Julian Lange, Ph.D.

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EDUCATION

M.S. in Data Visualization, Parsons School of Design New York, NY — graduation in **May 2018**

Ph.D. in Biology, Massachusetts Institute of Technology Cambridge, MA — **2008**

D.E.A. in Cancer Biology, University of Paris VII & Curie Institute Paris, France — **1999**

B.S. in Biochemistry, McGill University Montreal, Canada — **1997**

EXPERIENCE

Memorial Sloan Kettering Cancer Center New York, NY — Sep 2008–Sep 2016 & Jan–Jun 2017

HHMI Research Specialist (Jan–Jun 2017)

Supported the laboratory of Dr. Scott Keeney in the preparation of research articles. Functions included managing manuscript process; writing and editing manuscripts; and performing bioinformatic and visualization analyses.

- Collaborative work with research groups in New York, London, and Barcelona led to five articles currently published or under review at top-tier scientific journals

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 statistical analyses using R to identify meaningful patterns in large data sets; conceiving, performing and analyzing experiments in molecular biology and genomics; and using bioinformatic and visualization tools to communicate findings in print publications and seminars.

- Discoveries led to eleven articles in top-tier, peer-reviewed scientific journals
- Awarded $25,000 Tri-Institutional Breakout Prize for Junior Investigators for scientific impact
- Presented complex concepts at national and international conferences
- Awarded postdoctoral fellowship from the American Cancer Society
- Supervised research of a Ph.D. candidate and trained a laboratory technician

Massachusetts Institute of Technology and Whitehead Institute Cambridge, MA — 2000–2008

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 covered in The New York Times
- Discoveries published in five 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

SKILLS

Programming Tools and Software

- R, JavaScript, D3, P5, HTML/CSS, Adobe Illustrator, Adobe Photoshop, Microsoft Office
- See Publications and Graphics pages of website for examples

Languages

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

SELECTED 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 (in press) Control of meiotic double-strand-break formation by ATM: local and global views
- 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
- Daniel K, **Lange J** et al. Nature Cell Biology (2011) Meiotic homologue alignment and its quality surveillance are controlled by mouse HORMAD1
- 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