KAYLA SCHIFFER-KANE

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EDUCATION

September 2021 – Present	Doctoral Student Department of Biomedical Informatics, Columbia University New York, NY *Advisor:* Chunhua Weng, PhD, FACMI, FIAHSI
September 2016 – May 2019	Bachelor of Arts (BA) in Medicine, Literature, and Society Minor in Computer Science Barnard College, School of Columbia University: New York, NY *Department:* Institute for Comparative Literature and Society (ICLS) *Thesis Title:* Endometriosis Storytelling through Self-Tracked Data: An Integrative Analysis of Digital Experience, Illness Narratives, and Clinical Encounters *Advisors:* Dennis Tenen, PhD; Rishi Goyal, MD-PhD GPA: 3.63, Dean's List Fall '17, Spring '18, Fall '18, Spring '19
January 2018 – May 2018	Semester Abroad Columbia in Paris at Reid Hall: Paris, France Sorbonne University: Paris, France
September 2015 – May 2016	Major in Biomedical Engineering Cornell University, College of Engineering: Ithaca, NY

PUBLICATIONS

Schiffer K, Choi YA, Weng C. "Hierarchical Concept Relations Improve Detection of Off-Label Drug Use in Electronic Health Records Data." American Medical Informatics Association 2023 Informatics Summit; 2023 Mar 13-16; Washington D.C. [*Conference Student Paper*]

King T, Sun Y, Kim J, Ta C, Perotte A, **Schiffer K**, Wu M, Zhao Y, Moustafa-Fahmy N, Peng Y, Weng C. "EvidenceMap: a three-level knowledge representation for medical evidence computation and comprehension". Journal of the American Medical Informatics Association (JAMIA), 2023.

Pichon A, **Schiffer K,** Horan E, Massey B, Bakken S, Mamykina L, Elhadad N. "Divided We Stand: The Collaborative Work of Patients and Providers in an Enigmatic Chronic Disease." Proceedings of the ACM on Human-Computer Interaction 4, CSCW3 (Jan 2021), 261:1–261:24. https://doi.org/10.1145/3434170

CONFERENCE PRESENTATIONS AND POSTERS

Tucker E, Reyes Nieva H, **Schiffer K**, Grant L, Yin M, Castor D, Gordon P, Elhadad N, Zucker J. HIV Viral Load Suppression and Racial Disparities During the COVID-19 Pandemic in NYC. Conference on Retroviruses and Opportunistic Infextions; 2023 Feb 19-22; Seattle, WA. [*Poster*]

Schiffer K, Choi YA, Weng C. Hierarchical Concept Relations to Improve Automated Detection of Off-Label Drug Use in Electronic Health Record Data. American Medical Informatics Association 2022 Annual Symposium; 2022 Nov 5-9; Washington D.C. [*Podium Presentation*]

Bear Don't Walk IV O, Pichon A, Volpe S, Liu LG, Desai PM, Anand TV, Richter L, **Schiffer K**, Massey B. A Workshop to Build a Research Agenda for Justice Informatics. Facilitated at: American Medical Informatics Association 2022 Annual Symposium; 2022 Nov 5-9; Washington D.C. [*Workshop*]

Megjhani M, **Schiffer K**, Nametz D, Meyers R, Knaplund C, Kwon S, Lorenzi V, Rossetti S, Cao H, Mamykina L, Park S. Do You Trust Me? Development, Implementation and Acceptance of a Machine Learning Model - Opportunities, Challenges and Future Direction. Columbia University Data Science Institute Health Analytics Symposium. New York, NY, 2022. [*Poster*]

Pichon A, Houterloot M, **Schiffer K**, Horan E, Elhadad N. "Get on the Same Page: Negotiating and Aligning Knowledge and Expectations between Patients and Providers through Self-Tracking Artifacts." American Medical Informatics Association 2019 Annual Symposium; 2019 Nov 16-20; Washington D.C. [*Podium Presentation*]

TEACHING EXPERIENCE

Symbolic Methods [Graduate], Teaching Assistant
Department of Biomedical Informatics, Columbia University, New York, NY
Professor: Chunhua Weng, PhD

INVITED TALKS

Contextualized Machine Learning Predictions for Clinical Settings: Implementing Predictive Analytics for Delayed Cerebral Ischemia in Patients with Subarachnoid Hemorrhage
Data Science Research Center at the University of Haifa Colloquium. Haifa, Israel.
December 26, 2022.

