

UNIVERSITY OF PENNSYLVANIA - PERELMAN SCHOOL OF MEDICINE  
Curriculum Vitae

Date: 09/08/2015

Robert Babak Faryabi, Ph.D.

Address: Room 553 BRB II/III, 421 Curie Boulevard  
Philadelphia, PA 19104-6160  
Philadelphia, PA 19104 USA

If you are not a U.S. citizen or holder of a permanent visa, please indicate the type of visa you have:  
none (U.S. citizen)

Education:

1995	BSc	Sharif University of Technology, Tehran, Iran (Electrical Engineering)
1997	MSc	Sharif University of Technology, Tehran, Iran (Electrical Engineering)
2009	PhD	Texas A&M University, College Station, TX (Computational Biology)

Postgraduate Training and Fellowship Appointments:

2009-2015	Postdoctoral Research Fellow, Laboratory of Genome Integrity, National Institutes of Health, Bethesda, MD
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Military Service:  
[none]

Faculty Appointments:

2015-present	Assistant Professor of Pathology and Laboratory Medicine at the Hospital of the University of Pennsylvania, University of Pennsylvania School of Medicine
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Hospital and/or Administrative Appointments:  
[none]

Other Appointments:

1999-2003	Design Engineer, Dow Chemical Design & Construction, Houston, TX
2003-2005	Research Assistant, Wireless and Internet Research Laboratory, University of Toronto, Ontario, Canada
2005-2009	Research Assistant, Genomic Signal Processing Laboratory, Texas A&M University, TX

Specialty Certification:  
[none]

Licensure:

[none]

Awards, Honors and Membership in Honorary Societies:

2003	Edward S. Rogers Sr. Scholarship, University of Toronto, Ontario, Canada
2004	Edward S. Rogers Sr. Scholarship, University of Toronto, Ontario, Canada
2007	Texas Student Research Award Prize
2009-2014	Cancer Research Training Award

Memberships in Professional and Scientific Societies and Other Professional Activities:International:

2003-Present	Institute of Electrical and Electronics Engineers
2006-Present	International Society for Computational Biology

Editorial Positions:

2009-Present	Ad hoc Reviewer, EURASIP Journal of Bioinformatics and Systems Biology
2009-Present	Ad hoc Reviewer, IET Journal of Systems Biology
2010-Present	Ad hoc Reviewer, IEEE Journal of Selected Topics in Signal Processing
2012-Present	Ad hoc Reviewer, IEEE Transactions in Biomedical Engineering

Academic and Institutional Committees:

2013-Present	Member, Technical Program Committee, IEEE Workshop on Genomic Signal Processing and Statistics
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Major Academic and Clinical Teaching Responsibilities:

2003-2005	Teaching Assistant, Computer Networks, University of Toronto, Ontario, Canada
2005	Teaching Assistant, Network Programming, University of Toronto, Ontario, Canada
2013-2015	National Institutes of Health Undergraduate Mentoring

Lectures by Invitation (Last 5 years):

Jun, 2013	"Genome-wide identification of fragile sites in B cells", Center of Excellence in Chromosome Biology Workshop on Chromosome Biology, Bethesda, MD
Nov, 2013	"Genome-wide identification of fragile sites in B cells", Bioinformatics and Bio-imaging Seminar, Virginia Tech University, Arlington, VA

Nov, 2013 "Genome-wide identification of fragile sites in B lymphocytes",  
IEEE Workshop on Genomic Signal Processing and Statistics,  
Houston, TX

Organizing Roles in Scientific Meetings:

[none]

Bibliography:

Research Publications, peer reviewed (print or other media):

1. R.B. Faryabi, A. Datta, E. R. Dougherty: On Approximate Stochastic Control in Genetic Regulatory Networks. IET Journal of Systems Biology 1(6): 361-368, Nov 2007.
2. R.B. Faryabi, J.-F. Chamberland, G. Vahedi, A. Datta, E. R. Dougherty: Optimal Intervention in Asynchronous Genetic Regulatory Networks. IEEE Journal of Selected Topics in Signal Processing 2(3): 412-423, June 2008.
3. G. Vahedi, R.B. Faryabi, J.-F. Chamberland, A. Datta, E. R. Dougherty: Intervention in Gene Regulatory Networks via a Stationary Mean-First-Passage-Time Control Policy. IEEE Transactions on Biomedical Engineering 2(10): 2319-2331, Oct 2008.
4. R.B. Faryabi, G. Vahedi, J.-F. Chamberland, A. Datta, E. R. Dougherty: Optimal Constrained Stationary Intervention in Gene Regulatory Networks. EURASIP Journal on Bioinformatics and Systems Biology 2008.
5. G. Vahedi, R.B. Faryabi, J.-F. Chamberland, A. Datta, E. R. Dougherty: Optimal Intervention Strategies for Cyclic Therapeutic Methods. IEEE Transactions on Biomedical Engineering 56(2): 281-291, Feb 2009.
6. R.B. Faryabi G. Vahedi, A. Datta, J.-F. Chamberland, E. R. Dougherty: Recent Advances in the Control of Markovian Gene Regulatory Networks. Current Genomics 10(7): 540-547, Nov 2009.
7. G. Vahedi, R.B. Faryabi, J.-F. Chamberland, A. Datta, E. R. Dougherty: Sampling-Rate-Dependent Probabilistic Boolean Networks. Journal of Theoretical Biology 261(4): 463-477, Dec 2009.
8. R.B. Faryabi, G. Vahedi, J.-F. Chamberland, A. Datta, E. R. Dougherty: Intervention in Context-Sensitive Probabilistic Boolean Networks Revisited. EURASIP Journal on Bioinformatics and Systems Biology 2009.

