Sveinn Valtyr Einarsson

seinarsson@ufl.edu 757-447-802 in/sveinarsson https://github.com/seina001

EXPERIENCE

Post doctoral research associate

University of Florida / USDA GBRU Affiliate **January 2022 - Present, Gainesville, FL**

- Package genomic software for ease of distribution and use by scientists in bioinformatic pipelines.
- Upgraded ITSxpress python package for use with new versions of bioinformatic pipelines, as a plugin for Qiime2. Upgrades included fixing bugs, resolving dependency issues, Docker containerization, continuous integration, git/github version control, conda packaging and benchmarking on HPC.
- Currently researching bacterial infections of roots and plant seed microbiomes, using bayesian networks, metagenomics, and/or exo-metabolomics data.

Visiting Assistant Professor of Biology

Haverford College **October 2021 - December 2021, Haverford, PA**

- Taught 2 courses:
    - o BIO450 Advanced Topics in Biology: Biogeochemical Modeling.
    - o BIO300 Advanced Lab in Biology (Co-instructor with Dr. Kristen Whalen).

Graduate Research/Teaching Assistant

Old Dominion University **August 2016 - September 2021, Norfolk, VA**

- DNA/RNA extraction, amplification, and high-throughput sequencing; Cloning; Quantitative PCR; diatom culturing, trace metal clean incubations, RNA-seq.
- Field experience:
- 2019 (Oct-Nov) S. A. Aghullas II; SCALE 2019. Field and incubation sampling of DNA/RNA, dissolved iron, nitrate, and nitrogen isotopes.
- 2018 (Sept-Nov) R/V Revelle; GEOTRACES GP15, Pacific Ocean. Deployment of a trace metal clean rosette and GeoFish, DNA/RNA sample collection, single cell analysis and trace metal clean sampling for SXRF (synchrotron radiation X- ray fluorescence).
- 2016 (Sept-Oct) R/V I/B Nathaniel B. Palmer; Southern Ocean. Deployment of trace metal clean rosette, DNA/RNA and metatranscriptomic sample collection, dissolved iron and total metal sampling.
- Graduate Teaching Assistant, Introduction to Oceanography (Dr. Shannon Wells primary instructor)

EDUCATION

Doctor of Philosophy, Oceanography

Old Dominion University • Norfolk, VA • 2021

Master of Science, Ocean and Earth Science

Old Dominion University • Norfolk, VA • 2018

Bachelor of Science, Ocean and Earth Science

Minor in Computer Engineering • Old Dominion University • Norfolk, VA • 2016

Matricular Examination with Physics concentration

Verslunarskóli Íslands • Reykjavik, Iceland • 2011

PUBLICATIONS

Peer reviewed publications:

Einarsson S.V, Lowry K., Ashjian C., Lin P., Pickart R., Chappell P. D.. (2022),

Alexandrium on the Alaskan Beaufort Sea shelf: Impact of upwelling in a warming Arctic. Harmful Algae, 120: 102346.

Abdala, Z.M., Clayton, S., Einarsson, S.V., Powell, K., Till, C.P., Coale, T.H. and Chappell, P.D. (2022), Examining ecological succession of diatoms in California Current System cyclonic mesoscale eddies. Limnol Oceanogr, 67: 2586-2602.

Selden C. R., Einarsson S. V., Lowry Kate, Crider K. E., Pickart R. S., Lin P., Ashjian C., Chappell P. D. (2022). Coastal upwelling enhances abundance of a symbiotic diazotroph (UCYN-A) and its haptophyte host in the Arctic Ocean. Fron in Mar Sci, 9. * Co-first author

Publications complete and will be submitted following collaborator review:

Sveinn Einarsson and Adam R. Rivers. ITSxpress revisited. JORS.

Sveinn V. Einarsson, Kim Powell, Claire Till, Tyler Coale, P. Dreux Chappell. Diatom Community Response to Two Upwelling Plumes in the California Current System. Mar Ecol Prog S.

PROGRAMMING EXPERIENCE

7+years Python, Matlab, Shell. In addition to several years of experience with R, C++ and Assembly.

NVIDIA DLI – Fundamentals of Deep Learning Certificate

OUTREACH & PROFESSIONAL SERVICE

2017-2021 Blue Crab Bowl Volunteer

2016-2018 Science outreach with VA Young Scientist‘s Program

2017 Guest Lecturer for AP Environmental Science and AP Marine Biology at Cape Henry Collegiate, VA

2014-2017 Virginia Beach EMS Emergency Medical Technician