

## Curriculum Vitae

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### Education

B.S.	Univ. of Alabama in Birmingham	Biology	1981
Ph.D.	Old Dominion University	Oceanography	1989
Postdoc	Johns Hopkins University	Molecular Genetics	1989-90
	East Carolina University		1990-91

### Academic Appointments

Professor and Chair of Biology, University of New Hampshire	2018-present
Professor of Biology, Virginia Commonwealth University	2008-2018
Associate Professor of Biology	1998-2008
Assistant Professor of Biology	1992-1998
Research Assistant Professor of Biology	1991-1992
Affiliate Faculty Member, VCU Department of Forensic Science	2013-2018

### Research

*Publications past six years* (\*student coauthor, §postdoc, contact author)

Reddington K, 22 co-authors, **B Brown**. *in press*. Metagenomic analysis of planktonic riverine microbial consortia using nanopore sequencing reveals urban influence on river ecology. *GigaScience*.

Hamner S, **BL Brown**, NA Hasan, MJ Franklin, J Doyle, MJ Eggers, RR Colwell, TE Ford. 2019. Metagenomic profiling of microbial pathogens in the Little Bighorn River, Montana. *International Journal of Environmental Research and Public Health*. 16: 1097. doi:10.3390/ijerph16071097.

Jenkins JA, Chauvin MD, Johnson D, **Brown BL**, Bailey J, Kelly AM, Kinter BT. 2019. Defensible Standardized Ploidy Assessments for Grass Carp (*Ctenopharyngodon idella*, Cyprinidae) Intercepted from the Commercial Supply Chain. *J Great Lakes Reviews* 45:371-383. Doi:

Koch J, C Steffen, J Goekler, R Marteney, J Jagels, **B Brown**. 2018. Comparison of diploid and triploid saugeye in Kansas impoundments. *North American Journal of Fisheries Management*. DOI: 10.1002/nafm.10044.

**Brown BL**, M Watson, SS Minot, MC Rivera, RB Franklin. 2017. MinION™ nanopore sequencing of environmental metagenomes: a synthetic approach. *GigaScience*. 6:1-10. <https://doi.org/10.1093/gigascience/gix007>. *Lead article*.

Jain M, JR Tyson, M Loose, CLC Ip, DA Eccles, J O'Grady, S Malla, RM Leggett, O Wallerman, HJ Jansen, V Zalunin, E Birney, **BL Brown**, TP Snutch, HE Olsen. 2017. MinION Analysis and Reference Consortium: Phase 2 data release and analysis of R9 chemistry. [version1; referees: 1 approved] *F1000Research* 2017. 6:760. <https://f1000research.com/articles/6-760/v1>

Jenkins, JA, RO Draugelis-Dale, RP Glennon, AM Kelly, **BL Brown**, JR Morrison. 2017. An accurate method for measuring triploidy of larval fish spawns. *North American Journal of Aquaculture*. 79:224-237. <http://dx.doi.org/10.1080/15222055.2017.1296517>

- Ip CLC, Loose M, Tyson JR, deCesare M, **Brown BL**, and 18 others. 2015. MinION analysis and reference consortium: Phase 1 data release and analysis. [version 1; referees: 2 approved] *F1000Research* 2015. 4:1075. doi: <http://dx.doi.org/10.12688/f1000research.7201.1>
- Brown BL**, RV LePrell, RB Franklin, MC Rivera, FM Cabral, HL Eaves\*, V Gardiakos\*, KP Keegan, TL King. 2015. Metagenomic analysis of planktonic microbial consortia from a non-tidal urban-impacted segment of James River. *Standards in Genomic Sciences*. 10:65. DOI:10.1186/s40793-015-0062-5.
- Fetherman ER, JM Lepak, **BL Brown**, DJ Harris. 2015. Optimizing times of initiation for triploid walleye production using pressure shock treatment. *North American Journal of Aquaculture* 77:471-477.
- Kester KM, GM Eldeib\*, **BL Brown**. 2015. Genetic differentiation of two host-foodplant complex sources of the parasitic wasp, *Cotesia congregata* (Say) [Hymenoptera: Braconidae]. *Annals of the Entomological Society of America: Ecology and Population Biology*. 108:1014-1025. doi: <http://dx.doi.org/10.1093/aesa/sav088>
- King TL, MS Eackles, AW Aunins, HJ Brockmann, E Hallerman, **BL Brown**. 2015. Conservation genetics of the American horseshoe crab (*Limulus polyphemus*): allelic diversity, zones of genetic discontinuity, and regional differentiation. Chapter 4 in: RH Carmichael, ML Botton, PKS Shin and SG Chueng eds. Changing global perspectives on biology, conservation, and management of horseshoe crabs. Springer, New York. ISBN 978-3-319-19542-1.
- King TL, AP Henderson, BE Kynard, MC Kieffer, DL Peterson, AW Aunins, **BL Brown**. 2014. A nuclear DNA perspective on delineating evolutionarily significant lineages in polyploids: the case of the endangered shortnose sturgeon (*Acipenser brevirostrum*). *PLoS One*. 9: e102784
- Kellogg ML, AR Smyth\*, MW Luckenback, RH Carmichael, **BL Brown**, JC Cornwell, MF Piehler, MS Owens, DJ Dalrymple, CB Higgins\*<sup>§</sup>. 2014. Use of oysters to mitigate eutrophication in coastal waters. *Estuarine, Coastal and Shelf Science*. 151: 156-168. *Invited feature*.
- Caplins\* SA, CJ Friedline\*, **BL Brown**, JM Turbeville. 2014. Microsatellites of the self-compatible nemertean *Proserothochmus americanus* (Hoplonemertea). *Conservation Genetics Resources*. DOI 10.1007/s12686-014-0380-8.
- Michalak K, S Czesny, J Epifanio, R Snyder, E Schultz, J Velotta, S McCormick, **B Brown**, G Sanotopietro, P Michalak. 2014. Beta-thymosin gene polymorphism facilitates freshwater invasiveness of alewife (*Alosa pseudoharengus*). *Journal of Experimental Zoology*. 321A:233-240. *Cover illustration*.
- Aunins\*<sup>§</sup> AW, JM Epifanio, **BL Brown**. 2014. Genetic evaluation of supplementation-assisted American shad restoration in James River, Virginia. *Marine and Coastal Fisheries*. 6:1, 127-141. Doi: 10.1080/19425120.2014.893465

