

David Burstein - Curriculum Vitae

The Department of Cell Research and Immunology
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Education

- 2008 to date **Ph.D. Studies** under the supervision of Prof. Tal Pupko, Department of Cell Research and Immunology, Tel-Aviv University
- 2006 – 2008 **M.Sc. in the Bioinformatics track (*summa cum laude*)** under the supervision of Prof. Tal Pupko. Department of Cell Research and Immunology, Tel-Aviv University
- 2001 – 2004 **B.Sc. in Biology (*summa cum laude*) and Computer Science (*magna cum laude*)**, Tel-Aviv University. Double major program with specialization in Bioinformatics

Academic Prizes and Awards

- 2012 Prof. Willy Hirsch Prize for original research work conducted in the field of microbiology (awarded by the Israel Society for Microbiology)
- 2010 Best poster award - Fifth Edmond J. Safra Bioinformatics Retreat
- 2010 Best poster award - The Israel Society for Microbiology (ISM) 2010 Annual Meeting
- 2009 to date Scholarship for Excellence in Converging Technologies Program of the Israeli Council for Higher Education
- 2009 Best poster award - Israeli Bioinformatics Symposium 2009, Weizmann Institute of Science
- 2008 Award from the Wolf Foundation for excellent M.Sc. students
- 2008 Award from the Tel-Aviv University graduate school for excellent achievements in teaching, research and studies
- 2006 - 2009 Scholarship for excellent students from the Safra bioinformatics program
- 2004 Exact Science Dean's honour list & Life Science Dean's honour list
- 2003 Exact Science Dean's honour list
- 2002 Life Science Dean's honour list

Academic Teaching

- 2009 to date Teaching instructor in the course "Perl Programming for Biology" Tel-Aviv University
- 2007 – 2009 Teaching instructor in the course "Biological Sequences Analysis" in Tel-Aviv College (MTA)
- 2007 – 2008 Teaching assistant in the course "Introduction to Bioinformatics" in Tel-Aviv University
- 2005 – 2006 Teaching assistant in the course "Algorithms in Computational Biology", the Concentrated M.Sc. Track in Computer Science, Tel-Aviv University

Publications

- Amit M., Donyo M., Hollander D., Goren A., Kim E., Gelfman S., Lev-Maor G., Burstein D., Schwartz S., Postolsky B., Pupko T., and Ast G.
Differential GC content between exons and introns establishes distinct strategies of splice site recognition.
Cell Reports, accepted pending minor revisions.
- Burstein D.*, Gould S.B.*, Zimorski V., Klösger T., Kiosse F., Major P., Martin W., Pupko T., and Dagan T.
A machine-learning approach to identify hydrogenosomal proteins in *Trichomonas vaginalis*.
Eukaryotic Cell **11**:217-228 (2012)
- Gelfman S., Burstein D., Penn O., Schwartz S., Pupko T., and Ast G.
Changes in exon-intron structure during vertebrate evolution affect the splicing pattern of exons.
Genome Research **22**(1):35-50 (2012)
- Barzel A., Privman E., Peeri M., Naor A., Shachar E., Burstein D., Lazary R., Gophna U., Pupko T., and Kupiec M.
Native homing endonucleases can target conserved genes in humans and in animal models.
Nucleic Acids Research **39**(15):6646-6659 (2011)
- Burstein D., Zusman T., Degtyar E., Viner R., Segal G., and Pupko T.
Genome-scale identification of *Legionella pneumophila* effectors using a machine learning approach.
PLoS Pathogens **5**(7):e1000508 (2009)
- Schwartz S., Silva J., Burstein D., Pupko T., Eyras E., and Ast G.
Large scale comparative analysis of splicing signals and their corresponding splicing factors in eukaryotes.
Genome Research **18**(1):88-103 (2008)
- Ulitsky I., Burstein D., Tuller T., Chor B.
The ACS approach to phylogenomic reconstruction
Journal of Computational Biology (JCB) **13**(2):336-50 (2006)

* These authors contributed equally

Refereed proceedings

- Burstein D., Gould S.B., Zimorski V., Klösger T., Kiosse F., Major P., Martin W., Pupko T., and Dagan T.
A machine-learning approach to hydrogenosomal protein identification in *Trichomonas vaginalis*
Proceedings of the Fifth International Workshop of Machine Learning in Systems Biology (MLSB) pp. 15-18 (2011)
- Burstein D., Ulitsky I., Tuller T., Chor B.
Information theoretic approaches to whole genome phylogenomics
Proceedings of the Ninth Annual International Conference on Research in Computational Molecular Biology (RECOMB) pp. 283-295 (2005)

Involvement in the community and military service

- 2010 – 2011 Volunteering as a high school tutor in the Israeli Computer Science Unplugged program
- 2001 – 2004 Caregiver in a residential home for autistic people, ALUT – the Israeli society for autistic children
- 2001 Manager of an English summer-school for new immigrants (over 100 students), The Israel Association of Community Centres
- 1996 – 2000 Military service in Israeli defence force. Rank: Lieutenant.
Officer ranks granted with honour.