# Jeremy S. Rubin

Personal Website: <u>https://sites.google.com/umd.edu/jeremyrubin/home</u> Email: <u>jrub@umd.edu</u> Phone Number: 240-676-0544	
EXPERIENCE University of Maryland, College Park Clinical Assistant Professor of Biostatistics	College Park, MD Aug 2025
<b>RESEARCH AREAS OF INTERESTApplication:</b> Renal histopathology, kidney transplant/allograft outcomes, kidney disease outcomes <b>Methodology:</b> High-dimensional regression, random forests, ensemble learning, variable selection/feature selection	
EDUCATION University of Pennsylvania Ph.D., Biostatistics Advisor: Jarcy Zee, PhD Committee: Russell Shinohara, PhD, Jeffrey Morris, PhD, Lawrence Holzman, MD Dissertation Title: Statistical Methods for Variable Selection and	<b>Philadelphia, PA</b> April 2025
Prediction with Pathomic Features M.S., Biostatistics Advisors: Jarcy Zee, PhD and Laura Mariani, MD Thesis Title: Ridge regression for functional form Identification of continuous Predictors (RIP) of Patient-Reported Outcomes Certificate, College and University Teaching	May 2022 May 2022
Coursework: Probability, Inference I-II, Methods and Data Analysis I, Categorical and Survival Data Analysis, Advanced Survival Analysis, Linear Models and Generalized Linear Models, Interventional and Observational Studies, Big Data, Mathematics of High-Dimensional Data, Statistical Computing, Statistical Methods for Neuroimaging, Statistical Genetics and Genomics	
<ul> <li>University of Maryland, Baltimore County <ul> <li>B.S., Statistics and Mathematics</li> <li>GPA: 4.0</li> <li>Summa Cum Laude</li> <li>Mathematics/Statistics Departmental Honors</li> <li>Advisor: Russell Shinohara, PhD</li> <li>Thesis Title: Letting the LaxKAT out of the Bag: Packaging, Simulation, and Neuroimaging Data Analysis for a Powerful Kernel Test.</li> </ul> </li> </ul>	<b>Baltimore, MD</b> May 2020
<b>PUBLICATIONS</b> * indicates equal contributions as co-first authors or co-senior authors	

1. F. Fan, Q. Liu, J. Zee, T. Ozeki, D. Demeke, Y. Yang, A. B. Farris, B. Wang, L. Mariani, K. Lafata, **J. Rubin**, Y. Chen, L. Holzman, J. B. Hodgin, A. Madabhushi, L. Barisoni, A.

Janowczyk. Clinical Relevance of Computationally Derived Tubular Features: Spatial Relationships and the Development of Tubulointerstitial Scarring in MCD/FSGS (accepted at *Kidney International*).

- 2. **J. Rubin**, F. Fan, L. Barisoni, A. Janowcyzk, J. Zee (2025). Novel Scalar-on-matrix Regression for Unbalanced Feature Matrices. *Statistics in Biosciences*; in press.
- 3. J. W. Song, H. Q. Phi, M. Koneru, **J. Rubin**, Q. Cao, Y. Sakai, L. Ibrahim, S. Zhou, J. H. Woo, S. E. Kasner, L. Saba, B. K. Cucchiara (2025). Prevalence of High-risk CTA-based Carotid Plaque-RADS Subtypes in Patients with Embolic Stroke of Undetermined Source. *Stroke*, **56** (3).
- 4. Y. Sakai, Q. Cao, **J. Rubin**, J. Witsch, D. Cohen-Addad, K. Rodrigues, M. Coco-Martín, P. Pasyar, J. Juega, Z. Fan, S. Kasner, B. Cucchiara, J. Song (2023). Imaging Biomarkers and Prevalence of Complex Aortic Plaque in Cryptogenic Stroke: A Systematic Review. *Journal of the American Heart Association*, **12** (23).
- 5. Y. Chen, J. Zee, A. Janowczyk, **J. Rubin**, P. Toro, K. Lafata, L. Mariani, L. Holzman, J. Hodgins, A. Madabhushi, L. Barisoni (2023). Clinical Relevance of Computationally Derived Attributes of Peritubular Capillaries from Kidney Biopsies. *Kidney360*, **4**(5) 648-658.
- 6. **J. Rubin**, L. Mariani, A. Smith, J. Zee (2022). Ridge regression for functional form Identification of continuous Predictors of Patient-Reported Outcomes in Glomerular Disease. *Glomerular Diseases*, **3** 47-55.
- 7. **J. Rubin**, E. L. Shirley, Z. H. Levine (2018). Acceleration of diffraction calculations in cylindrically symmetrical optics by use of discrete fast Fourier transforms. *Applied Optics*, **57** 778-793.

