

*Curriculum Vitae*  
*Yitzhak Pilpel*  
(updated: December 2015)

**A: Personal Details**

**Date of birth:** 12/9/1968

**Citizenship:** Israeli

**Mailing Address:**

Dept. of Molecular Genetics  
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**B: Education**

- 2000 - 2002 Postdoctoral Fellow, Department of Genetics, Harvard Medical School, Boston, MA, USA. Advisor: Prof. George M. Church.
- 1995 - 1999 Ph.D. degree. Department of Molecular Genetics, Weizmann Institute of Science, Rehovot, Israel. Thesis title: Structural and evolutionary genomics of molecular recognition repertoires. Advisors: Prof. Doron Lancet, Prof. Ephraim Katchalski-Katzir.
- 1994 - 1995 Studies toward M.Sc. degree followed by transferring to direct Ph.D. track. Department of Membrane Research and Biophysics, Weizmann Institute of Science, Rehovot, Israel. Advisors: Prof. Doron Lancet, Prof. Ephraim Katchalski-Katzir.
- 1990 - 1993 B.Sc. degree. Major: Biology. Tel-Aviv University, Tel-Aviv, Israel.

## **C: Employment History**

- 2015 - Full Professor Department of Molecular Genetics, Weizmann Institute of Science. Group leader.
- 2008 – 2015: Associate Professor Department of Molecular Genetics, Weizmann Institute of Science. Group leader.
- 2010 - *Incumbent of the Ben-May Professorial Chair*
- 2008 – 2009: Visiting Professor, Department of Systems Biology, Harvard Medical School.
- 2003 – 2008: Senior Scientist, Department of Molecular Genetics, Weizmann Institute of Science. Group leader.

## **D: Academic Administration**

- 2015-2018: Head, Committee on Appointment of Senior Scientists (tenure track faculty entry rank), Life Sciences Faculties, Weizmann Institute of Science.
- 2010-2013: Committee on Appointment of Senior Scientists (tenure track faculty entry rank), Weizmann Institute of Science.
- 2009-2012: Committee on Appointment of Senior Scientists (tenure track faculty entry rank), Life Sciences Faculties, Weizmann Institute of Science.
- 2007 - 2008 Feinberg Graduate School, Weizmann Institute of Science, Rehovot, Israel. Member of the Board of Studies, Life Sciences.
- 2004 - 2008 Feinberg Graduate School, Head of the Graduate Program in Bioinformatics. Weizmann Institute of Science.

## **E. Other Appointments**

### **• Positions in academia and membership on committees**

- 2015-2018 EMBO Young Investigator Program: member of the selection committee
- 2012 – present: The European Research Council (ERF): review panel member ERC Advanced grant, in the (LS2) panel on Genetics, Genomics, Bioinformatics and Systems Biology.
- 2010: Member of the International Advisory Board, Centre for Integrative Systems Biology at Imperial College, London.

### **• Teaching experience - courses taught**

- 2014 – present: Developed and taught the course “Regulatory Genomics”, Feinberg Graduate School, Weizmann Institute of Science.
- 2011 – 2014: Developed and taught the course “Systems and Genome Biology” Harvard Summer School.
- 2003 – 2006: Developed and taught the course, "Computational Functional Genomics." Feinberg Graduate School, Weizmann Institute of Science.
- 1998: Teaching Assistant for the course, "Programming for Bioinformatics and Internet." Feinberg Graduate School, Weizmann Institute of Science.
- 1997: Lecturer for the course, "Computational Genomic and Bioinformatics." Feinberg Graduate School, Weizmann Institute of Science.
- 1994: Teaching Assistant for the course, "Receptors and Recognition." Feinberg Graduate School, Weizmann Institute of Science.
- 1992: Teaching Assistant in mathematics for the course, “Introduction to Differential and Integral Calculus.” Tel Aviv University.

### **• Membership on scientific advisory boards, consulting activities**

- 2009 – 2011: Consultant for Evogene, Rehovot, Israel.
- 2005: Member of the Program Committee, RECOMB 2005, (San Diego CA, USA).
- 2004 – 2006: Member of the Program Committee, RECOMB Regulatory Genomics 2004, (San Diego CA, USA).
- 2001-2002: Consultant for Pfizer, Cambridge MA, on G-Protein Coupled Receptor structure and function.

