

Anthony Almudevar - Teaching and Mentoring Activities

SUMMARY My mentoring experience includes supervision of 2 postdoctoral trainees and 5 PhD theses, and I have additionally served as member of 17 graduate or undergraduate thesis committees. Both postdoctoral trainees were awarded the prestigious NIH Career Development (K) grant, and one is now Associate Professor at the University of Rochester. One predoctoral trainee is currently a postdoctoral fellow in Biostatistics at Harvard University. Two predoctoral trainees now have faculty appointments at the Rochester Institute of Technology and the Southampton Business School, University of Southampton, and two others went on to careers as mathematical statisticians in research institutions (Mathematical Statistician at the U.S. Food and Drug Administration; Director of Research and Development (Genetics Division) at Nature Source Improved Plants. LLC, Ithaca NY). I have 17 coauthored publications with my predoctoral trainees, and 9 coauthored publications with my postdoctoral trainees.

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January 2, 2026

1. Courses Taught/Scheduled

2026 University of Rochester
• BST412 Statistical Inference II (Graduate Level)
2025 University of Rochester
• PM463 Intro Mathematical Statistics Pt 1(Graduate Level)
2021 University of Rochester
• BST512 Inference for Graphical Models (Graduate Level)
2020 University of Rochester
• BST412 Large Sample Theory (Graduate Level)
• BST411 Statistical Inference (Graduate Level)
2019 University of Rochester
• CSC265/465 Intermediate Statistical and Computational Methods (undergraduate/graduate, Dept. Computer Science/Data Science)
2018 University of Rochester
• BST411 Statistical Inference (Graduate Level)
• CSC265/465 Intermediate Statistical and Computational Methods (undergraduate/graduate, Dept. Computer Science/Data Science)
• CSC462 A Computational Introduction to Statistics (graduate, Dept. Computer Science/Data Science)
2017 University of Rochester
• BST411 Statistical Inference (Graduate Level)
• CSC265/465 Intermediate Statistical and Computational Methods (undergraduate/graduate, Dept. Computer Science/Data Science)
• CSC262/462 A Computational Introduction to Statistics (undergraduate/graduate, Dept. Computer Science/Data Science)
2016 University of Rochester
• CSC265/465 Intermediate Statistical and Computational Methods (undergraduate/graduate, Dept. Computer Science/Data Science)
• BST511 Topics in Statistical Inference (High Dimensional Data Analysis) (Graduate Level)
• BST433 Computational Systems Biology (Graduate Level)
• CSC262/462 A Computational Introduction to Statistics (undergraduate/graduate, Dept. Computer Science/Data Science)
2015 University of Rochester
• CSC262/462 A Computational Introduction to Statistics (undergraduate/graduate, Dept. Computer Science/Data Science)
• CSC262/462 A Computational Introduction to Statistics (undergraduate/graduate, Dept. Computer Science/Data Science)

2014 University of Rochester
<ul style="list-style-type: none"> • BST432 Introduction to Bioinformatics (Graduate Level) • CSC294 A Computational Introduction to Statistics (undergraduate/graduate, Dept. Computer Science/Data Science)
2013 University of Rochester
<ul style="list-style-type: none"> • BST463 Introduction to Biostatistics
2006, 2010, 2012 University of Rochester
<ul style="list-style-type: none"> • BST520 Topics in Bioinformatics (Graduate level)
2003-2005, 2007, 2011 University of Rochester
<ul style="list-style-type: none"> • BST411 Statistical Inference (Graduate Level)
2009 University of Rochester
<ul style="list-style-type: none"> • BST497 Seminars in Statistical Literature (Graduate Level)
2002-2003 Acadia University
<ul style="list-style-type: none"> • Statistics for Business and Behavioural Sciences I • Regression
2001-2002, Acadia University
<ul style="list-style-type: none"> • Statistics for Business and Behavioural Sciences II • Statistics for Life Sciences I, II • Applied Probability for Science and Engineering I
2000-2001, Saint Mary's University
<ul style="list-style-type: none"> • Statistics of Business and Behavioural Sciences II) • Introduction to Mathematical Statistics (2nd, 3rd year) • Stochastic Processes (3rd, 4th year, with graduate students) • Calculus for Engineers II (2nd, 3rd year)
1999-2000, Saint Mary's University
<ul style="list-style-type: none"> • Survey of Statistics (1st year) • Introduction to Probability (2nd, 3rd year)
1998-1999, Dalhousie University
<ul style="list-style-type: none"> • Advanced Statistical Theory (Graduate Level) • Introduction to Statistics for Social Work (all levels) • Introductory Statistics for Sciences and Health Sciences (1st Year)
1997-1998, Dalhousie University
<ul style="list-style-type: none"> • Advanced Statistical Theory (Graduate Level)
1996-1997, Dalhousie University
<ul style="list-style-type: none"> • Introductory Statistics for Sciences and Health Sciences (1st Year) • Probability (Graduate Level)
1995-1996, Dalhousie University
<ul style="list-style-type: none"> • Introductory Statistics for Sciences and Health Sciences (1st Year) • Introduction to Probability and Statistics (1st and 2nd Year) • Probability (3rd and 4th Year)