## Submitted/Under Revision

- 8. C. Chen, **J. Rubin**, L. Rennert, M. Edmondson, S. Vandekar\*, R. Shinohara\*. A novel method for detecting signal in high-dimensional neuroimaging data (submitted to *Statistics and Data Science in Imaging*).
- 9. **J. Rubin**, Q. Cao, Y. Sakai, N. Arnett, H. Q. Phi, A. C. Hu, B. L. Cucchiara, D. Bos, L. Saba, J. Zee, J. W. Song. Carotid Plaque Calcification Attenuation Characteristics are Associated with Intraplaque Hemorrhage Volumes: A 3D Segmentation-Based Analysis (under invited revision at *Journal of Neuroimaging*).
- 10. E. M. Sonnenberg, S. Amaral, S. Zhang, **J. Rubin**, M. H. Levine, V. S. Potluri. Utilization and characteristics of deceased donor kidneys prioritized for and placed ahead of pediatric recipients using the updated KDRI (under invited revision at *American Journal of Kidney Diseases*).
- 11. **J. Rubin**, F. Fan, L. Barisoni, A. R. Janowczyk, J. Zee. Analysis of Correlated Imaging Features using Scalar-on-matrix Regression (under invited revision at *Statistical Analysis and Data Mining*).
- 12. B. Ren, I. Barnett, H. Shou, **J. Rubin**, H. Zhu, T. Conway, K. Cain, B. Saelens, K. Glanz, J. Sallis, J. S. Morris. Semiparametric quantile functional regression analysis of adolescent physical activity distributions in the presence of missing data (submitted to *Journal of the American Statistical Association Applications & Case Studies*).
- 13. V. S. Potluri, **J. Rubin**, J. Zee, S. J. Ratcliffe, M. O. Harhay, P. L. Abt, E. A. Vail, C. R. Parikh, R. D. Bloom, A. Gasparini, M. Crowther, D. S. Goldberg, P. P. Reese. Assessing the Quality of Deceased Donor Kidneys through Post-Transplant Survival Prediction Algorithms (under invited revision at *American Journal of Kidney Diseases*).
- 14. M. Lin, **J. Rubin**, R. Palermo, J. Zee, E. Hartung. Determinants of left ventricular mass in children with autosomal recessive polycystic kidney disease (under invited revision at *Journal of Nephrology*).
- 15. J. Zee, P. Mahajan, **J. Rubin**, V. Pate, B. Layton, M. Denburg, D. Glenn. Methods for calculating differences in vaccine effectiveness (submitted to *American Journal of Epidemiology*).

## In preparation

- 16. L. Rodrigues\*, A. Paul\*, **J. Rubin**\*, H. Magdy, A. Gupta, S. Border, C. Pardinhas, V. Sousa, A. Figueirerdo, A. Z. Rosenberg, K. Jen, J. Zee, P. Sarder. Integrating Pathomic and Clinical Data from Kidney Deceased Donors to Enhance Graft Function Prediction and Reduce Organ Discard.
- 17. **J. Rubin**, L. Han, J. Zee. Outcome Prediction Using Image Features with Conformal Quantile Regression.
- R. R. Scobell, M. Zhou, S. Kowalczyk, E. Mitchel, R. Fulchiero, D. Campos, D. Gunturi, J. Rubin, R. Xiao, L. Wu, L. Copelovitch, L. Albenberg, M. Denburg. Kidney Disease in Children and Young Adults with Inflammatory Bowel Disease.

