

Jacob D. Mauldin

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EDUCATION

New York University

Bachelor of Science in Global Public Health
Joint Major in Global Public Health and Global Liberal Studies
3.8 GPA; 2021, 2022 Honor Roll

August 2018 - May 2022

Pace University

Masters of Science in Data Science
4.0 GPA

January 2025 - Present

WORK AND RELATED EXPERIENCE

Research & Analytics:

Mount Sinai - Simon Lab

Data Analyst I
Clinical Research Assistant

April 2022 - September 2024
September 2023 - September 2024
April 2022 - September 2023

- Analyzed large-scale immunology datasets using Python and SAS.
- Built sequential data libraries and optimized sample tracking systems.
- Created figures and models for publications in Cell Reports Medicine, Immunity, and mBio.
- Coordinated study operations and ensured data accuracy across research teams.

Other Experience:

NEUO.io (· Remote)

Client Management Intern

November 2020 - May 2021

- Built and maintained client outreach and feedback databases.
- Maintained outreach metrics and performance dashboards for engagement insights.

NYU Esports

LoL Varsity Coach

August 2020 - March 2022

- Led varsity team (NYU Violet) in practices, match preparation, and performance analysis.
- Organized intercollegiate scrimmages and coordinated event logistics.

Pace University Esports

LoL Varsity Coach

August 2025 - Present

- Coached and coordinated the university's competitive League of Legends roster.
- Analyzed gameplay and implement strategies to improve team performance.

MR Varsity Player

- Competed in collegiate tournaments and team scrimmages.
- Collaborated on draft planning and post-match reviews.

TECHNICAL SKILLS

Programming & Analysis

- Python (pandas, NumPy, scikit-learn, matplotlib, seaborn)
- SQL (MySQL, PostgreSQL)
- SAS, R, Java

Data Visualization & Business Intelligence

- Tableau, PowerBI
- Excel, Google Sheets

Machine Learning & Statistics:

- Regression and classification modeling, feature engineering
- Data preprocessing, model evaluation

Data Management & Organization:

- Proficient with Data cleaning, ETL pipelines
- Sequential data libraries, relational database design, data documentation

Tools & Other Skills:

- Git/GitHub, Jupyter Notebooks, VS Code, Google Suite, Microsoft Office
- Visualization, Interactive Dashboards, Statistical Plotting, Data Storytelling