1994-1995, Dalhousie University
<ul style="list-style-type: none"> • Introductory Statistics for Sciences and Health Sciences (1st Year) • Intermediate Statistical Theory (3rd and 4th Year) • Probability (Graduate Level)
1993-1994, Dalhousie University
<ul style="list-style-type: none"> • Introductory Statistics for Sciences and Health Sciences (1st Year) • Statistical Methods for Data Analysis and Inference (2nd Year) • Stochastic Processes (Graduate Level)
1992-1993, University of Toronto
<ul style="list-style-type: none"> • Introductory Statistics for Engineers (2nd Year)
1991-1992, University of Toronto
<ul style="list-style-type: none"> • Operations Research (3rd and 4th Year)
1990-1991, University of Toronto
<ul style="list-style-type: none"> • Operations Research (3rd and 4th Year)

2. Mentoring Roles

PhD Thesis Advisor (2022-2024)
Luke Duttweiler
Department of Biostatistics and Computational Biology
Dr. Duttweiler wrote his thesis on the statistical estimation of graph complexity in the context of Bayesian network estimation. He is currently a Postdoctoral Fellow at T.H. Chan School of Public Health of Harvard University.
CSC899 Master's in Computer Science Research Project (Spring 2019)
Zonglin Li, Jun Liang, Yanzhao Liang
CSC899 Master's in Computer Science Research Project (Fall 2018)
Jiashun Liu
CSC899 Master's in Computer Science Research Project (Fall 2018)
Jiechun Liu, Jiashun Liu
Postdoctoral Supervisor (2010-2015)
Matthew McCall
Department of Biostatistics and Computational Biology
Dr. McCall worked with me primarily in the area of gene regulatory network modeling, and also on biomarker development. He was awarded a K99/R00 NIH Pathways to Independence Award in 2014. He is currently Associate Professor in the Department of Biostatistics and Computational Biology at the University of Rochester. We have coauthored six publications.

PhD Thesis Advisor (2012-2015)

Thanh Van Tran

Department of Biostatistics and Computational Biology

Ms. Van Tran has completed and successfully defended her thesis “Threshold Boolean Network Inference and Experimental Design” in the area of gene regulatory network modeling in 2015. We have one coauthored publication. In 2013 she was awarded a fellowship under the NIH Student Internship Program (SIP) at the National Center for Environmental Health (NCEH). In 2014 she was awarded a fellowship under the National Science Foundation "East Asia and Pacific Summer Institutes for U.S. Graduate Students" (EAPSI) program to fund a summer internship at Monash University, Melbourne, Australia. She was also awarded a travel stipend to present at the 5th International Conference on Systems Biology, Melbourne, Australia (14-18 Sept 2014). She is currently Mathematical Statistician at the U.S. Food and Drug Administration.

Master’s Thesis Advisor (2012-2016)

Ben Chapman, Assistant Professor

Department of Psychiatry,

University of Rochester Medical Center

Dr. Chapman has completed and successfully defended his thesis “A False Discovery Rate Upper Bound for Two-Stage Testing” in 2016.

PhD Thesis Advisor (graduated 2011)

Jason LaCombe

Dr. LaCombe graduated in 2011 with a thesis on the application of information theoretic techniques in graphical modeling and is currently Director of Research and Development (Genetics Division) at Nature Source Improved Plants. LLC, Ithaca NY. We have coauthored four publications.

