# Julian H. Lange, Ph.D.

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Meticulous and engaging data analyst and visualization expert with a Ph.D. in biomedical sciences from M.I.T., an M.S. in Data Visualization from Parsons School of Design, and a track-record of managing complex projects and bringing influential ideas to fruition. Attention to detail in data analysis and design cultivated through rigorous scientific training, extensive data wrangling, and graphics programming. Collegial teammate adept at working collaboratively and developing relationships with internal and external partners to drive success and meet objectives. Strong interest in telling stories with data.

#### PROFESSIONAL EXPERIENCE

#### Charter Communications Stamford, CT

Sep 2018-present

## Senior Manager (Dec 2018–present) and Temporary Management Consultant (Sep 2018–Dec 2018)

Provide data visualization, business analytics, and infographics support to Charter's Diversity & Inclusion team.

- · Create statistical and graphics tools to analyze metrics and create visuals for Charter's D&I initiatives
- Monitor and report on the progress of Charter's D&I objectives
- Develop high quality presentations for internal communications related to Charter's D&I programs
- Collaborate with internal and external partners to research Charter's current D&I processes and engage leadership and stakeholders to implement best practices

# Parsons School of Design, The New School New York, NY

Oct 2018-present

#### Part-Time Faculty

Teach online course in introductory data visualization 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

Jun-Aug 2018

#### Visualization and Data Intern

Worked with reporters and editors to create charts, maps, graphics, and explanatory videos that accompany the newspaper's online and print articles.

- · Used programming and graphics software to supplement reporters' stories with graphs, charts and maps
- · Contributed graphics-driven stories, including three bylines

# Memorial Sloan Kettering Cancer Center New York, NY

Sep 2008-Sep 2016 & Jan-Jun 2017

#### HHMI Research Specialist (Jan-Jun 2017) and Postdoctoral Fellow (Sep 2008-Sep 2016)

Executed independent, hypothesis-driven biomedical research using experimental and programmatic approaches in the laboratory of Dr. Scott Keeney. Functions included employing statistical tools to identify meaningful patterns in large data sets; conceiving, performing and analyzing experiments in molecular biology and genomics; using bioinformatic and visualization tools to communicate findings in print publications and seminars; and writing and editing manuscripts.

- Published 16 articles in top-tier, peer-reviewed scientific journals, including Nature and Cell
- Worked collaboratively with research groups in New York, London, Barcelona, and Dresden
- Awarded \$25,000 Tri-Institutional Breakout Prize for Junior Investigators for scientific impact
- Presented complex concepts at national and international conferences
- Supervised research of a Ph.D. candidate and trained a laboratory technician

# Massachusetts Institute of Technology Cambridge, MA

Sep 2000-Jun 2008

#### Ph.D. Researcher and Instructor

Carried out independent research on human genetic disorders of the Y chromosome in the laboratory of Dr. David Page, Director of the Whitehead Institute for Biomedical Research.

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

#### **EDUCATION**

M.S. in Data Visualization, Parsons School of Design New York, NY	2018
Ph.D. in Biology, Massachusetts Institute of Technology Cambridge, MA	2008
D.E.A. in Cancer Biology, University of Paris & Curie Institute Paris, France	1999
B.S. in Biochemistry, McGill University Montreal, Canada	1997

#### **SKILLS**

#### **Programming Tools and Software**

- R, JavaScript, D3.js, p5.js, HTML/CSS
- Adobe Illustrator, Adobe Photoshop, Microsoft Office

# Languages

- French (fluent with oral and written knowledge)
- German (conversational)

# **SELECTED SCIENTIFIC PUBLICATIONS (9 OF 23)**

# **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
- Lange J et al. Nucleic Acids Research (2008) MSY Breakpoint Mapper, a database of sequence-tagged sites useful in defining naturally occurring deletions in the human Y chromosome

# **Secondary contribution**

- Lukaszewicz A, Lange J et al. Cell Cycle (2018) Control of meiotic double-strand-break formation by ATM: local and global views
- Widger A, Mahadevaiah S, Lange J et al. Nature Communications (2018) ATR is a multifunctional regulator of male mouse meiosis
- Jain D, Meydan C, Lange J et al. PLoS Genetics (2017) rahu is a mutant allele of Dnmt3c, encoding a DNA methyltransferase homolog required for meiosis and transposon repression in the mouse male germline
- Versteege I, Sévenet S, Lange J et al. Nature (1998) Truncating mutations of hSNF5/INI1 in aggressive paediatric cancers

#### **AWARDS & FELLOWSHIPS**

- The New School Provost Scholarship, 2017-2018
- Tri-Institutional Breakout Prize for Junior Investigators, 2015
- American Cancer Society Postdoctoral Fellowship, 2012–2013
- Finalist, Life Sciences Research Foundation Postdoctoral Fellowship, 2010
- M.I.T. Walter A. Rosenblith Graduate Fellowship, 2000–2002
- Fellowship, Académie Nationale de Médecine, 1998–1999
- NSERC Canada Scholarship in Science and Engineering, 1993–1997
- McGill University McConnell Entrance Scholarship, 1993–1997

#### **INVITED TALKS**

- New York University Langone Medical Center, Mar 2015 New York, NY
- UT Southwestern Children's Medical Center Research Institute, Mar 2015 Dallas, TX
- The Hospital for Sick Children, Feb 2015 Toronto, Canada
- 8ème Journée d'Endocrinologie Sexuelle Alfred Jost, Mar 2010 Paris, France
- American Society of Andrology 31st Annual Conference, Apr 2006 Chicago, IL
- 15th International Chromosome Conference, Sep 2004 London, UK