of Ichthyologists and Herpetologists. Norman, OK. [oral].
- Cox Fernandes, C. & E. J. Hilton. 2004. Osteological basis for sexual dimorphism in *Apteronotus bonapartii* (Castelnau) (Gymnotiformes). American Society of Ichthyologists and Herpetologists. Norman, OK. [oral; delivered by C. Cox Fernandes].
- **Hilton, E. J.** & L. Grande. 2003. The fossil record of sturgeons (Actinopterygii: Acipenseriformes: Acipenseridae). Society of Vertebrate Paleontology. St. Paul, MN. [oral].

- Kley, N. J., E. J. Hilton, & A. M. Richmond. 2003. Comparative morphology of the pelvic apparatus of snakes. Society of Integrative and Comparative Biology. Toronto, Ontario, Canada. [oral; delivered by N. J. Kley].
- Hilton, E. J. 2002. Phylogeny of fossil and living osteoglossomorph fishes. Society of Vertebrate Paleontology. Norman, OK. [oral].
- Kley, N. J., E. J. Hilton, & A. M. Richmond. 2002. Comparative morphology of the pelvic apparatus of snakes. American Society of Ichthyologists and Herpetologists. Kansas City, MO. [oral; delivered by N. J. Kley].
- **Hilton, E. J.** 2002. Phylogeny of osteoglossomorph fishes based on comparative osteology. American Society of Ichthyologists and Herpetologists. Kansas City, MO. [oral].
- Hilton, E. J. & L. Grande. 2001. Osteology of *Eohiodon* (Teleostei: Hiodontiformes) based on new acid-prepared specimens from the Green River Formation (Eocene) of Wyoming. Society of Vertebrate Paleontology. Bozeman, MT. [oral].
- Hilton, E. J., L. Grande & W. E. Bemis. 2001. Morphology of *†Coccolepis bucklandi* Agassiz 1843 (Actinopterygii) from the Solnhofen lithographic limestone deposits (Late Jurassic, Germany). Mesozoic Fishes 3 – Systematics, Paleoenvironments and Biodiversity. Serpiano, Switzerland. [oral].
- Hilton, E. J. 2001. Osteology of the teleostean genus *Hiodon* and the phylogeny of Osteoglossomorpha. American Society of Ichthyologists and Herpetologists. Pennsylvania State University, State College, PA. [oral].
- **Hilton, E. J.** 2001. Morphological complexity and simplicity of the axial skeleton of Teleostei. Society of Integrative and Comparative Biology. Chicago, IL. [oral].
- **Hilton, E. J.** 2000. Gulf Coast ichthyology, collection building, and the Alabama Deep Sea Fishing Rodeo. Second Midwest regional meeting of the Division of Vertebrate Morphology (SICB). Augustana College, Rock Island, IL. [oral].
- Hilton, E. J. 2000. Rostral canal bones of sturgeons: a search for new characters in old fishes. Second Midwest regional meeting of the Division of Vertebrate Morphology (SICB). Augustana College, Rock Island, IL. [oral].
- Hilton, E. J. 2000. Complexity and simplicity in the teleostean vertebral column. Tenth Northeast regional meeting of the Division of Vertebrate Morphology (SICB). University of Massachusetts, Amherst, MA. [oral].
- Hilton, E. J. 1999. The temporal fossa, foramen, and fenestra of basal teleost fishes. Ninth Northeast regional meeting of the Division of Vertebrate Morphology (SICB). Brown University, Providence, RI. [oral].
- Hilton, E. J. 1999. Variation of the "parasphenoid-tongue bite" in osteoglossomorph fishes (Teleostei). Major Events in Early Vertebrate Evolution Palaeontology, Phylogeny, and Development. London, England. [poster].
- Hilton, E. J. 1999. Comparative morphology of the "parasphenoid-tongue bite" in basal teleost fishes. Society of Integrative and Comparative Biology. Denver, CO. [oral].