PUBLICATIONS

- Abbad A, Yellin T, Singh G, Fried M, Raskin A, Tcheou J, Monahan B, Gleason C; PARIS Study Group; Simon V, Carreño JM, Krammer F. *SARS-CoV-2 BA.1 and BA.2 breakthrough infections boost antibody responses to early Omicron subvariants but not BQ.1.1 or XBB.1.5*. Cell Rep Med. 2024 Mar 19;5(3):101474. doi: 10.1016/j.xcrm.2024.101474. PMID: 38508136; PMCID: PMC10983110.
 - *PARIS Study Group Member*: Assisted with Data Collection
- Srivastava K, Carreño JM, Gleason C, Monahan B, Singh G, Abbad A, Tcheou J, Raskin A, Kleiner G, van Bakel H, Sordillo EM; PARIS Study Group; Krammer F, Simon V. *SARS-CoV-2-infection- and vaccine-induced antibody responses are long lasting with an initial waning phase followed by a stabilization phase*. Immunity. 2024 Mar 12;57(3):587-599.e4. doi: 10.1016/j.immuni.2024.01.017. Epub 2024 Feb 22. PMID: 38395697; PMCID: PMC11066813.
 - *PARIS Study Group Member*: Assisted with Data Collection, Analysis.
- Singh G, Abbad A, Kleiner G, Srivastava K, Gleason C; PARIS Study Group; Carreño JM, Simon V, Krammer F. *The post-COVID-19 population has a high prevalence of cross-reactive antibodies to spikes from all Orthocoronavirinae genera*. mBio. 2024 Jan 16;15(1):e0225023. doi: 10.1128/mbio.02250-23. Epub 2023 Dec 19. PMID: 38112467; PMCID: PMC10790767.
 - *PARIS Study Group Member*: Assisted with Data Collection
- Bhavsar D, Singh G, Sano K, Gleason C, Srivastava K; PARIS Study Group; Carreno JM, Simon V, Krammer F. *Mucosal antibody responses to SARS-CoV-2 booster vaccination and breakthrough infection*. mBio. 2023 Dec 19;14(6):e0228023. doi: 10.1128/mbio.02280-23. Epub 2023 Dec 1. PMID: 38092666; PMCID: PMC10790573.
 - *PARIS Study Group Member*: Assisted with Data Collection
- Aleman A, van Kesteren M, Zajdman AK, Srivastava K, Cognigni C, Mischka J, Chen LY, Upadhyaya B, Serebryakova K, Nardulli JR, Lyttle N, Kappes K, Jackson H, Gleason CR, Oostenink A, Cai GY, Van Oekelen O; PVI/MM/Seronet Study Group; van Bakel H, Sordillo EM, Cordon-Cardo C, Merad M, Jagannath S, Wajnberg A, Simon V, Parekh S. *Cellular mechanisms associated with sub-optimal immune responses to SARS-CoV-2 bivalent booster vaccination in patients with Multiple Myeloma*. EBioMedicine. 2023 Dec;98:104886. doi: 10.1016/j.ebiom.2023.104886. Epub 2023 Nov 22. PMID: 37995467; PMCID: PMC10708991.
 - *SeroNet Study Group Member*: Assisted with Data Collection
- Cohn H, Bloom N, Cai GY, Clark JJ, Tarke A, Bermúdez-González MC, Altman DR, Lugo LA, Lobo FP, Marquez S; PVI study group; Chen JQ, Ren W, Qin L, Yates JL, Hunt DT, Lee WT, Crotty S, Krammer F, Grifoni A, Sette A, Simon V, Coelho CH. *Mpox vaccine and infection-driven human immune signatures: an immunological analysis of an observational study*. Lancet Infect Dis. 2023 Nov;23(11):1302-1312. doi: 10.1016/S1473-3099(23)00352-3. Epub 2023 Jul 17. PMID: 37475115; PMCID: PMC10826035.
 - *PVI Study Group Member*: Assisted with Data Collection
- Gonzalez-Reiche AS, Alshammary H, Schaefer S, Patel G, Polanco J, Carreño JM, Amoako AA, Rooker A, Cognigni C, Floda D, van de Guchte A, Khalil Z, Farrugia K, Assad N, Zhang J, Albuquerque B; PARIS/PSP study group; Sominsky LA, Gleason C, Srivastava K, Sebra R, Ramirez JD, Banu R, Shrestha P, Krammer F, Paniz-Mondolfi A, Sordillo EM, Simon V, van Bakel H. *Sequential intrahost evolution and onward transmission of SARS-CoV-2 variants*. Nat Commun. 2023 Jun 3;14(1):3235. doi: 10.1038/s41467-023-38867-x. PMID: 37270625; PMCID: PMC10239218.
 - *PARIS Study Group Member*: Assisted with Data Collection
- Changrob S, Halfmann PJ, Liu H, Torres JL, McGrath JJC, Ozorowski G, Li L, Wilbanks GD, Kuroda M, Maemura T, Huang M, Zheng NY, Turner HL, Erickson SA, Fu Y, Yasuhara A, Singh G, Monahan B, **Mauldin J**, Srivastava K, Simon V, Krammer F, Sather DN, Ward AB, Wilson IA, Kawaoka Y, Wilson PC. *Site of vulnerability on SARS-CoV-2 spike induces broadly protective antibody against antigenically distinct Omicron subvariants*. J Clin Invest. 2023 Apr 17;133(8):e166844. doi: 10.1172/JCI166844. PMID: 36862518; PMCID: PMC10104900.
 - *Co-Author*: Biospecimen Collection and Retrieval
- Rana, M. M., Haydel, B., Carrara, G., Gleason, C., **Mauldin, J.**, Srivastava, K., Florman, S., Åberg, J., van Kesteren, M., Mischka, J., Carreño, J. M., Singh, G., Mendu, D. R., TITAN Study Group, Wajnberg, A., Cordon-Cardo, C., Krammer, F., & Simon, V. (in press). *Humoral SARS-CoV-2 vaccine responses are durable in solid organ transplant recipients with and without HIV*. *Vaccine*.
 - *Co-Author*: Biospecimen, Resources, Data curation