## TEACHING

Universi	ty of Maryland, College Park Colle	ge Park, MD
Instru	ctor	
0	Categorical Data Analysis (EPIB 652)	Fall 2025
0	Public Health Data Management (EPIB 697) Fall 2025,	Summer 2025
Universi	ty of Pennsylvania Phil	adelphia, PA
Works	hop Director	
0	Using Real World Data in a Course Curriculum	Apr 2023
	<ul> <li>Facilitators: Ian Barnett, PhD, Jin Jin, PhD, and Rui Xiao, PhD</li> </ul>	
	<ul> <li>Led discussion of topics including big data, accessing public data,</li> </ul>	1
	programming tools, resources for learning programming languag	es,
	as well as teaching research design and data pre-processing	
0	Teaching a First Course after Graduate School	Mar 2023
	• Facilitators: Arman Oganisian, PhD and Lior Rennert, PhD	
	<ul> <li>Led discussion of topics including navigating the application</li> </ul>	
	process for faculty positions, differences between various faculty	
	tracks, strategies for designing a course, and now graduate	
	Student and faculty environments differ	Esh agaa
0	Eacilitatory Nandita Mitro, DhD and Mai Ting Hwang, DhD	Feb 2023
	<ul> <li>Facilitators. National Milita, Fild and Wei-Filing Hwang, Fild</li> <li>Lod discussion of tonics including nicking appropriate statistical</li> </ul>	
	- Led discussion of topics including picking appropriate statistical software, encouraging student engagement through motivating	
	data examples and making courses accessible to students of	
	different statistical backgrounds	
0	Strategies for Teaching in Graduate School. A Panel of Experienced PhD	s Nov 2022
Ũ	& Post-Docs	
	<ul> <li>Facilitators: Ouv Cao, PhD, Kevin Donovan, PhD, and</li> </ul>	
	Sarah Hegarty, MPhil, MS	
	<ul> <li>Led discussion of topics including working with students from</li> </ul>	
	diverse backgrounds, deciding how flexible to be with assignment	S
	given students' COVID experiences, encouraging understanding of	of
	material beyond achieving grades, and dealing with students aski	ng
	for extra credit on assignments	
0	Incorporating Scientific Literature in STEM Courses	Oct 2022
	• Facilitators: Rebecca Hubbard, PhD and Alisa Stephens-Shields,	PhD
	<ul> <li>Led discussion of topics including example activities of having</li> </ul>	
	students engage with primary scientific literature, as well as make	ng
	these classroom techniques interesting and accessible to students	
	with different backgrounds	
0	Strategies for Teaching Highly Mathematical Material	Uct 2022
	<ul> <li>Facilitators: Elizabeth Sweeney, PhD and Haochang Shou, PhD</li> <li>Lad diagonation of taning including among the flow size of the second second</li></ul>	
	<ul> <li>Leu discussion of topics including aspects of learning specific to advanced methometical heat mustices for musculing specific to</li> </ul>	
	advanced mathematics, best practices for presenting content in	

