Julia Fukuyama

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ACADEMIC Fred Hutchinson Cancer Research Institute

Position Postdoctoral Research Fellow, July 2017 to present.

EDUCATION Stanford University

Ph.D. Statistics, 2017

Stanford University M.S. Statistics, 2012

Yale University

B.S. Biology, magna cum laude, with distinction in the major, 2010

Preprints Julia Fukuyama. Adaptive gPCA: A method for structured dimensionality

reduction. arXiv preprint arXiv:1702 00501, 2017.

Publications Julia Fukuyama, Laurie Rumker, Kris Sankaran, Pratheepa Jeganathan, Les

Dethlefsen, David A. Relman, Susan Holmes. Multidomian analyses of a longitudinal human microbiome intestinal cleanout perturbation experiment.

PLoS Computational Biology, 2017.

Elena Vendrame, Julia Fukuyama, Dara Strauss-Albee, Susan Holmes, Catherine Blish. Mass cytometry analytical approaches reveal cytokine-induced changes in natural killer cells. *Cytometry Part B: Clinical Cytometry*, 2016.

Ben Callahan, Kris Sankaran, Julia Fukuyama, Paul McMurdie, and Susan Holmes. Bioconductor workflow for microbiome data analysis: from raw reads to community analyses. *F1000Research*, 2016.

Benjamin Callahan, Diana Proctor, Julia Fukuyama, David A. Relman, Susan Holmes. Reproducible research workflow in R for the analysis of personalized human microbiome data. *Pacific Symposium on Biocomputing*, 2016.

Dara Strauss-Albee, Julia Fukuyama, Emily Liang, Yi Yao, Justin Jarrell, Alison Drake, John Kinuthia, Ruth Montgomery, Grace John-Stewart, Susan Holmes, Catherine Blish. Human NK cell repertoire diversity reflects immune experience and correlates with viral susceptibility. *Science Translational Medicine*, 2015.

Alex Kay, Nick Bayless, Julia Fukuyama, Natali Aziz, Cornelia Dekker, Sally Mackey, Gary Swan, Mark Davis, Catherine Blish. Pregnancy does not attenuate the antibody or plasmablast response to inactivated influenza vaccine. *Journal of Infectious Diseases*, 2015.

Alex Kay, Julia Fukuyama, Natali Aziz, Cornelia Dekker, Sally Mackey, Gary Swan, Mark Davis, Susan Holmes, Catherine Blish. Enhanced natural killercell and T-cell responses to influenza A virus during pregnancy. *Proceedings of the National Academy of Sciences*, 2014.

Miling Yan, Sunje Pamp, Julia Fukuyama, Peter Hwang, Do-Yeon Cho, Susan Holmes, David A. Relman. Nasal microenvironments and interspecific interactions influence nasal microbiota complexity and *S. aureus* carriage. *Cell Host and Microbe*, 2013.

Julia Fukuyama, Paul McMurdie, Les Dethlefsen, David A. Relman, Susan Holmes. Comparisons of Distance Methods for Combining Covariates and Abundances in Microbiome Studies. *Pacific Symposium on Biocomputing*, 2012.

Jeffrey Isenberg, Yifeng Jia, Julia Fukuyama, Christopher Switzer, David A. Wink, David D. Roberts. Thrombospondin-1 inhibits nitric oxide signaling via CD36 by inhibiting myristic acid uptake. *Journal of Biological Chemistry*, 2007.

Presentations

Adaptive gPCA.

STAMPS 2017

Beyond UniFrac.

Interdisciplinary Microbiome Perspectives 2017

Improved phylogenetic ordinations for microbiome data.

JSM 2016

Phylogenetically informed analysis of microbiome data using adaptive gPCA in R. $UseR\ 2016$

Interpretable ordinations for microbiome data using sparse double principal coordinates analysis. $BCATS\ 2015$

Comparisons of distance methods for combining covariates and abundances in microbiome studies.

Pacific Symposium on Biocomputing 2012

SERVICE

Referee for the Annals of Applied Statistics and Microbiome.

Awards

Bio-X SIGF Graduate Student Fellow William R. Belknap Prize for Excellence in Biology Yale College Dean's Research Fellowship in the Sciences Yale College Fellowship for International Research in the Sciences and Health Studies $\,$