A. Grant Schissler

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GitHub	github.com/grizant

EDUCATION

Pursuing PhD Statistical Informatics 2012-current

University of Arizona, Tucson, AZ

Statistics Graduate Interdisciplinary Program (GIDP)

Advisors: Walter W. Piegorsch (Statistics) & Yves A. Lussier (Biomedical Informatics)

MS Applied Statistics 2009-2011

Kennesaw State University, Kennesaw, GA

Honors Graduate (4.0 GPA)

BS Applied Mathematics 2002-2005

Georgia Institute of Technology, Atlanta, GA

Dean's List, Social/Personality Psychology Certificate

APPOINTMENTS

Research Assistant Fall 2014-

Lussier Lab, Center for Biomedical Informatics & Biostatistics, University of Arizona

Developing statistical informatics methodology for precision medicine with Prof. Yves A. Lussier. Engaging in a truly interdisciplinary effort: working with an expert team of statisticians, physicians, engineers, biologists, geneticists, and computer scientists.

Statistical Consultant 2013-2014

HTG Molecular, Tucson, AZ

Worked with a interdisciplinary team to develop gene expression platforms, design and analyze experiments for process and technical improvement, analyze gene expression for clients, implement advanced R programming and visualization, communicate results to management, and utilize current research findings in a practical setting.

Instructor/Teaching Assistant 2012-2014

University of Arizona

Developed curriculum and served as an instructor of Preparation for University-Level Mathematics. Also taught Statistical Foundations in the Information Age including R programming.

Mathematics Instructor/Athletic Coach 2006-2012

Tri-Cities High School, East Point, GA

Designed and utilized best-practice pedagogy to teach nearly every secondary mathematics course offered in Georgia. Specialized in AP Statistics. Implemented effective classroom management and motivational systems. Designed and delivered professional development for teachers. Displayed dynamic oral/written presentation skills.

PEER-REVIEWED JOURNAL PUBLICATIONS [Stats]

1. Schissler, A.G., Gardeux, V., Li, Q., Anchour, I., Li, H., Piergorsch, W.W., and Lussier, Y.A., "Dynamic changes of RNA-sequencing expression for precision medicine: N-of-1-*pathways* Mahalanobis distance within pathways of single subjects predicts breast cancer survival", *Bioinformatics* **31**, 12 (2015).

COMPUTING SKILLS (13+ years experience)

Programming/Scripting Languages
R *(expert),* SHELL(Bash), PBS/LSF

Statistical Packages
SPSS, SAS 9 *(Certified Advanced Programmer)*, Minitab, R

Operating Systems
Mac OS, Windows, Linux *(Ubuntu)*

Reproducible Research/Publishing
Emacs Org-mode, MS Word, Adobe Illustrator, LaTeX

SYNERGISTIC ACTIVITIES/ASSOCIATIONS

- Contributed to the University of Arizona Health Sciences' participation in the national Precision Medicine Initiative® (Feb 2016)
- Secondary Education Statistics Outreach: Collaboratively developed and delivered motivational statistics presentation for Saguaro High School statistics classes (29 Apr 2015), Catalina HS (29 Jan 2016), Sunnyside HS (12 Feb 2016), Bisbee HS (5 Apr 2016)
- Member: American Statistical Association (ASA), International Society for Computational Biology (ISCB)
- Educator: Clear and Renewable Georgia Educator Certificate Mathematics (6-12)

INVITED TALKS

2. ISMB/ECCB-2015, Dublin, July 2015 (N-of-1-*pathways* MD)

1. 2016 Mathematics Educator Appreciation Day, Tucson, 23 Jan 2016 (Incorporating Quantitatively-Talented and Underrepresented High School Students in Arizona into the Biostatistics Community)

SEMINARS AND COLLOQUIA

2. University of Arizona Biostatistics Seminar, *Statistical Development of N-of-1-pathways MD*, 17 Feb 2016

1. University of Arizona Statistics Student Meeting, *Reproducible Research through GNU Emacs Org-mode*, 18 Feb 2014

POSTER SESSIONS AND SHOWCASES

2. GIDP Student Research Showcase, *N-of-1-pathways for Precision Medicine*, 10 Dec 2015

1. University of Arizona Student Showcase, *N-of-1-pathways for Precision Medicine*, 24 Feb 2016

AWARDS

- 2015 HE Carter Travel Award, Graduate Interdisciplinary Programs, University of Arizona
- 2015 ASA Biometrics Section Funding of Proposed Strategic Initiative: Incorporating quantitatively-talented and underrepresented high school students in Arizona into the biostatistics community. - Grant Co-Investigator

TEACHING

@ U. of Arizona:

- Fall 2012/2013: **SAS100AX: Preparation for University Level Mathematics**
  Instructor: Guided first year students to became independent learners through explicit instruction of metacognition, mathematics learning strategies, performance traits, and rapid skill acquisition. Designed "flipped" classroom curriculum to maximize student learning and engagement. Formerly behind students were retained at much higher rates than on-level students.

- Fall 2012: **ISTA116: Statistical Foundations in the Information Age**
  Teaching Assistant: Led a weekly statistics laboratory. We focused on a broad range of applications with computing solutions via R.

@ Tri-Cities High School, Math Dept.:

- 2008-2012: **AP Statistics**
  Instructor: Received best-practice training from Paul Myers and Josh Tabor among others. Designed and implemented "flipped" classroom curriculum. Grew the statistics program by gaining stakeholder interest, resulting in more than a 50% increase in student enrollment. Increased AP exam success and student awareness of statistical careers. Spearheaded data-driven decision making for student/school initiatives.

- 2006-2012: **Other Secondary Math Courses**
  GPS Advanced Algebra, Discrete Math, Trigonometry, Geometry, Algebra I-III:
  Taught every secondary course available except AP Calculus. Specialized in teaching 11^{th} grade students to prepare them for the Georgia High School Graduation Test (GHSGT). The GHSGT is a major determinant of student and school-wide achievement. Designed and led after-school tutorial programs for GHSGT.