9. Bunting Samuel F, Callén Elsa, Kozak Marina L, Kim Jung Min, Wong Nancy, López-Contreras Andrés J, Ludwig Thomas, Baer Richard, Faryabi Robert B, Malhowski Amy, Chen Hua-Tang, Fernandez-Capetillo Oscar, D'Andrea Alan, Nussenzweig André: BRCA1 functions independently of homologous recombination in DNA interstrand crosslink repair. Molecular cell 46(2): 125-35, Apr 2012.
10. Callen Elsa, Faryabi Robert B, Luckey Megan, Hao Bingtao, Daniel Jeremy A, Yang Wenjing, Sun Hong-Wei, Dressler Greg, Peng Weiqun, Chi Hongbo, Ge Kai, Krangel Michael S, Park Jung-Hyun, Nussenzweig André: The DNA damage- and transcription-associated protein paxip1 controls thymocyte development and emigration. Immunity 37(6): 971-85, Dec 2012.
11. Barlow Jacqueline H\*, Faryabi Robert B\*, Callén Elsa, Wong Nancy, Malhowski Amy, Chen Hua Tang, Gutierrez-Cruz Gustavo, Sun Hong-Wei, McKinnon Peter, Wright George, Casellas Rafael, Robbiani Davide F, Staudt Louis, Fernandez-Capetillo Oscar, Nussenzweig André: Identification of early replicating fragile sites that contribute to genome instability. Cell 152(3): 620-32, Jan 2013 \*co-first author.
12. Callen Elsa, Di Virgilio Michela, Kruhlak Michael J, Nieto-Soler Maria, Wong Nancy, Chen Hua-Tang, Faryabi Robert B, Polato Federica, Santos Margarida, Starnes Linda M, Wesemann Duane R, Lee Ji-Eun, Tubbs Anthony, Sleckman Barry P, Daniel Jeremy A, Ge Kai, Alt Frederick W, Fernandez-Capetillo Oscar, Nussenzweig Michel C, Nussenzweig André: 53BP1 mediates productive and mutagenic DNA repair through distinct phosphoprotein interactions. Cell 153(6): 1266-80, Jun 2013.
13. Santos Margarida A, Faryabi Robert B, Ergen Aysegul V, Day Amanda M, Malhowski Amy, Canela Andres, Onozawa Masahiro, Lee Ji-Eun, Callen Elsa, Gutierrez-Martinez Paula, Chen Hua-Tang, Wong Nancy, Finkel Nadia, Deshpande Aniruddha, Sharrow Susan, Rossi Derrick J, Ito Keisuke, Ge Kai, Aplan Peter D, Armstrong Scott A, Nussenzweig André: DNA-damage-induced differentiation of leukaemic cells as an anti-cancer barrier. Nature 514(7520): 107-11, Oct 2014.

Research Publications, peer-reviewed reviews:

[none]

Contributions to peer-reviewed research publications, participation cited but not by authorship:

[none]

Research Publications, non-peer reviewed:

[none]

Abstracts (Last 3 years):

1. Faryabi RB: Mll4-dependent regulation of Hematopoietic Stem Cell Aging. Keystone Symposia, Epigenomics and Chromatin Dynamics, Keystone, CO Jan 2012.
2. Faryabi RB: PTIP controls thymocyte development and emigration by regulating DNA recombination, transcription and repair. RECOMB Conference on Regulatory and Systems Genomics, San Francisco, CA Nov 2012.
3. Faryabi RB: Identification of early replicating fragile sites that contribute to genome instability. Keystone Symposia, DNA Replication and Recombination, Banff, AL, Canada Mar 2013.

Editorials, Reviews, Chapters, including participation in committee reports (print or other media):

[none]

Books:

[none]

Alternative Media:

[none]

Patents:

[none]