BIOGRAPHICAL SKETCH

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NAME: Coyner, Aaron Scott

eRA COMMONS USER NAME (credential, e.g., agency login): COYNERA

POSITION TITLE: PhD Student

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)*

INSTITUTION AND LOCATION	DEGREE (if applicable)	END DATE MM/YYYY	FIELD OF STUDY
Pierce Community College, Lakewood, WA	AS	06/2012	Biology, Chemistry
Pacific Lutheran University, Tacoma, WA	BS	05/2014	Biochemistry
Oregon Health & Science University, Portland, OR	Graduate Student	present	Bioinformatics and Computational Biology

A. Personal Statement

Aaron is a National Library of Medicine Pre-doctoral Fellow studying Bioinformatics and Computational Biomedicine at Oregon Health & Science University (OHSU). He works closely with the i-ROP Consortium studying retinopathy of prematurity. His dissertation work centers around the implementation and use of machine learning algorithms, specifically deep learning, for retinal fundus image quality assessment and abnormal pathological findings for telemedicine applications.

Prior to beginning his PhD, he received his Bachelor of Science in Biochemistry from Pacific Lutheran University in Tacoma, WA. During his undergraduate career, he volunteered with Guide Dogs for the Blind and raised two guide dog puppies. Naturally, this developed into an affinity for the visually-impaired community and a desire to use his undergraduate degree to make an impact within. Following graduation, he sought out a job as a research assistant in an ophthalmic genetics lab at the Casey Eye Institute at OHSU. However, after a couple years, he caught the "data bug," learning that he loved working with data and performing analyses. This led Aaron to the Bioinformatics and Computational Biomedicine program at OHSU.

In addition, Aaron is a teaching assistant for both the PHPM 524 - Introduction to Biostatistics and MATH 630 - Probability & Statistical Inference for Scientists and Engineers at OHSU.

1. Coyner AS, Swan R, Brown JM, Kalpathy-Cramer J, Kim SJ, Campbell JP, Jonas KE, Ostmo S, Chan RVP, Chiang MF. Deep Learning for Image Quality Assessment of Fundus Images in Retinopathy of Prematurity. AMIA Annu Symp Proc. 2018;2018:1224-1232. PubMed PMID: 30815164; PubMed Central PMCID: PMC6371336.

B. Positions and Honors

Positions and Employment

2014 - 2015   Research Assistant I, Casey Eye Institute, Oregon Health & Science University, Portland, OR

2015 - 2016   Research Assistant II, Casey Eye Institute, Oregon Health & Science University, Portland, OR

2016 -   PhD Student, Oregon Health & Science University, Department of Medical Informatics and Clinical Epidemiology, Portland, OR

Other Experience and Professional Memberships

2014 -   Student Member, Association for Research and Vision in Ophthalmology
2016 -   Student Member, American Medical Informatics Association

Honors

2012 - 2014   Provost Merit Scholarship, Pacific Lutheran University
2012 - 2014   Academic Merit Award, Pacific Lutheran University
2012 - 2014   Academic Merit Award, Phi Theta Kappa
2012 - 2014   Larson, Ludwig and Clara Scholarship, Pacific Lutheran University
2016   Fellowship, National Library of Medicine
2017   Travel Grant Recipient, National Eye Institute
2018   Members-In-Training Outstanding Poster Award Finalist, Association for Research in Vision and Ophthalmology

C. Contribution to Science

1. a. Coyner AS, Swan R, Brown JM, Kalpathy-Cramer J, Kim SJ, Campbell JP, Jonas KE, Ostmo S, Chan RVP, Chiang MF. Deep Learning for Image Quality Assessment of Fundus Images in Retinopathy of Prematurity. AMIA Annu Symp Proc. 2018;2018:1224-1232. PubMed PMID: 30815164; PubMed Central PMCID: PMC6371336.

D. Additional Information: Research Support and/or Scholastic Performance

Completed Research Support

T15 LM007088-25   HERSH, WILLIAM R (PI)   07/01/92-06/30/17

Biomedical Informatics Research Training at Oregon Health & Science University

Role: TA