0	<ul> <li>lectures, making material accessible to students from different math backgrounds, creating homework/exams, encouraging student participation, and helping struggling students</li> <li>Workshop Director, Working as Part of a Teaching Team</li> <li>Led evaluation and case study activities to emphasize effectively leveraging different opinions and evaluation preferences on a teaching team, as well as strategies for reaching out to one's</li> </ul>	1 Sep 2022
	teaching team for different situations	Son acco
0	Eacilitators: Jarey Zoo, DhD and Kristin Linn, DhD	Sep 2022
	<ul> <li>Facilitators: Sarcy Zee, Fird and Kristin Linn, Fird</li> <li>Led discussion of tonics including big data accessing public data</li> </ul>	
	programming tools, resources for learning programming languages deciding whether to have a dedicated laboratory section of a course access to computing resources, and making courses meaningful and	, , 
	accessible to students with diverse computing backgrounds	
Guest	Lecturer	
0	Biostatistics for Epidemiologic Methods II (EPID 527)	
	<ul> <li>Topic: Sample size and power</li> </ul>	Feb 2023
	<ul> <li>Topic: Proportional odds model and generalized ordered logistic regression</li> </ul>	Feb 2022
Teachi	ing Assistant	
0	<ul> <li>Introduction to Statistics for Health Policy (HPR 604)</li> <li>Responsibilities included grading homework and holding office hours</li> </ul>	r 2021, 2022
0	Data Analysis for Life Science (BIOM 610) Jan 2022	– May 2022
Ū.	<ul> <li>Created video lectures to reinforce statistical concepts</li> <li>covered in DataCamp statistics courses</li> </ul>	1.1.uj =0==
	covered in DataCamp statistics courses	
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Universi Works °	ty of Maryland, Baltimore County hop Director Networking Workshop: Establishing Relationships that will Unlock Your Future	<b>imore, MD</b> Jun 2020
Universi Works 0	ty of Maryland, Baltimore County hop Director Networking Workshop: Establishing Relationships that will Unlock Your Future • Led discussion of topics including what networking is, the	<b>imore, MD</b> Jun 2020
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	0	<ul> <li><u>Evaluations</u>)</li> <li>Multivariable Calculus (MATH 251)</li> <li>Responsibilities included holding discussion sessions in which I reviewed quiz solutions, grading quizzes/exams and holding</li> </ul>	Spr 2019
	0	<ul> <li>office hours (Evaluations)</li> <li>Calculus and Analytical Geometry I (MATH 151)</li> <li>Responsibilities included holding discussion sessions in which I facilitated group work on practice problems, holding office hours, and grading quizzes/exams (Spring 2018 Evaluations, Fall 2017 Evaluations)</li> </ul>	Spr 2018
	Grade		
	0	Introduction to Differential Equations (MATH 225)	Fall 2019
		<ul> <li>Graded weekly homework</li> </ul>	
	0	Applied Statistics (STAT 454)	Spr 2019
	<b>—</b> .	<ul> <li>Graded weekly homework</li> </ul>	
	Tutor		
	0	College of Natural and Mathematical Sciences Active Science	reb - May 2017
		<ul> <li>Provided hands-on tutoring to predominately calculus I and II students in a collaborative learning environment</li> </ul>	
FUND	ING		
•	Develo Predic	pping High-Quality Tools to Characterize Allograft Quality, t Transplant Outcomes and Expand Access to Kidney and Liver	
		Source: National Institute of Diabetes and Diaestive and	
	0	Kidney Diseases	
	0	Role: Biostatistician Trainee	
	0	Dates: 06/29/2022 – 05/31/2025	
	0	Amount Awarded: 506,377 USD	
٠	The Li	near Maximal Sequence Kernel Association Test for Neuroimaging	
	Studie	s	
	0	Source: National Science Foundation Graduate Research	
		Fellowship Program	
	0	Role: Fellow	
	0	Dates: 06/20/2022 - 06/20/2025	
	0	Amount Awarded: 102,000 USD	
HONG	DC		
HUNC	JK5 Duonou	ing to Tooch Statistics and Data Science Mentrahan	Aug 000 (
•	Prepar	Selected to newticing to in one device workshop	Aug 2024
	•	role as faculty responsible for teaching statistics and data science to undergraduate students of different disciplines	ure
•	Center	for Excellence in Teaching Learning and Innovation Graduate Fellowshi	n Apr 2022
·	for Tea	aching Excellence Recognizes graduate students who are dedicated to excellent	p 11pi 2022
	•	teaching and encourages their development as teachers	
	•	Organize departmental and university-wide workshops, as well as	
		perform observations of guest lectures by graduate students	
		working towards the College and University Teaching certificate	
	•	One of 14 fellows and the first biostatistics student selected from	
		across all of Penn	
•	Top Bi	ostatistics Talk DBEI & CCEB Research Day	Apr 2022
•	Honor	s College Outstanding Academic Achievement Award	Apr 2020
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•	Outstanding Graduating Senior in Statistics	Apr 2020
٠	Outstanding Graduating Senior in Mathematics	Apr 2020
٠	Valedictorian Nomination	Apr 2020
•	Biological Sciences 1 <sup>st</sup> Place Undergraduate Research Symposium in the Chemical and Biological Sciences	Oct 2019
•	Phi Kappa Phi	May 2019
٠	Pi Mu Epsilon Mathematics Honor Society	Sep 2018
٠	UMBC Dr. Bimal and Mrs. Suchandra Sinha Endowment for Excellence in Statistics	Apr 2018
•	MARC U*STAR Scholarship	Apr 2018
	<ul> <li>Increase diversity in achievement of terminal degrees in biomedical, behavioral, or mathematical sciences</li> </ul>	•
٠	UMBC Undergraduate Research Award	Mar 2018
	• Provides up to \$1,500 to undergraduates to fund their research or creative work with a UMBC faculty member on a new project	
٠	Mu Sigma Rho Statistics Honor Society	Nov 2017
٠	UMBC Honors College	Jul 2016
٠	Meyerhoff Scholars Program	Jul 2016
	Increase diversity in achievement of STEM PhDs	