#### *Grants Awarded past six years*

- State of Utah. “Walleye triploidy.” B Brown (PI). 2020-2025. \$312K.
- Hatch. “Uncertain times for oyster aquaculture in Great Bay Estuary: quantifying connections between farmed and wild oysters and refining our understanding of disease effects.” B Brown (PI), R Grizzle, T Lippmann, K Ward, L Brown (Coop. Pers.). 2020-2023. \$60K.
- NH Sea Grant Summer Project. “Creating a deposition baseline for modeling microplastic particle distribution in Great Bay Estuary” B Brown (PI), T Lippmann, G Bradt, J Dijkstra (Co-PIs). 2019. \$6.8K.
- UNH CoRE. “Interdisciplinary working group on marine genomics in the Gulf of Maine.” D Plachetski and B Brown (Co-PIs). 2019-2020. \$7.5K.
- National Science Foundation (DEB). “Climate change effects on coastal wetlands – Linking microbial community composition and ecosystem responses” RB Franklin (PI), BL Brown and S Neubauer (Co-PIs). 2014-2018, \$779K.

USGS-ICES. “Use of a sustained-release chemical delivery device in assessing effects of systemic insecticides.” J Jenkins (PI), B Brown (**Co-PI**). 2016-2018. \$36.8K.  
Garden Club of Virginia. “Defining the rhizosphere metagenome of the pitcher plant, *Sarracenia flava*, to aid conservation efforts.” N Andresen\* (PI) and BL Brown (**host**). 2015-2016. \$4K.  
Rice River Center. “A PCR-based method of detecting *Crassostrea virginica* in the gut of *Stylochus ellipticus*. A Reinertson\* (PI) and BL Brown (**host**). 2014-2015. \$500.  
Rice River Center. “Understanding the role of *Stylochus ellipticus* as a predator of *Crassostrea virginica* in Chesapeake Bay tributaries.” M Barker\* (PI) and BL Brown (**host**). 2013-2014. \$500.

### *Proposals Pending*

National Science Foundation (DEB). “BII-Design: From the mountains to the sea: biology integration to understand adaptation in a changing climate.” BL Brown (**PI**), M Howey, M Ducey, and L Tisa (Co-PIs), and 25 additional Sr. Personnel. 2020-2022. \$198K  
National Science Foundation (ICE EarthCube). “Collaborative Research: EarthCube Data Capabilities: GEOMICROS: GEOScience Microbial Integration of Community ResOURCES and Standards.” EL Aronson (PI), BL Brown, A Castronova, KA Lehnert, E Mayorga (**Co-PIs**). 2020-2023. \$626K  
National Science Foundation (DEB). “Collaborative Research: The effects of saltwater intrusion on nitrogen cycling in tidal freshwater wetlands.” RB Franklin (PI), BL Brown and S Neubauer (**Co-PIs**). 2020-2023. \$1,499,101 (Brown portion is \$343K)  
USDA AFRI. “Developing sustainable and profitable aquaponic model systems through a systematic approach of optimizing production processes to marketing success.” HP Wang (PI), B Brown and T Guerdat (**Co-PI**). 2020-2024. \$5M (Brown portion is \$410K)  
NIH. “Metagenomic-based testing of water quality” S Hamner (PI), B Brown (**Collaborator**).

*Postdoctoral Scholars Sponsored with External Funds – 11*

*Visiting Scientists who worked in my lab – 2*

*Graduate Students Completed – 29 – 4 PhD and 25 MS*

*Thesis and Dissertation Committees – 53*

*GTAs and GRAs Supervised – 27*