- Bemis, W. E. & E. J. Hilton. 1999. Observations on the functional morphology of the lookdown, *Selene vomer* (Perciformes: Carangidae). Society of Integrative and Comparative Biology. Denver, CO. [poster].
- Hilton, E. J. 1998. Structure and function of osteoglossomorph feeding. Eighth Northeast regional meeting of the Division of Vertebrate Morphology (SICB). Harvard University, Cambridge, MA. [oral].
- Hilton, E. J. & W. E. Bemis. Variation in some dermal and chondral components of the skeleton of shortnose sturgeon (*Acipenser brevirostrum*). 1998. Society of Integrative and Comparative Biology. Boston, MA. [oral].
- Hilton, E. J. 1998. Paedomorphic characters or paedomorphic clades? First Meeting of the Julia B. Platt Club. Boston, MA. [oral].
- Hilton, E. J. & W. E. Bemis. 1997. Skeletal variation in shortnose sturgeon (*Acipenser brevirostrum*) from the Connecticut River: Implications for the study of fossil fishes. Second International Meeting on Mesozoic Fishes Systematics and Fossil Record. Buckow, Germany. [oral].
- Hilton, E. J. & W. E. Bemis. 1997. Skeletal variation in shortnose sturgeon (*Acipenser brevirostrum*) from the Connecticut River. American Society of Ichthyologists and Herpetologists. Seattle, WA. [oral].

## **PROFESSIONAL SERVICE**

#### **Professional Service Activities**

#### **College-wide committee service**

Institutional Animal Care and Use Committee; 2015-2022.

Faculty Hearing Committee; 2020-present

Diversity, Equity, and Inclusion Advisory Committee; 2020-2021.

Diversity, Equity, and Inclusion Leadership Council; 2021-2022.

Faculty Hiring Proposal to Increase Diversity Review Committee, 2021; *ad hoc* committee appointed by Provost

## **SMS/VIMS Governance**

#### Standing committee service:

Diversity and Inclusion Steering Committee: Member & Secretary; 2016-2022.

- Search Committee, Organismal Fish Ecologist; 2013-2014; K. Weng hired.
- Admissions Committee: Member; 2009-2013 (stepped down in 2013 due to research leave).
- Educational Policy Committee: Member, 2009-2021; Chair: 2010-2013, 2014-2021 (stepped down as Chair in 2013-2014 due to research leave).
- Faculty Status and Tenure Review Committee: Member, 2012-2015 (stepped down 2013-2014 due to research leave); 2021-present.

Seminar Committee: Member, 2021-2022.

Thesis and Dissertation Defense Exam Moderator: 2021-present.

#### Ad hoc and award committee service:

VIMS Strategic Planning Committee: member, lead on DEI; 2021-2022.

William & Mary Plumeri Award for Faculty Excellence interview selection committee, 2021

VIMS Bay Data Strategic Planning Committee: member, 2021

VIMS Task Force on Diversity, Inclusion, and Equity: co-Chair (with D. Robinson); 2019.

John E. Olney, Sr. Ichthyology Award Committee: Member, 2010-present.

Graduate Student Handbook-Graduate Catalog Committee (ADAS): spring 2012.

# Editorial Board Services, review panels, program reviews, national or international research programs

## Editorial positions:

Associate Editor, 2019-present. Zoological Journal of the Linnean Society.
Editorial Board, member. 2010-present. Organisms Diversity and Evolution.
Editorial Board, member, 2017-present. Acta Zoologica (Stockholm)
Guest Editor, 2019. Northeastern Naturalist
Editor, 2012-2019. Zootaxa (for Marine and Estuarine Fishes).
Subject Editor (Fish Larvae Taxonomy and Biology). 2015-2017. Marine Biology Research.
Associate Editor. 2003-2013. Journal of Paleontology.
Editorial Board, member. 2001-2008. Copeia.

## Manuscript peer review (in the last two years):

Acta Palaeontologica Polonica; Copeia; Environmental DNA; Journal of Anatomy; Journal of Fish Biology; Journal of Morphology; Journal of Vertebrate Paleontology; Ichthyological Explorations of Freshwaters; Neotropical Ichthyology; Palaeontology; PLoS One; Royal Society Open Science; Southeastern Naturalist; Zootaxa.

