JULIAN H. LANGE, Ph.D.

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SUMMARY OF QUALIFICATIONS

- Meticulous and engaging data analytics and data visualization professional with a published track-record of analyzing complex data for actionable insights and delivering tools and strategies that drive enterprise-wide and business unit workforce initiatives.
- Data intuition and attention to detail in analysis and design cultivated through rigorous scientific background, extensive data wrangling, graphics programming, and the production of impactful, meaningful, and well-designed data visualizations.
- Built and now own the analytics and metrics reporting environment for the Diversity & Inclusion function of a Fortune 70 telecommunications company, with a focus on identifying meaningful patterns in workforce data.
- Published 25 articles in scientific journals and created data-driven graphics for the Los Angeles Times and The New York Times.
- Earned an M.S. in Data Visualization from Parsons School of Design and a Ph.D. in Biology from M.I.T.
- Collegial and highly communicative teammate adept at developing partnerships and leveraging relationships throughout an
 organization to develop solutions and achieve success.

KEY SKILLS & EXPERTISE

- Collecting, handling, and analyzing large data sets for insights and meaning
- Data visualization, information design, and visual storytelling
- Conducting hypothesis-driven analyses and research

PROFESSIONAL EXPERIENCE

Charter Communications Stamford, CT

Senior Manager, Diversity & Inclusion (Dec 2018–present) and Consultant (Sep–Dec 2018)

Lead analytics and metrics reporting for the Diversity & Inclusion function at Charter, a Fortune 70 telecommunications/media company.

- Create and manage processes and metrics to define, analyze, and monitor enterprise-wide and business unit-specific progress on Charter's diversity, inclusion, and culture objectives
- Conduct business intelligence and visualize outputs to surface data-driven insights and identify new strategic and tactical opportunities for attracting and fostering underrepresented talent
- Develop and plan all aspects of a company-wide speaker series on inclusion, including identifying and coaching speakers and moderators, conceiving themes and intended audience takeaways, and managing event logistics
- Create high-quality presentations and reports communicating the progress of Charter's D&I goals to executives and to internal and external committees
- Lead a working group for completing industry D&I surveys, e.g., Human Rights Campaign's Corporate Equality Index
- Liaise with internal and external partners and communicate with key stakeholders, including C-level executives, HR business partners, and Employee Resource Group leaders, to understand and deliver business needs related to the company's D&I goals

Parsons School of Design New York, NY

Adjunct Faculty

Teach an introductory data visualization course that serves as a foundation for information design, data analytics, and interactive visualization practices and prepares students for advanced-level courses.

Los Angeles Times Los Angeles, CA

Visualization and Data Intern

Collaborated with reporters and editors to analyze data and create charts, maps, graphics, and explanatory videos that accompany 22 online and print news <u>articles</u>, including four bylines.

Memorial Sloan Kettering Cancer Center New York, NY

Research Scientist (Sep 2008–Sep 2016) and HHMI Research Specialist (Jan–Jun 2017)

Executed independent, hypothesis-driven biomedical research using experimental and computational approaches. Functions included statistical analyses to identify meaningful patterns in large data sets; conceiving, performing and analyzing experiments in molecular biology and genomics; and using computational and visualization tools to communicate findings.

- Published 18 articles in top-tier, peer-reviewed scientific journals
- Collaborated with research groups in New York, London, Barcelona, and Dresden
- Awarded \$25,000 Tri-Institutional Breakout Prize for Junior Investigators for scientific impact
- Supervised research of a Ph.D. candidate and trained a laboratory technician

- Defining project goals and identifying data-informed solutions to achieve them
- Creating high-quality, data-driven presentations
- Communicating findings to diverse audiences
- Coaching colleagues on best practices in analytics

Oct 2018–present

Jun–Aug 2018

Sep 2008–Jun 2017

Sep 2018–present

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Massachusetts Institute of Technology Cambridge, MA

Ph.D. Researcher and Instructor

Carried out independent, hypothesis-driven research on the medical genetics of the Y chromosome.

- Discoveries published in 5 articles in top-tier scientific journals and <u>covered</u> in The New York Times
- Developed a web-based database of genetic markers for screening the Y chromosome for medically relevant deletions
- Taught sections of two undergraduate courses and mentored six students

EDUCATION

M.S. in Data Visualization, Parsons School of Design New York, NY

The New School Provost Scholarship

Ph.D. in Biology, Massachusetts Institute of Technology Cambridge, MA

M.I.T. Walter A. Rosenblith Graduate Fellowship

D.E.A. in Cancer Biology, University of Paris & Curie Institute Paris, France

Fellowship, Académie Nationale de Médecine

B.S. in Biochemistry, McGill University Montreal, Canada

NSERC Canada Scholarship in Science and Engineering; McGill University McConnell Entrance Scholarship

SELECTED SCIENTIFIC PUBLICATIONS (7 OF 25)

Complete list and PDFs available here.

Primary authorship

- Lange J et al. Cell (2016) The landscape of mouse meiotic double-strand break formation, processing and repair
- Lange J et al. Genomics (2013) Intrachromosomal homologous recombination between inverted amplicons on opposing Y-chromosome arms
- Lange J et al. Nature (2011) ATM controls meiotic double-strand-break formation
- Lange J et al. Cell (2009) Isodicentric Y chromosomes and sex disorders as byproducts of homologous recombination that maintains palindromes

Secondary authorship

- Lukaszewicz A, Lange J et al. bioRxiv (2020) De novo deletion mutations at recombination hotspots in mouse germlines
- Widger A, Mahadevaiah S, Lange J et al. Nature Communications (2018) ATR is a multifunctional regulator of male mouse meiosis
- Daniel K, Lange J et al. Nature Cell Biology (2011) Meiotic homologue alignment and its quality surveillance are controlled by mouse HORMAD1

Sep 2000-Jun 2008