Miaozhu Li, Ph.D.

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2024 West Main Street, Room B112, Durham, NC 27708

EDUCATION

Institute for Nutritional Sciences (INS), SIBS, CAS

2008.09 - 2013.06

Ph.D. in Genetic and Environmental Epidemiology

Advisor: Prof. Lin He

China Agricultural University (CAU)

2005.09 - 2008.06

B.S. in Biological Sciences with Honors

Graduated 1 year early based on academic excellence

Overall GPA: 3.61/4 (88/100)

ACADEMIC EXPERIENCE

Center for Population Health and Aging, Duke University

2014.09 - present

Postdoctoral Associate

Durham, US

- · Advisor: Dr. Svetlana Ukraintseva
- · Project: Relationships among genetic regulators of aging, health and lifespan

CAS-MPG Partner Institute for Computational Biology

2013.07 - 2014.08

Postdoctoral Fellow

Shanghai, China

- · Advisors: Prof. Sijia Wang; Prof. Jean Krutmann
- · Project: Air pollution exposure, its interaction with genes and the role of systemic inflammation on skin-related outcomes

Leibniz Institut für umweltmedizinische Forschung (IUF)

2011.11 - 2012.07

Visiting Scientist

Düsseldorf, Germany

- · Advisor: Prof. Ursula Krämer
- · Project: Gene-environment interactions in the onset of allergic diseases

PROFESSONAL SKILLS

Statistical Computing SAS, Stata, SPSS for statistical analysis

R for data mining, machine learning and data visualization

Bioinformatics NGS software: Bowtie2, BWA, SOAP, Samtools, Bedtools, Tophat, Cufflinks

GWAS tools: PLINK, Haploview, IMPUTE2

Programming Linux Shell, Perl, Python and C

Experimental Skills PCR, Quantitative PCR, NGS library preparation, ELISA and Western Blot

Languages Mandarin Chinese, English (IELTS Overall score 7), German (A2)

PUBLICATIONS

Peer-Reviewed Journal Articles

M Li*, A. Vierkötter*, T. Schikowski*, A Hüls, M. Matsui, B. Deng, C. Ma, A. Ren, J. Zhang, J. Tan, Y Yang, L. Jin, J. Krutmann*, Z. Li*, S. Wang*. Epidemiological evidence that indoor air pollution from cooking with solid fuels accelerates skin aging in Chinese women (* equal contribution) *J Dermatol Sci.* 2015, 79(2):148–154. doi:10.1016/j.jdermsci.2015.04.001

- A.I. Yashin, D. Wu, L.S. Arbeeva, K.G. Arbeev, A.M. Kulminski, I. Akushevich, M. Kovtun, I. Culminskaya, E. Stallard, <u>M Li</u>, S.V. Ukraintseva. Genetics of aging, health and survival: Dynamic regulation of human longevity related traits. *Front Genet.* 2015; 6: 122. doi:10.3389/fgene.2015.00122
- A.I. Yashin, K.G. Arbeev, L.S. Arbeeva, D. Wu, I. Akushevich, M. Kovtun, A. Yashkin, A.M. Kulminski, I. Culminskaya, E. Stallard, <u>M Li</u>, S.V. Ukraintseva. How the effects of aging and stresses of life are integrated in mortality rates: insights for genetic studies of human health and longevity. *Biogerontology*. 2015 Aug 18. [Epub ahead of print]. doi: 10.1007/s10522-015-9594-8
- X Zeng, X Tang, X Wang, M Li, Y Guo, W Huang, Y Niu, W Leng. AlloDerm implants for prevention of Frey syndrome after parotidectomy: A systematic review and meta-analysis. *Mol Med Report.* 2012, 5(4):974–980. doi:10.3892/mmr.2012.762
- S Wu, <u>M Li</u>, Y Liu, M Wei. Meta-analyses of correlation between tea consumption and risk of ovarian cancer. *Journal of Shanghai Jiaotong University (Medical Science)*. 2011, 31(6) 840–845.
- M Li, Wu Y, Chen G, Yang Y, Zhou D, Zhang Z, Zhang D, Chen Y, Lu Z, He L, Zheng J, Liu Y. Deletion of the late cornified envelope genes *LCE3C* and *LCE3B* is associated with psoriasis in a Chinese population. *J Invest Dermatol.* 2011, 131(8):1639–1643. doi:10.1038/jid.2011.86
- $\underline{\mathbf{M}}$ Li, E Link, C Cramer, D Sugiri, H Lin, U Krämer. Interactions between filaggrin (FLG) mutations and traffic-related pollution in the induction of eczema in children. (under review)

Book Chapters

<u>M Li</u>. Meta-Analysis of Correlation Coefficients with metacor and MAc, In: *Applied Meta-Analysis using R*, X. Zeng ed., Beijing: Military Medical Science Press, 2015. In press.