## Grant proposal review:

Leverhulme Trust (2021) St. Mary's University On-Campus Faculty Grant Program (2014) National Geographic Society (2010, 2011, 2013) National Science Foundation (2002, 2009, 2010, 2011, 2018) National Oceanic and Atmospheric Administration (Fisheries) (2015) New Jersey Sea Grant (2015) M.J. Murdock Charitable Trust (2008) Research Foundation Flanders (FWO) (2011) German-Israeli Foundation (2012) Hudson River Foundation (2017)

## Grant review panels:

National Science Foundation, Directorate for Biological Sciences, Panelist (2014)

National Science Foundation, Directorate for Biological Sciences, Panelist (2017)

National Science Foundation, Directorate for Biological Sciences, Panelist (2021)

# **Other Review Activities:**

Oxford University Press: Book proposal/manuscript review (2016)

# Service to professional societies

# **Elected positions:**

- 2022-2024. Robert H. Gibbs, Jr. Memorial Award Committee, American Society of Ichthyologists and Herpetologists (member 2022-2024; chair 2024).
- 2020-present. Treasurer, International Society for the History and Bibliography of Herpetology
- 2018-2020. Robert K. Johnson Award Committee, American Society of Ichthyologists and Herpetologists (member 2018-2020; chair 2020).
- 2011-2013. Robert H. Gibbs, Jr. Memorial Award Committee, American Society of Ichthyologists and Herpetologists (member 2011-2013; chair 2013).
- 2015-2019. Board of Governors, American Society of Ichthyologists and Herpetologists.

2009-2013. Board of Governors, American Society of Ichthyologists and Herpetologists.

# Appointed positions:

- 2021. Best Papers in *Copeia* 2020, Ichthyology. American Society of Ichthyologists and Herpetologists; appointed by ASIH Editor W. Leo Smith. [*ad hoc* committee]
- 2019- present. Chair, Symposium Review Committee. American Society of Ichthyologists and Herpetologists; appointed by ASIH President Kassi Cole. [*ad hoc* committee]
- 2019. Co-chair, Judges Committee, American Society of Ichthyologists and Herpetologists; appointed by ASIH President Kassi Cole, served with Chris Beachy, ASIH President Elect. [standing committee]
- 2013-2016. Committee for the 100<sup>th</sup> Anniversary of the American Society of Ichthyologists and Herpetologists; member and chair; appointed by ASIH President W. J. Matthews. [*ad hoc* committee]
- 2017-present. Long Range Planning and Policy Committee; American Society of Ichthyologists and Herpetologists; member; appointed by ASIH President Maureen Donnelly. [standing committee]
- 2017-present. History of the Society Committee; American Society of Ichthyologists and Herpetologists; member; appointed by committee chair, David Smith. [standing committee]

# Volunteer activities:

2018-2020. Local Host Committee, Chair, 2020 Joint Meeting of Ichthyologists and Herpetologists, originally scheduled to be held in Norfolk, VA, July 2020. Canceled due to the COVID-19 pandemic, and rescheduled to July 2023 [I have agreed to serve as the Chair of the local committee for this rescheduled meeting]

- 2008, 2009, 2013. Judge, Stoye Award Committee (Best Student Oral Presentation), Annual meeting of the American Society of Ichthyologists and Herpetologists.
- 2005, 2007, 2010. Judge, Storer Award Committee (Best Student Poster Presentation), Annual meeting of the American Society of Ichthyologists and Herpetologists.

## Current professional society memberships:

American Society of Ichthyologists and Herpetologists The Linnean Society of London (Fellow) International Society for the History and Bibliography of Herpetology Society for the Preservation of Natural History Collections Society for the History of Natural History Early Life History Section AFS (Affiliate Member) Southeastern Fishes Council North American Native Fishes Association Virginia Natural History Society Virginia Herpetological Society