# PRESENTATIONS

## **Conference Presentations**

- 1. Analysis of Correlated Image Features using Scalar-on-matrix Regression, Eastern North American Region International Biometric Society Spring Meeting, New Orleans, LA (March 2025, Contributed Oral Talk)
- 2. Analysis of Independent and Correlated Imaging Features using Scalar-on-matrix Regression, Joint Statistical Meetings, Portland, OR (August 2024, Contributed Oral Talk)
- 3. Novel Scalar-on-matrix Regression for Unbalanced Feature Matrices, Eastern North American Region International Biometric Society Spring Meeting, Baltimore, MD (March 2024, Contributed Oral Talk)
- 4. Leveraging Machine Learning Methods and Novel Data Sources to Develop Race-Free Algorithms to Predict Deceased Donor Kidney Quality, American Society of Nephrology Kidney Week, Philadelphia, PA (November 2023, Contributed Poster)
- 5. Novel Scalar-on-matrix Regression for Unbalanced Feature Design Matrices, Joint Statistical Meetings, Toronto, ON (August 2023, Contributed Oral Talk)
- 6. Novel Scalar-on-matrix Regression for Unbalanced Feature Design Matrices, Statistical Methods in Imaging Conference, Minneapolis, MN (May 2023, Contributed Poster)
- 7. Assessing the form of predictor-outcome association for machine learning models of Patient Reported Outcomes in Nephrotic Syndrome, American Society of Nephrology Kidney Week, Orlando, FL (November 2022, Contributed Poster)
- 8. Assessing the form of predictor-outcome association for machine learning models of Patient Reported Outcomes in Nephrotic Syndrome, NEPTUNE Steering Committee Meeting, Virtual (September 2022, Invited Oral Talk)
- 9. Ridge regression for functional form Identification of continuous Predictors (RIP), Eastern North American Region International Biometric Society Spring Meeting, Virtual (March 2022, Contributed Oral Talk)
- 10. Letting the LaxKAT out of the Bag: A Powerful Kernel Test for Neuroimaging Studies, Joint Statistical Meetings, Virtual (August 2021, Contributed Speed Talk)
- 11. Letting the LaxKAT out of the Bag: Packaging, Simulation, and Neuroimaging Data Analysis for a Powerful Kernel Test, Eastern North American Region International Biometric Society Spring Meeting, Virtual (March 2020, Contributed Oral Talk)

- 12. Letting the LaxKAT out of the Bag: Packaging, Simulation, and Neuroimaging Data Analysis for a Powerful Kernel Test, Leadership Alliance National Symposium, Hartford, CT (July 2019, Contributed Oral Talk)
- 13. Letting the LaxKAT out of the Bag: Packaging, Simulation, and Neuroimaging Data Analysis for a Powerful Kernel Test, Leadership Alliance National Symposium, Hartford, CT (July 2018, Contributed Oral Talk)
- 14. Letting the LaxKAT out of the Bag: Packaging, Simulation, and Neuroimaging Data Analysis for a Powerful Kernel Test, Undergraduate Research Symposium in the Chemical and Biological Sciences, Baltimore, MD (October 2019, Contributed Poster)
- 15. Letting the LaxKAT out of the Bag: Packaging, Simulation, and Neuroimaging Data Analysis for a Powerful Kernel Test, Eastern North American Region International Biometric Society Spring Meeting, Philadelphia, PA (March 2019, Contributed Electronic Speed Poster)
- 16. Letting the LaxKAT out of the Bag: Packaging, Simulation, and Neuroimaging Data Analysis for a Powerful Kernel Test, Undergraduate Research Symposium in the Chemical and Biological Sciences, Baltimore, MD (October 2018, Contributed Poster)
- 17. An image processing toolbox for CAVE software testing, University of Maryland Alliance for Diversity in Science and Engineering Young Researcher Conference, College Park, MD (September 2017, Contributed Poster)