Oral Presentations

<u>M Li</u>, E Link, C Cramer, D Sugiri, H Lin, U Krämer. Interactions between filaggrin mutations and traffic-related pollution in the induction of eczema in children, *Shanghai Doctoral Public Lectures in Biology*, December 2013.

Posters

M Li*, A. Vierköetter*, A Ding, MS Matsui, B Deng, J Zhang, J Tan, Y Yang, T Schikowski, L Jin, J Krutmann, S Wang. Ethnic differences and environmental factors in skin aging. *J Invest Dermatol.* 134: S61–S71; doi:10.1038/jid.2014.105 (* co-first authors)

A Vierköetter*, <u>M Li*</u>, C Ma, B Deng, MS Matsui, J Krutmann, Z Li. Indoor air pollution from cooking with coal or firewood accelerates skin aging in northern Chinese women. *J Invest Dermatol.* 134: S61–S71; doi:10.1038/jid.2014.105 (* co-first authors)

<u>M Li</u>, A. Vierköetter, A Ding, MS Matsui, J Tan, T Schikowski, L Jin, J Krutmann, S Wang. Environmental and lifestyle factors affecting skin aging in different ethnic groups. *CAS-MPG PICB Scientific Exchange Meeting*, June 2014.

SOFTWARE PACKAGES

hdnom R package building nomograms for high-dimensional Cox models, with support for model validation and calibration. Project website: http://hdnom.org.

Availbale from CRAN: https://cran.r-project.org/web/packages/hdnom/.

liftr R package for dockerizing R Markdown documents with support for Rabix in reproducible research. Project website: http://liftr.me.

Availbale from CRAN: https://cran.r-project.org/web/packages/liftr/.

AWARDS AND HONORS

Best Poster Award in 2014 CAS-MPG PICB Scientific Exchange Meeting	2014.06
Nominated Postdoc by Post-Doctoral Retreat in the 73 rd SID Annual Meeting	2014.05
Merit Student in Chinese Academy of Sciences	2013.05
Third prize for the academic report in 4 th Doctoral Student Symposium in INS	2012.10
Pfizer Scholarship of Shanghai Institutes for Biological Sciences	2012.01
Wood-Whelan Research Fellowship of IUBMB, the 2 nd Chinese student won it	2011.06
National Encouragement Scholarship (top 5%), China Agricultural University	2007.10
Honor's Scholarship (Grade 2), China Agricultural University	2006.10

MEMBERSHIP

The Gerontological Society of America (GSA)	2015
American Society for Biochemistry and Molecular Biology (ASBMB)	2015
The Cochrane Collaboration	2014
The German Society for Epidemiology (DGEpi)	2012
European Academy of Allergy and Clinical Immunology (EAACI)	2012
Friends of International Union of Biochemistry and Molecular Biology (IUBMB)	2009

SOCIAL ACTIVITIES

Council Member of Duke University Postdoc Association	2015.02 - present
Committee member of Capital of Statistics (http://cos.name)	2013.11 - present
Largest online community on statistics in China	
Volunteer of 2010 Shanghai International Youth Science and Technology Expo	2010.07
Team leader of "Qiu Suo Lecture Room" in Chinese Academy of Sciences	2009.09 - 2013.06
Volunteer of Junior Achievement, China, Project Manager of MESE	2009.09 - 2013.06
(Management Economic Simulation Exercise)	
Team leader of the volunteers of $21^{\rm th}$ IUBMB & $12^{\rm th}$ FAOBMB	2009.08

REFERENCES

Svetlana V. Ukraintseva, Ph.D.

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Lin He, Ph.D.

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Angelo Azzi, M.D., Ph.D.

Professor, Tufts University

President of International Union of Biochemistry and Molecular Biology

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