# **ADVISORY SERVICE ACTIVITY**

## Regional, national or international management commissions or programs

- 2022. Northeast Fish and Wildlife Diversity Technical Committee, Northeast Regional Species of Greatest Conservation Need review team for marine and diadromous fishes.
- 2016, 2020. International Union for Conservation of Nature (IUCN) assessment team for North American sturgeons and paddlefishes; member and lead reviewer for Atlantic Sturgeon.
- 2016-present. Virginia Alosine Task Force, member. Research and Monitoring subcommittee, (2018-present).
- 2014-2020. Atlantic States Marine Fisheries Commission/National Oceanographic and Atmospheric Administration Fisheries Joint River Herring Technical Expert Working Group, member
- 2012-2013. Chesapeake Bay Program American Shad Indicator Action Team, member
- 2012-present. Atlantic States Marine Fisheries Commission, Atlantic Sturgeon Technical Committee, Virginia Representative.
- 2009-2022. Atlantic States Marine Fisheries Commission, Shad and River Herring Technical Committee, Virginia Representative.
- 2008-2010. National Marine Fisheries Service/Atlantic States Marine Fisheries Commission, Atlantic Sturgeon Research Protocol Working Group, member.

# Public outreach (K – 12, private organizations, citizenry) (since 2007)

In addition to specific activities below, I respond to inquiries related to vertebrate biology by the public. I also routinely provide tours of the VIMS Nunnally Ichthyology Collection for visitors to VIMS, through both the Department of Communications and other academic and administrative departments, and I annually participate in the VIMS Marine Science Day open house.

- Friends of the Dragon Run, June 2022; online presentation titled *Fishes of the Dragon: Hidden Treasures of the Middle Peninsula* to 30+ members of the public.
- Williamsburg Public Library Public Seminar Series, May 2022; presentation titled *The Story of the Coelacanth* to 30+ members of the public.
- Seaford Yacht Club, Seadog Seminar Series, February, 2021; online presentation titled *The Story of the Coelacanth* to 35+ members of the public.
- After Hours Lecture, January 2021; presentation titled *RecFish: Engaging Recreational Anglers as Community Scientists.* M. L. Kellogg & E. J. Hilton to 40+ members of the public.
- Science Museum of Virginia Lunch Break Science, July 2020; online presentation titled *What can you do with a preserved shark (and other animals and plants)?* To 80+ members of the public.
- After Hours Lecture (VIMS), March 2019; presentation titled *The Story of the Coelacanth* to 160+ members of the public.
- CBNEER Discovery Lab, June 2018, presentation on the Nunnally Ichthyology Collection at VIMS to 50+ members of the public.
- Presented on paddlefishes and the caviar industry at the 2018 Champagne and Caviar Chase at the 8<sup>th</sup> Annual Wine and Run for the Roses event at the Muscarelle Museum of Art
- Shark Week, July 2015; discussed shark biology and specimens from the VIMS Nunnally Ichthyology Collection at the Virginia Living Museum; 1,200 museum visitors.
- CBNEER Discovery Lab, January 2013, presentation on sturgeon biology to 100+ members of the public, primarily children.
- Gloucester High School Senior Boards, 2010-2011, shadowed by a senior high school student (Ms. Samantha Prince).
- Public seminar, May 2009; presentation on invasive species of the Chesapeake Bay to the annual meeting of the East Coast Camano Owners.
- Public seminar, April 2009; presentation on sturgeon evolution and biology; Eastern Shore Lab (VIMS).
- After Hours Lecture (VIMS), February 2009; presentation on invasive species of the Chesapeake Bay to 50+ members of the public.
- Mentor, Virginia Governor's School Marine Science Apprenticeship Program, June-July 2008; served as mentor for Ms. Lauren Horton.
- After Hours Lecture (VIMS), January 2008; presentation on sturgeon evolution to 60+ members of the public.
- CBNEER Discovery Lab, January 2008, presentation on shark biology to 100+ members of the public, primarily children.

#### **Civic Outreach and Engagement**

2018 – 2022 Chair of Kingspoint Neighborhood Social Committee

| 2020 - 2021 | Co-chair Diversity and Inclusion Committee, Matthew Whaley<br>Elementary School (Williamsburg-James City County School District)<br>Parent-Teacher Association (inaugural committee, formed in 2020; with<br>Muricia Perry) |
|-------------|---|
| 2021 - 2022 | Vice-President for Membership, Matthew Whaley Elementary School<br>(Williamsburg-James City County School District) Parent-Teacher<br>Association (PTA)   |