Andrew Quitadamo

Contact Information

andrew.quitadamo@gmail.com

Education

University of North Carolina at Charlotte, Charlotte, North Carolina

Ph.D., Bioinformatics and Genomics, December 2018

University of New Hampshire, Durham, New Hampshire

B.S., Biochemistry, Molecular and Cellular Biology, May 2013

Experience

Boston Children's Hospital

Bioinformatics Scientist **May 2019 - Present**

Helped maintain a codebase to coordinate a sequencing project for rare disease cohorts and curated variants. Worked with over a dozen diseases and investigators to find variants of interest in patients.

Skills

Experienced: Python, R, Git/GitHub, Unix/Linux Shell, LaTeX
Familiar: Java, Matlab, Javascript, AWS

Research Experience

University of North Carolina at Charlotte

Shi Lab **January 2014 - December 2018**

Developing network models of eQTLs, and applied eQTL analysis techniques to cancer data. Analyzed the impact of structural variants on gene expression. Developed an eQTL analysis pipeline software package.

Janies Lab **August 2013 - December 2013**

Created a phylogenetic tree of Phlebotominae sandflies using multiple genetic markers.

University of New Hampshire

Thomas Lab **June 2012 - June 2013**

Undergraduate research assistant, studied DNA methylation in *C. elegans*.

Teaching Experience

Teaching Assistant **August 2017-December 2017**

BINF 6112/8112 - Bioinformatics Programming I
Co-taught Introduction to Bioinformatics Programming. Prepared and gave lectures on the command line and Python basics during the first month of the semester.

Teaching Assistant **January 2016-May 2016**

BINF 6112/8112 - Bioinformatics Programming II
Taught lab section of Python programming and guest lectured. Taught classes on text editors, Git and GitHub, unit testing and other subjects.

Teaching Assistant **January 2015-May 2015**

BINF 6112/8112 - Bioinformatics Programming II
Taught lab section of Python programming.

Honors and Awards

Essam El-Kwae Student-Faculty Research Award 2016

GAANN Fellowship 2016

University Scholar 2012, 2013

Selected Publications

Xie R, Wen J, **Quitadamo A**, Cheng J, Shi X. "A deep auto-encoder model for gene expression prediction". BMC Genomics 2017. 18(Suppl 9): 845. doi:10.1186/s12864-017-4226-0

Wen J, **Quitadamo A**, Hall B, Shi X. "Epistasis analysis of microRNAs on pathological stages in colon cancer based on an Empirical Bayesian Elastic Net method". BMC Genomics 2017. 18(Suppl 7): 756. doi:10.1186/s12864-017-4130-7

Sudmant PH, Rausch T, Gardner EJ, Handsaker RE, Abyzov A, Huddleston J, Zhang Y, Ye K, Jun G, Fritz M et al. The 1000 Genomes Project Consortium, Mills RE, Gerstein MB, Bashir A, Stegle O, Devine SE, Lee C, Eichler EE, Korbel JO. "An integrated map of structural variation in 2,504 human genomes". Nature 2015. 562: 75-81. doi:10.1038/nature15394

The 1000 Genomes Project Consortium. "A Global Reference for Human Genetic Variation". Nature 2015. 562: 68-74. doi:10.1038/nature15393

Hall B, **Quitadamo A**, Shi X. "A Graph Community Approach for Constructing microRNA Networks". Big Data Computing and Communications, 283-293. doi:10.1007/978-3-319-22047-5_23

Quitadamo A, Tian L, Hall B, Shi X. "An Integrated Network of microRNA and Gene Expression in Ovarian Cancer". BMC Bioinformatics 2015, 16(Suppl 5):S5. doi:10.1186/1471-2105-16-S5-S5

Tian L, **Quitadamo A**, Lin F, Shi X. "Methods for Population Based eQTL Analysis in Human Genetics". Tsinghua Science and Technology, 2014. 19(6): 624-634. doi:10.1109/TST.2014.6961031

Social Media

LinkedIn: linkedin.com/in/andrewquitadamo

Github: github.com/andrewquitadamo