## **Department and Institutional Presentations**

- 1. Alumnus Guest Speaker, Undergraduate Research Training Initiative for Student Enhancement (U-RISE) at University of Maryland, Baltimore County Scholars Recognition Ceremony, Baltimore, Maryland (May 2025, Oral Talk)
- 2. Statistical Methods for Variable Selection and Prediction with Pathomic Features, University of Maryland, Baltimore County Statistics Colloquium, Baltimore, Maryland (May 2025, Oral Talk)
- 3. Analysis of Independent Imaging Features using Scalar-on-matrix Regression, University of Pennsylvania Graduate Program in Biostatistics Virtual Open House, Virtual (October 2024, Oral Talk)
- 4. Analysis of Independent and Correlated Imaging Features using Scalar-on-Matrix Regression, University of Pennsylvania Graduate Group in Epidemiology and Biostatistics Summer Undergraduate Internship Program Current Student/Faculty Presentations, Philadelphia, PA (June 2024, Oral Talk)
- 5. Novel Variable Selection and Prediction Methods for Unbalanced Feature Matrices, Penn-CHOP Kidney Innovation Center Work-in-Progress Seminar, Philadelphia, PA (March 2024, Oral Talk)
- 6. Novel Scalar-on-matrix Regression for Unbalanced Feature Design Matrices, University of Pennsylvania Graduate Group in Epidemiology and Biostatistics Summer Undergraduate Internship Program Current Student/Faculty Presentations, Philadelphia, PA (June 2023, Oral Talk)
- 7. Leveraging Machine Learning Methods and Novel Data Sources to Develop Race-Free Algorithms to Predict Deceased Donor Kidney Quality, University of Pennsylvania Department of Medicine Research Day, Philadelphia, PA (June 2023, Poster)
- 8. PCA Structured lasSO (PCASSO), University of Pennsylvania Department of Biostatistics, Epidemiology, & Informatics & Center for Clinical Epidemiology and Biostatistics Research Day, Virtual (April 2022, Oral Talk)
- 9. Ridge regression for functional form Identification of continuous Predictors (RIP) of Patient-Reported Outcomes, University of Pennsylvania Graduate Group in Epidemiology and Biostatistics Thesis and Biostatistics in Practice Presentations, Philadelphia, PA (April 2022, Oral Talk)
- 10. PCA Structured lasSO (PCASSO), University of Pennsylvania Graduate Group in Epidemiology and Biostatistics Works-in-Progress Talks, Virtual (March 2022, Oral Talk)

- 12. Letting the LaxKAT out of the Bag: A Powerful Kernel Test for Neuroimaging Studies, University of Pennsylvania Graduate Group in Epidemiology and Biostatistics First Year Chalk Talks, Virtual (August 2021, Oral Talk)
- 13. Letting the LaxKAT out of the Bag: Packaging, Simulation, and Neuroimaging Data Analysis for a Powerful Kernel Test, University of Pennsylvania Graduate Group in Epidemiology and Biostatistics First Year Chalk Talks, Virtual (April 2021, Oral Talk)
- 14. Wait just a 5-minute interval! Finding a near-lossless representation of TEAN accelerometer data with a quantlet basis, University of Pennsylvania Graduate Group in Epidemiology and Biostatistics First Year Chalk Talks, Virtual (January 2021, Oral Talk)
- 15. Letting the LaxKAT out of the Bag: Packaging, Simulation, and Neuroimaging Data Analysis for a Powerful Kernel Test, University of Maryland, Baltimore County Differential Equations Seminar: Undergraduate Researchers (Senior Thesis Presentations), Virtual (April 2020, Oral Talk)
- 16. Letting the LaxKAT out of the Bag: Packaging, Simulation, and Neuroimaging Data Analysis for a Powerful Kernel Test, University of Maryland, Baltimore County Undergraduate Research and Creative Achievement Day, Virtual (April 2020, Oral Talk)
- 17. Letting the LaxKAT out of the Bag: Packaging, Simulation, and Neuroimaging Data Analysis for a Powerful Kernel Test, University of Maryland, Baltimore County Undergraduate Research and Creative Achievement Day, Baltimore, MD (April 2019, Oral Talk)
- 18. An image processing toolbox for CAVE software testing, National Institute of Standards and Technology Summer Undergraduate Research Fellowship Colloquium, Gaithersburg, MD (July 2017, Oral Talk)
- 19. Letting the LaxKAT out of the Bag: Packaging, Simulation, and Neuroimaging Data Analysis for a Powerful Kernel Test, University of Pennsylvania Summer Undergraduate Internship Program Research Symposium, Philadelphia, PA (August 2019, Poster)
- 20. Letting the LaxKAT out of the Bag: Packaging, Simulation, and Neuroimaging Data Analysis for a Powerful Kernel Test, University of Pennsylvania Summer Undergraduate Internship Program Research Symposium, Philadelphia, PA (August 2018, Poster)
- 21. Using Fast Fourier Transform Techniques and Debye's Asymptotic Expansion to Accelerate Diffraction Calculations for Cylindrically Symmetrical Systems, National Institute of Standards and Technology Summer High School Intern Program Poster Session, Gaithersburg, MD (August 2015, Poster)