Supervisor, Summer Internship (2010)

Srujana Reddy Cheguri

I supervised Ms. Cheguri for a summer internship in 2010. At the time she was a master’s degree candidate in bioinformatics at the Rochester Institute of Technology. I trained her in the fundamentals of the analysis of microarray data, gene set analysis (including use of the well-known GSEA application), R programming and literature review. Following the internship, Ms. Cheguri was offered a position as a research technician in the laboratory of Dr. Kenneth Offit, at the Memorial-Sloan Kettering Cancer Centre. After completing her degree, Srujana was the first recipient of the Cristine Meredith Miele Fellowship in Computational Genomics and Bioinformatics.

<p>PhD Thesis Advisor (graduated 2009) Linlin Chen</p> <p>I assumed the role of thesis advisor for Dr. Chen following the sudden death of Dr. Yakovlev in 2008. Her thesis was on correlational structure in microarray gene expression data. She is currently Associate Professor in the School of Mathematical Sciences at the Rochester Institute of Technology. We have coauthored three publications.</p>
<p>Postdoctoral Supervisor (2004-2008) Peter Salzman</p> <p>Dr. Salzman worked with me primarily in gene regulatory network modeling and was awarded a K99/R00 NIH Pathways to Independence Award in 2007. We have coauthored three publications.</p>
<p>PhD Thesis Co-Advisor (with Joao do Val) (graduated 2007) Edilson Arruda Electrical Engineering and Computation, University of Campinas, Campinas Brazil</p> <p>I served as PhD thesis co-advisor with Dr. Joao do Val of the University of Campinas, where Edilson was enrolled as a PhD candidate. His thesis was in the area of functional approximation techniques for Markov decision processes. He graduated in 2007 and is currently Lecturer in Business Analytics/Management Science, Southampton Business School, University of Southampton. We have coauthored 7 publications.</p>

3. PhD and Master's Degree Committees

Responsibility	Year of Graduation	Student, Supervisor(s)	Affiliation
PhD Thesis Examiner	2017	Salem Ali S. Alyami Jonathan Keith	School of Mathematical Sciences, Monash University, Melbourne Australia
PhD Thesis Committee	2016	Joseph Ciminelli Tanzy Love, Sally Thurston	Biostatistics and Computational Biology, University of Rochester
Chair of PhD Thesis Defense Examination	2016	Yinghan Fu, David Mathews	Department of Biochemistry & Biophysics, University of Rochester
MS Thesis Committee	2015	Daniel Scarfoni Phillip Guo	Department of Computer Science, University of Rochester

Chair of PhD Thesis Defense Examination	2013	Jingping Xing, Helena Temkin-Greener	Public Health Sciences, University of Rochester
Undergraduate Honor's Thesis Committee	2013	Benjamin Kellman, Mark Noble	Department of Brain and Cognitive Science, Department of Biomedical Genetics, University of Rochester
PhD Thesis Committee	2014	Iris Chen, Hulin Wu	Biostatistics and Computational Biology, University of Rochester
Chair of PhD Thesis Defense Examination	2012	Hyunjoo Cho, Sema Salur	Mathematics, University of Rochester
PhD Thesis Committee	2014	Katie Evans, Sally Thurston/Tanzy Love	Biostatistics and Computational Biology, University of Rochester
PhD Thesis Committee	2013	Tivadar Papai, Henry Kautz	Computer Science, University of Rochester
PhD Thesis Committee	2010	Miranda Lynch, Sally Thurston	Biostatistics and Computational Biology, University of Rochester
PhD Thesis Committee	2010	Arif Ozgun Harmanci, Gaurav Sharma	Electrical and Computer Engineering, University of Rochester
PhD Thesis Committee	2009	Alex Pearson, Derick Peterson	Biostatistics and Computational Biology, University of Rochester
PhD Thesis Committee	2007	Hongyue Wang, Govind Mudholkar	Biostatistics and Computational Biology, Mathematics, University of Rochester
Chair of PhD Thesis Defense Examination	2006	Yinhe Cheng, Mitsunori Ogihara	Computer Science University of Rochester
Reader, Master's Degree Thesis	1997	Heather Merry, Chris Field	Mathematics, Statistics and Computer Science, Dalhousie University
Reader, Master's Degree Thesis	1996	Xiaoming Sheng, Chris Field	Mathematics, Statistics and Computer Science, Dalhousie University