RESEARCH & WORK EXPERIENCE

Crossix Solutions (Acquired by Veeva systems): New York, NY
September 2020 – *Present* **Senior Healthcare Data Analyst**
July 2019 – September 2020 **Healthcare Data Analyst**

- Serve as Key Account Owner, responsible for maintaining brand portfolio knowledge base among analysts, consulting on analytics contracting, communicating analytic capabilities to client, and ensuring quality of all deliverables shared with client

- Utilize analytics to link marketing and consumer data to health data using SQL, Python and Spotfire to help healthcare clients plan, measure, and optimize marketing
- Use a logic-based proprietary language alongside SQL, Excel and other analytics and data visualization tools to successfully complete 24 analyses
- Collaborate closely with client-facing associates and business development teams to ensure coherence and relevance of analytics deliverables for targeted TV product suite across industry stakeholders
- Operationalize various coding systems to represent relevant health metrics, including ICD-9/10, NDC, HCPCS, J, NPI and taxonomy codes
- Investigate data coverage for various disease spaces across claims, EHR and pharmacy data sources against expected national incidence and client-provided market sizing estimates
- Leverage survival analysis, time series analysis, and attribution methodologies to identify causal relationships between marketing and health outcomes
- Develop disease space and therapeutic area expertise to contextualize desired health outcomes based on expected patient treatment trajectory
- Assess effectiveness of propensity score models leveraging consumer data to reach desired patient populations
- Lead company-wide training sessions for analysts and client-facing associates on targeted TV product suite, as well as built out process documentation and analytics visualization and insights guides
- Created and implemented new methodology for Data-Driven Linear TV analysis assessing health outcomes according to targeted population stratification based on client business questions and technical capabilities

Columbia University: *New York, NY*
Department of Biomedical Informatics: PI: Noemie Elhadad, PhD
October 2018 - July 2019 **Research Intern**

- Conducted literature review on shared decision making, patient work, enigmatic disease care, personal informatics tools, and data collection and visualization to inform research
- Conducted research on design and development methods to aid patient-centered clinical decision-making models
- Checked provider interview transcripts against transcribed audio recordings
- Performed collaborative thematic analysis of provider interviews and patient focus groups to investigate demands of endometriosis care and identify opportunities for design of tools to support care
- Engaged as a team in iterative codebook development and executed qualitative coding
- Developed insights from looking at themes across providers and put forth design implications to support collaborative work of patient and providers

Junior Biotech Analyst June 2017-January 2019
Quantum Media Consulting Group New York, NY

- Directed narrative building and copy creation for clients from global biotechnology companies operating at various stages of development, from early research to clinical trials to IPO launch
- Conducted extensive research on disease space and market needs for various client focuses
- Created research reports on potential clients in preparation for meetings with company executives
- Worked in teams with financial analysts to draft business proposals for clients detailing proposed market positioning, competitive strategies, and opportunities for media exposure
- Wrote articles for client companies covering industry innovations for various online financial and biotech news outlets

NYU Langone Health's Rusk Rehabilitation *New York, NY*
Motor Recovery Research Lab: PI: Preeti Raghavan, MD
June 2016 – October 2016 **Research Intern, Clinical Trial Assistant**

- Managed data processing and analysis in MATLAB for a study assessing fingertip grip forces for sensory feedback adaptation to various conditions
- Conducted literature review on existing stroke protocols and best practices to inform study on strategies for recovery of dexterity post-stroke
- Conducted research on systemic limitations of implementation of research including time constraints on clinical sessions, physical and psychological patient fatigue, and cost and access restrictions
- Assisted in clinical data collections sessions for study on emotional regulation post-traumatic brain injury
- Coordinated with Rusk's institutional review board to ensure HIPAA compliance for research projects
- Shadowed physical therapy sessions implementing ongoing research

Rutgers New Jersey Medical School *Newark, NJ*
Public Health Research Initiative PI: Gilla Kaplan, PhD
May 2014 – August 2014 **Research Assistant**

- Shadowed research on the molecular epidemiology and antibiotic resistance of Mycobacterium tuberculosis
- Engaged in benchwork preparing various strains and cultures for testing
- Conducted PCR and gel electrophoresis
- Analyzed DNA sequences for mutations and compared to patient reported response to antibiotics
- Conducted data entry for clinical trial enrollment
- Conducted background literature review on tuberculosis