## STUDENT MENTORSHIP

Academic Adviser	
Betelehim Haile	June 2025 - Present
• MPH Student in Biostatistics, University of Maryland,	-
College Park	
External Research Mentor	
Angitha Reji	June 2025 - Present
<ul> <li>Medical Student, University of Florida College of Medicine</li> </ul>	
Aryan Mishra	June 2025 - Present
• PhD Student in Mathematical Statistics, University of Maryland,	
College Park	
Huiqian Hu	June 2025 - Present
• PhD Candidate in Molecular Pharmaceutics, University of Utah	
Connie Gao	June 2025 - Present
<ul> <li>Medical Student, University of South Florida Morsani</li> </ul>	
College of Medicine	

Lylybell Zhou o Medical Student, University of South Florida Morsani	June 2025 - Present
College of Medicine	
SERVICE	
American Statistical Association Session Chair	
<ul> <li>Joint Statistical Meetings</li> </ul>	Aug 2024
<ul> <li>Topic: Novel Bayesian Methods for the Analysis of Im</li> <li>Ensured that speakers adhered to allotted times and f questions</li> </ul>	aging Data acilitated
University of Pennsylvania	Philadelphia, PA
Panel Moderator	
<ul> <li>Graduate Program in Biostatistics Virtual Open House</li> </ul>	Oct 2024, Oct 2020
<ul> <li>Moderated panel of current biostatistics faculty to add questions concerning the application process for prog in the Graduate Group in Epidemiology and Biostatist</li> </ul>	lress rams tics
Speaker	
<ul> <li>Biomedical Graduate Studies Orientation</li> <li>Topic: Electronic Laboratory Notebooks</li> <li>Provided a brief overview of resources for creating and mathematical typesetting, code version control, as we organization and version control tools specific to R and the state of the st</li></ul>	Aug 2024, 2023, 2021 d sharing ll as id Python
Workshop Volunteer	• • • • • • • • • • • • • • • • • • • •
• Biomedical Graduate Studies Orientation,	Aug 2024, 2022, 2021
<ul> <li>Led breakout session to facilitate discussion on mentor between students, faculty, and future thesis mentor(s) incoming Biomedical Graduate Studies students</li> <li>Peer Support Network Wellness Workshop</li> <li>Led breakout session to discuss our own wellness prace provide a space to begin building community through conversation, and share resources available for incom</li> </ul>	oring ) for Aug 2021 ctices, ing
Biomedical Graduate Studies students	
Panelist	<b>T</b>
<ul> <li>Graduate Group in Epidemiology and Biostatistics Job Panel</li> <li>Gave ten-minute presentation to current Graduate Gr Epidemiology and Biostatistics students about experie and advice for applying to post-PhD jobs</li> </ul>	Jun 2025 oup in ence with
<ul> <li>Summer Undergraduate Internship Program</li> <li>Topic: Applying to Graduate School</li> <li>Fielded questions about the graduate school preparati application processes to undergraduate summer inter Graduate Group in Epidemiology and Biostatistics</li> </ul>	Jul 2024, 2023 ion and ns in the
<ul> <li>Graduate Group in Epidemiology and Biostatistics</li> <li>Graduate Group in Epidemiology and Biostatistics</li> <li>Interview Day</li> <li>Fielded questions about our graduate programs for in students</li> </ul>	Feb 2024, Jan 2023 Feb 2022 terviewing
<ul> <li>Center for Teaching and Learning Workshop: How to Teach a Research &amp; Scientific Discovery in the STEM Classroom</li> <li>Fielded questions about incorporating research and so discovery in the classroom as a teaching assistant Committee Member</li> </ul>	about Feb 2022 cientific