- **Membership on editorial boards**

- Associate Editor: [PLoS Computational Biology](#) (term ended)
- Associate Editor: [Biology Direct](#)
- Associate Editor: [Database](#)
- Editorial Board Member [Current Opinion in Genetics and Development](#)

## **F: International Recognition**

- **Prizes, awards, and competitive scholarships**

- 2014 [ERC Consolidator Grant](#)
- 2013 [IBM Faculty Award](#)
- 2012 [Michael Bruno Memorial Award](#)
- 2011 [EMBO member](#)
- 2010 [Hestrin Prize. The Israeli Society for Biochemistry and Molecular Biology](#)
- 2008 [European Research Council grant award](#)
- 2007 [Levinson Prize in Biology, awarded by the Scientific Council, Weizmann Institute of Science](#)
- 2006 [James Heineman Research Award, \(awarded by Minerva Stiftung\).](#)
- 2005 [EMBO Young Investigator Award, awarded by the European Molecular Biology Organization.](#)
- 2003 Fellowship from the Center for Complexity Sciences – a merit-based fellowship for young principal investigators (awarded by the Horowitz Foundation).
- 2002 Fellow of the PhRMA Foundation, a Center for Excellence in Integration of Genomics and Informatics, Harvard University.
- 2000 Fulbright Postdoctoral Award, awarded by the United States - Israel Educational Foundation.
- 1999 Prize of Distinction for outstanding Ph.D. studies. Awarded by the Feinberg Graduate School, Weizmann Institute of Science.
- 1998 First Prize in the National Competition for Multidisciplinary Ph.D. Studies. Awarded by the Faculty of Mathematics and Natural Sciences, Hebrew University of Jerusalem.

- 1997 Fellowship of Distinction for outstanding achievement in studies and research. Awarded by the Dean of the Feinberg Graduate School, Weizmann Institute of Science.

• **International organizing committees, Membership in juries, Review boards**

- 2015-2018 Member of the [EMOBO Young Investigator Program \(YIP\)](#) Selection committee
- 2014 Member on the [Pan-Cancer Genome Atlas project](#)
- 2014 Initiated and co-organized the first [Workshop on the Economy of a Cell](#), ICTP, Trieste
- 2013, 2015 review panel member, Israel Science Foundation, Bioinformatics, Systems and computational Biology committee
- 2011-present Initiated and directed [Harvard-Weizmann partnership in Systems Biology](#)
- 2009-2010 USA-Israel Bi-national Foundation (BSF) review panel member, Computational Biology

• **Invited talks at international meetings**

1. Invited Speaker, 4th EMBO conference on Experimental Approaches to Evolution and Ecology using Yeast and Other Systems 2016
2. Invited Speaker, [Winter School on Quantitative Systems Biology, The International Centre for Theoretical Science \(ICTS\) Bangalore, India 2015](#)
3. Invited Speaker, Cancer Symposium at the Nobel Forum, Karolinska Institute, Stockholm, Sweden, 2015.
4. Invited Speaker, the Netherlands Cancer Institute (NKI), as part of the international seminar series, Amsterdam 2015.
5. Plenary Lecture [The Joseph Braverman Annual Lecture, Biotechnology Engineering Faculty Day, Technion, Haifa 2014](#) .
6. [Invited Speaker at EMBO Experimental Approaches to Evolution and Ecology using Yeast and other Model Systems, Heidelberg, 2014.](#)
7. Organizer, and speaker, [Workshop on Cellular Economy the International Centre for Theoretical Physics \(ICTP\), Trieste, 2014](#)
8. [Invited speaker at EMBO Cancer Genomics Meeting November 2013, Heidelberg.](#)
9. [Invited speaker at 108th ITC Causes and consequences of aneuploidy, October Titisee 2013.](#)
10. Plenary Lecture New EMBO member lecture at the [EMBO Members Meeting 2012.](#)
11. Invited Speaker EMBO Conference series: [Experimental Approaches to Evolution and Ecology using Yeast, Heidelberg 2012.](#)
12. Invited Speaker EMBO Conference series: [From Functional Genomics to Systems Biology, Heidelberg, 2012.](#)

