

Gali Prag, PhD Curriculum Vitae

Born	Kibbutz Ein Harod M. Israel, 1966		
IDF Service	Officer course of the Navy (reserve - rank of Major) 1985-1990		
Family status	Married; two children		
A. Education			
1993-1995	Hebrew University Life Science Institute Givat Ram, Jerusalem Hadassah Medical	Biology B.Sc. 1995	
1996-1997	Hebrew University School Jerusalem	Biotechnology M.Sc. 1997	
1997-2001	Hebrew University Hadassah Medical School Jerusalem	Molecular Biology PhD 2001	
Title of PhD thesis	<u>Structure function analysis of TIM-barrel proteins: The catalytic mechanism of chitinolytic enzymes.</u>		
PhD Supervisor	Prof. Amos Oppenheim		
B. Professional courses			
2002	NIH Bethesda MD USA	Advanced Methods in Protein X-ray Crystallography	Foundation for Advanced Education in the Sciences
2003-2004	NIH Bethesda MD USA	Cell Membranes and Intracellular Trafficking	Foundation for Advanced Education in the Sciences
2006	NIH Bethesda MD USA	Analytical Ultra- centrifugation Workshop	Foundation for Advanced Education in the Sciences
C. Academic experience			
1997-1998	Hebrew University Hadassah Medical School, Jerusalem	Molecular Genetics and Biotechnology	Teaching Assistant in a course of: Genetic Engineering in Biotechnology

1999-2001	Hebrew University Hadassah Medical School, Jerusalem	Institute of Microbiology	Head of a course: Computational analysis of Macromolecules in Biotechnology
2005-2007	Hebrew University Hadassah Medical School, Jerusalem Department of Hematology	Institute of Microbiology	Co supervisor of a MS.c. student: (Hagit Bronfeld) Structural based <i>In silico</i> Study of the assembly of SV40. Together with Prof. Ariella Oppenheim

D. Active Participation in Scientific conferences

1997	2 nd Sectorial Meeting on the Biotechnology of TIM-barrel proteins.	Heraklion, Greece ; (Lecture).
1997	Analiza 1997 - The Annual meeting of the Israeli Society for Biochemistry and Molecular Biology.	Tel Aviv, Israel ; (Poster).
1998	Genomics, Victor Rothschild Memorial Symposia, 7 th .	Jerusalem, Israel ; (Poster).
1999	4 th Sectorial Meeting on the Biotechnology of TIM-barrel proteins.	Antwerpen, Belgium ; (Lecture).
1999	5 th Sectorial Meeting on the Biotechnology of TIM-barrel proteins.	Santorini, Greece ; (Lecture).
2001	European Society of Chitin and Chitin Enzymology.	Ancona, Italy ; (Lecture).
2003	The 31 th Mid-Atlantic Macromolecular Crystallography Meeting.	Durham, NC ; (Lecture).
2003	Gordon Conference (GRC) of Molecular Membrane Biology.	Proctor Academy, NH : (Lecture).
2003	Ubiquitin & Ubiquitin-like Modifications in health & disease conference.	Bethesda MD ; (Poster).
2004	1st International Conference Ubiquitin, Ubiquitin-like Proteins & Cancer.	Houston, TX ; (Poster).
2005	The 35th Mid-Atlantic Macromolecular	Bethesda, MD ;

	Crystallography Meeting.	(Lecture).
2005	Gordon Conference (GRC) of Molecular Membrane Biology.	Proctor Academy NH ; (Poster).
2006	3 rd International Conference Ubiquitin, Ubiquitin-like Proteins & Cancer.	Houston, TX ; (Lecture).
2006	Analytical Ultracentrifugation workshop.	Bethesda, MD ; (Lecture).

E. Invited Lecture

- 2003 Structural insight into CUE:Ubiquitin complex: Recognition and binding of monoubiquitin.
Weizmann Institute, Rehovot, Israel.
- 2003 The structure of CUE:Ubiquitin complex elucidates the discrimination between poly- and mono-Ubiquitin.
The Hebrew University, Jerusalem, Israel.
- 2003 Recognition and binding of monoubiquitin by CUE domains.
Technion Israeli Institute of Technology, Haifa, Israel.
- 2004 Conservation of structural elements and catalytic mechanism of chitinolytic enzymes.
Cell Biochemistry and Biology, NIDDK, NIH, Bethesda, MD
- 2006 Mechanisms of ubiquitin recognition in the endocytic pathway.
National Cancer Institute, Frederick, MD
- 2007 Structural Mechanisms for Recognition and Trafficking of Ubiquitylated Proteins.
Yale School of Medicine, New Haven, CT

F. Honors, Awards And Scholarships

- 1996-1997 Rector award of the Hebrew University for excellence for MSc. students. The Hebrew University Hadassah Medical School, Jerusalem, Israel.
- 1996 Kibo prize of the Hebrew University, Jerusalem, Israel.
- 1996 Herzfield A. prize of the Hebrew University, Jerusalem, Israel.
- 1996 Karpels B. prize of the Hebrew University, Jerusalem, Israel.
- 1996 Gordon A.D. prize of the Hebrew University, Jerusalem, Israel.
- 1997 Karpels B. prize of the Hebrew University Jerusalem, Israel.
- 1997-2001 PhD Scholarship the Hebrew University Hadassah Medical School.

Jerusalem, Israel.