Summer Undergraduate Internship Program Curriculum
 May 2024, 2023

<ul> <li>Committee         <ul> <li>Assisted with scheduling of social and professional activiti Summer Undergraduate Internship Program students wor faculty in the Graduate Group in Epidemiology and Biostat</li> <li>Graduate Group in Epidemiology and Biostatistics Student Recruitment Committee                 <ul> <li>Help organize events to recruit trainees from diverse backgrounds for the Graduate Group in Epidemiology and Biostatistics</li></ul></li></ul></li></ul>	es for rking with tistics Sep 2023 - Present
<ul> <li>Graduate Group in Epidemiology and Biostatistics         <ul> <li>Graduate Group in Epidemiology and Biostatistics</li> <li>Interview Day                 <ul> <li>Met individually with interviewing Biostatistics PhD program and ser applicants to answer questions about the program and ser current student contact</li> <li>Graduate Group in Epidemiology and Biostatistics</li> <li>Interview Day</li> <li>Met individually with interviewing Biostatistics PhD program and ser applicants to answer questions about the program and ser current student contact</li> <li>Graduate Group in Epidemiology and Biostatistics</li> <li>Interview Day</li></ul></li></ul></li></ul>	Feb 2024, Jan 2023 Feb 2022, 2021 cam ve as a
<ul> <li>Graduate Student 1:1 Session Volunteer</li> <li>Diversity, Equity, and Engagement at Penn in STEM</li> <li>Met individually with prospective Biostatistics PhD progra applicant to answer questions about the program and serv a current student contact</li> </ul>	Oct 2022 am re as
University of Maryland, Baltimore County	Baltimore, MD
<ul> <li>Meyerhoff Scholars Program</li> <li>Provided mentorship and academic guidance for younger math students in the Meyerhoff Scholars Program</li> </ul>	Sep 2018 - May 2020
<ul> <li>MEDIA</li> <li>"Where math and medicine meet: Jeremy Rubin is one of UMBC's nine new NSF Graduate Research Fellows," UMBC News. https://news.umbc.edu/where-math-and-medicine-meet-jeremy-rubin-is-one-of-umbcs-nine-new-nsf-graduate-research-fellows/?preview=true&amp;_thumbnail_id=46009</li> </ul>	May 2020
<ul> <li>MEMBERSHIPS</li> <li>American Society of Nephrology</li> <li>American Statistical Association</li> <li>Eastern North American Region, International Biometric Society</li> </ul>	
<ul> <li>SKILLS</li> <li>Proficient: R</li> <li>Experience with: C++, Python</li> <li>Other tools: High Performance Computing, Rcpp, RcppArmadillo, bash, LaTeX, Git/Github, Linux/Unix</li> </ul>	
REFERENCES Dr. Jarcy Zee Assistant Professor of Biostatistics, University of Pennsylvania 210 Blockley Hall 423 Guardian Drive Philadelphia, PA 19104 Phone: 215-573-8545 Email: jarcy.zee@pennmedicine.upenn.edu	

Dr. Russell Shinohara Professor of Biostatistics, University of Pennsylvania 217 Blockley Hall 423 Guardian Drive Philadelphia, PA 19104 Phone: 215-746-1090 Email: <u>russell.shinohara@pennmedicine.upenn.edu</u>

Dr. Jae W. Song Assistant Professor of Radiology, Hospital of the University of Pennsylvania 1 Silverstein, Ste. 130 3400 Spruce St Philadelphia, PA 19104 Phone: 215-662-4000 Email: jae.song@pennmedicine.upenn.edu

Dr. Jeffrey S. Morris George S. Pepper Professor of Public Health and Preventative Medicine/Director, University of Pennsylvania 600 Blockley Hall 423 Guardian Drive Philadelphia, PA 19104 Phone: 215-573-4824 Email: jeffrey.morris@pennmedicine.upenn.edu

#### **OTHER INTERESTS**

٠	Stand	-up comedy	
	0	It's Always Punny in Philadelphia #5: Pundemonium Finalist	Feb 2024
٠	Badm	inton	
	0	2025 Snowpeak DC Open MD D Consolation Champion	Mar 2025
	0	2024 PhillyPinoy Badminton Team Tournament Division 2	Oct 2024
		(Intermediate Division) 1st Place	
	0	Penn competitive badminton team	Sep 2024 – May 2025