13. [Keynote International conference on information processing in cells and tissues Cambridge UK, 2012.](#)
14. [Talk at the Distinguished Lecture Series at McGill University, 2011.](#)
15. Plenary Speaker [The International Conference on Systems Biology \(ICSB\) Heidelberg 2011.](#)
16. Invited Speaker EMBO meeting title: Controlling the ribosome on the genetic highway, Barcelona, 2012.
17. Keynote speaker [Imperial College London 2010 An open day on computational systems biology.](#)
18. Keynote speaker [RECOMB Bioinformatics-education San-Diego 2010.](#)
19. Whitehead Institute Lecture Series, Invited talk "Post-transcription regulatory networks, Cambridge, MA 2010.
20. Keynote speaker [Keystone meeting on Biomolecular Interaction Networks: Function and Disease 2010 Quebec City 2010 .](#)
21. Keynote speaker [The 24<sup>th</sup> International Conference on Yeast Genetics and Molecular Biology Manchester UK, 2009](#)
22. Invited Speaker Whistler Meeting on yeast genetics 2009.
23. Invited guest, Pasteur-Weizmann Program, Institute Pasteur, Paris 2009.
24. EMBO Young Investigator meeting, Heidelberg Germany, 2008.
25. Invited Speaker Batsheva Seminar on Information Processing in Living Cells (International meeting), Ein Gedi Israel. 2008.
26. Invited Speaker The Human Genome Meeting (HUGO), India. (declined) 2008.
27. Invited Speaker EMBO workshop on Evolutionary and Environmental Genomics of Yeast, 2008.
28. Plenary Speaker The German Bioinformatics Conference, Potsdam, Germany, 2007.
29. Invited Speaker The 9th International Northern European Bioinformatics Conference, Umeå, Sweden, 2007.
30. Invited Speaker International course on "Global interrogations of biological processes" ISREC, Lausanne, Switzerland, 2006.
31. Invited Speaker Systems Biology and Evolution Workshop, Imperial College, London, UK, 2006.
32. Speaker at the Baure Center for Genomics Research, Harvard University, Cambridge 2006.
33. Speaker at The 6<sup>th</sup> EMBO Young Investigator Meeting, Vienna 2006.
34. Guest lecturer in the seminar series of the Rockefeller Center for Studies in Physics and Biology, New York, 2006.
35. Invited Speaker The Yeast Systems Biology Network, Gotenburg, Sweden, 2005.
36. Invited Speaker The 3rd Bertinoro Computational Biology Meeting, Bertinoro, Italy, 2005.
37. Invited Speaker EMBO Practical Course on Functional Genomics, Milan, Italy, 2005.

38. Speaker (selected by peer review) The First Annual RECOMB Meeting on Regulatory Genomics. University of California at San Diego, San Diego, CA, USA, 2004.
39. Invited Speaker The 5<sup>th</sup> International Northern European Bioinformatics Conference, Helsinki, Finland, 2003.
40. Invited Speaker The 2nd Annual McGill Workshop on Computational Biology, Barbados, 2003.
41. Invited Speaker, DIMACS Workshop on Integration of Diverse Biological Data, Rutgers University, Piscataway, NJ, USA, 2003.

• **Invited talks at national meetings**

1. 2015 Landscapes of Collectivity in the Life Sciences, Tel-Aviv, Jerusalem.
2. 2015 NYU-Tel Aviv Symposium on Individuality and Cooperation: Cells, Organisms and Populations, Tel-Aviv.
3. 2014 “Genomic and systems perspectives on protein translation” Anat Krauskopf memorial lecture, Tel-Aviv University.
4. 2014 “Prospects of realizing Lamarckian evolution in the lab” Gene to Genome Workshop, Ben-Gurion University
5. 2014 A dual translation efficiency program in proliferation and differentiation” Cancer Research Club, Weizmann Institute of Science
6. 2014 A dual translation efficiency program in proliferation and differentiation” Cancer Research Club, Weizmann Institute of Science
7. 2008 “Coping with genetic and non-genetic stress.” ILANIT, Eilat, Israel.
8. 2004 “Promoter analysis of gene duplications reveals the architecture of genetic backup circuits.” The Annual Meeting of the Israel Society of Genetics, (Haifa, Israel).
9. 2003 “Computational dissections of genetics regulatory networks.” The 6<sup>th</sup> Israeli Bioinformatics Conference, Haifa, Israel.

• **Refereed international conference talks**

1. 2007 “Comparative genomics of translation regulation in yeast,” a “Highlight Track” ISMB, Vienna.
2. 2005 “Genome-wide transcription regulatory circuits controlling cellular malignant transformation.” (One of 50 talks selected for oral presentation from 500 submissions. (Lecture delivered by my student) Best Poster Award. ISMB, Detroit.
3. 2005 “Transcriptional reprogramming in genetic backup circuits.” (One of 50 talks selected for oral presentation from 500 submissions. (Lecture delivered by my student) ISMB, Detroit.
4. 2005 “Characterization of the effects of TF binding site variations on gene expression: Towards predicting the functional outcomes of regulatory SNPs.”

- (Lecture delivered by my student.) RECOMB Regulatory Genomics and Systems Biology, San Diego.
5. 2005 “Backup by paralogs decouples genes lethality from centrality: evidence for preferential backup of hubs.” RECOMB Regulatory Genomics and Systems Biology, San Diego.
  6. 2005 “Phenotypic divergence correlates with translational control signals in protein coding sequences in yeast species.” (Lecture delivered by my student.) RECOMB Regulatory Genomics and Systems Biology, San Diego.

### **H: Patents**

Provisionary patent application: “A universal adaptive translation efficiency profile of proteins designed accordingly” In preparation by Yeda Research and Development Co., Ltd.

Provisionary patent application: “Global and local architecture of the mammalian microRNA-transcription factor regulatory network.” In preparation by Yeda Research and Development Co., Ltd.