- 1999 Short term European Molecular Biology Organization (EMBO) fellowship. Visit the IMBB-FORT, Heraklion, Greece
- 2000 Short term European Molecular Biology Organization (EMBO) fellowship. Visit the EMBL DESY Outstation , Hamburg Germany
- 2000-2001 Rector award of the Hebrew University for excellence for Ph.D. students. The Hebrew University Hadassah Medical School, Jerusalem, Israel.
- 2001-2006 Post Doctoral Scholarship NIDDK, NIH, Bethesda MD

F. Membership in Professional Organizations

- 1997 Israeli Society for Biochemistry and Molecular Biology. Israel

G. Collaborators

1. Ajay Chitnis - Section on Neural Developmental Dynamics, NICHD, Bethesda MD
2. Ariella Oppenheim -Department of Hematology Hebrew University-Hadassah Medical School Jerusalem
3. Juan S. Bonifacino - Section on Intracellular Protein, NICHD, Bethesda MD
4. Peter Schuck - Protein Biophysics Resource, DBEPS, NIH Bethesda MD
5. Allan M. Weissman - Laboratory of Protein Dynamics and Signaling, NCI, Frederick MD
6. Sankar Adhya - Laboratory of Molecular Biology, NCI, Bethesda MD
7. Tommer Ravid - Department of Molecular Biophysics & Biochemistry, Yale University CT

H. Publication List

1. G. Prag, S. Greenberg, and A.B. Oppenheim.
Structural principles of prokaryotic gene regulatory proteins and the evolution of repressors and gene activators.
Mol Microbiol., 1997, Vol. 26, (Page 619-620).
2. H. Giladi, S. Koby, G. Prag, M. Engelhorn, J. Geiselmann and A.B. Oppenheim.
Participation of IHF and a distant UP element in the stimulation of the phage lambda PL promoter.

- Mol Microbiol., 1998, Vol. 30, (Page 443-451).
3. [G. Prag G, Y. Papanikolau, G. Taylas, C.E. Vorgias, K. Petratos and A.B. Oppenheim.](#)
Structures of chitobiase mutants complexed with the substrate Di-N-acetyl-d-glucosamine: the catalytic role of the conserved acidic pair, aspartate 539 and glutamate 540.
J. Mol Biol. 2000, Vol. 300, (Page 611-617).
4. [Y. Papanikolau, G. Prag, G. Taylas, C.E. Vorgias, A.B. Oppenheim and K. Petratos.](#)
High resolution structural analyses of mutant chitinase A complexes with substrates provide new insight into the mechanism of catalysis.
Biochemistry., 2001, Vol. 40, (Page 11338-11343).
5. [G. Prag and A.B. Oppenheim.](#)
Conservation of structural elements and catalytic mechanism in the chitinolytic enzymes from *Serratia marcescens*.
Chitin Enzymology., 2001, Vol. 3, (Page 351-360).
6. [S.C. Shih, G. Prag, S.A. Francis, M.A. Sutanto, J.H. Hurley and L. Hicke.](#)
A ubiquitin-binding motif required for intramolecular monoubiquitylation, the CUE domain.
EMBO J., 2003, Vol. 22, (Page 1273-1281).
7. [G. Prag, S. Misra, E.A. Jones, R. Ghirlando, B.A. Davies, B.F. Horazdovsky and J.H. Hurley.](#)
Mechanism of ubiquitin recognition by the CUE domain of Vps9p.
Cell., 2003, Vol. 113, (Page 609-620).
* Highlighted with one other paper in a preview, Cell 2003, Vol. 113, (Page 554).
* Evaluated by Faculty of 1000 <http://www.f1000biology.com>
8. [A. Hierro, J. Sun, A.S. Rusnak, J. Kim, G. Prag, S.D. Emr and J.H. Hurley.](#)
Structure of the ESCRT-II endosomal trafficking complex
Nature, 2004, Vol. 431, (Page 221-225).
* Evaluated by Faculty of 1000 <http://www.f1000biology.com>
9. [G. Prag, S. Lee, R. Mattera, C.A. Arighi, B.M. Beach, J.S. Bonifacino, and J.H. Hurley.](#)
Structural mechanism for ubiquitinated cargo recognition by the GGA proteins
Proc. Natl. Acad. Sci. USA 2005, Vol. 102, (Page 2334-2339).
10. [J.H. Hurley, S. Lee and G. Prag.](#)
Ubiquitin-binding domains
Biochemical Journal 2006, Vol. 399, (Page 361-372)

11. G. Prag, H. Watson, Y.C. Kim, B.M. Beach, R. Ghirlando, G. Hummer, J.S. Bonifacino, and J.H. Hurley.
The Vps27/Hse1 complex is a GAT domain-based scaffold for ubiquitin-dependent sorting
Dev. Cell 2007, (In print)
12. C.L. Bair, A.B. Oppenheim, A. Trostel, G. Prag and S. Adhya
 2λ – a genetic system to detect and study protein-protein associations based on *in vitro* phage λ display
Nature Genetics, 2007 (submission)

Proceedings

1. S. Misra, G. Prag, E. Jones, and J.H. Hurley.
Crystal structure of a new ubiquitin binding domain, the CUE domain of yeast Vps9p
Biophysical Journal 2003 Vol. 84 (Page 62A-62A Part 2)
2. G. Prag G and J.H. Hurley.
How Ubiquitin Takes Its Cue.
APS SCIENCE 2003, Vol. 7, (Page 68).