

# CURRICULUM VITÆ

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## Limor Minai

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### Education:

- 1991-1994 B.Sc. in Biology  
The Hebrew University of Jerusalem, Jerusalem, Israel.
- 1994-1996 M.Sc. in Biology, Department of Plant Sciences,  
The Hebrew University of Jerusalem, Jerusalem, Israel.
- 1996-2001 Ph.D., Department of Plant Sciences,  
Theses title: The assembly of PsuD, a peripheral stromal-facing subunit, into the  
photosystem I complex. Supervisor: Prof. Rachel Nechushtai.  
The Hebrew University of Jerusalem, Jerusalem, Israel.

### Academic Experience:

- 2011 Accompanying lecturer.  
Department of Biomedical Engineering, Technion-Israel Institute of Technology.
- 2008-todate Lab manager.  
Department of Biomedical Engineering, Technion-Israel Institute of Technology.
- 2006-2007 Post-doctoral research fellow. Research theme: Characterization of the human fetal  
respiratory chain in different stages of gestation. INSERM U781, Hôpital Necker-  
enfant malade, 149 rue de Sèvres, 75015 Paris, France. Group: Mitochondria.  
Head of unit: Prof. Arnold Munnich. Group leader: Dr. Agnès Rötig.

- 2004-2006 Post-doctoral research fellow. Research theme: Looking for a possible involvement of a member of the Striatin family in the MAP kinase pathway. Inserm U528, Institut Curie, 26 rue d'Ulm, 75248 Paris cedex 05, France. Groupe d'Analyse des Réseaux de Transduction. Head of unit: Dr. Jean de Gunzburg. Group leader: Dr. Jacques Camonis.
- 2001-2004 Post-doctoral research fellow. Research theme: Mechanisms involved in the biogenesis of the Photosystem II complex. CNRS/UPR1261 Institut de Biologie Physico-Chimique, 13 rue Pierre et Marie Curie, 75005 Paris, France. Head of unit: Dr. Francis-André Wollman.
- 2003 Teaching assistant, Université Paris 6, Paris, France. Maitrise de Biologie Cellulaire et Physiologie. Course: Molecular and cellular physiology of plants.
- 1996-2001 Teaching assistant, Department of Plant Sciences, The Hebrew University of Jerusalem, Jerusalem, Israel.

**Awards:**

- 1996 Polack Award for Outstanding M.Sc. Students.

**Fellowships:**

- 2002-2003 The Marie Curie fellowship.  
2004 The Chateaubriand fellowship.

**Invited talks:**

The French society of photosynthesis, Journées photosynthèse. The Role of the CES Process in the Biogenesis of the Photosystem II complex: Hierarchical Synthesis of the Different Subunits of the Complex. June 2003, Paris, France.

**Refereed  
Publications:**

1. A. Abranov, L. Minai, D. Yelin. Multiple-channel spectrally encoded imaging. *Opt Express*. 18(14):14745-51(2010).
2. E. Leshinski-Silver, A.S. Lebre, L. Minai, A. Saada, J. Steffann, S. Cohen, A. Rötig, A. Munnich, D. Lev, T. Lerman-Sagie. NDUF54 mutations cause Leigh syndrome with predominant brainstem involvement. *Mol. Genet. Metab*. 97 (3):185-189 (2009).

3. L. Minai, J. Martinovic, D. Chrétien, F. Dumez, F. Razavi, A. Munnich, A. Rötig. Mitochondrial respiratory chain complex assembly and function during human fetal development. *Mol. Genet. Metab.* 94(1):120-126 (2008).
4. S. Lebon, L. Minai, V. Serre, J. Corcos, N. Kadhom, J. Steffann, J.-Y. Pauchard, A. Rötig, A. Munnich, J.-P. Bonnefont. A novel mutation of the *NDUFS7* gene leads to activation of a cryptic exon and impaired assembly of mitochondrial complex I in a patient with Leigh syndrome. *Mol. Genet. Metab.* 92:104-108 (2007).
5. A. Bourdon, L. Minai, V. Serre, J.-P. Jais, E. Sarzi, S. Aubert, D. Chrétien, P. de Lonlay, V. Paquis, H. Arakawa, Y. Nakamura, A. Munnich, A. Rötig. Mutation of *RRM2B*, encoding p53-controlled ribonucleotide reductase (p53R2) causes severe mitochondrial DNA depletion. *Nat. Genet.* 39:776-780, (2007).
6. L. Minai, K. Wostrikoff, F.-A. Wollman, Y. Choquet. Chloroplast biogenesis of Photosystem II cores involves a series of assembly-controlled steps that regulate translation. *Plant Cell*, 18:159-75 (2006).
7. L. Minai, A. Fish, M. Darash-Yahana, Lilya Verchovsky and R. Nechushtai, The assembly of the *PsaD* subunit into the membranal photosystem I complex occurs via an exchange mechanism. *Biochemistry*, 40, 12754-12760 (2001).
8. F. Baymann, F. Zito, R. Kuras, L. Minai, W. Nitschke, P. Joliot and F.-A. Wollman, Functional characterization of *Chlamydomonas* mutants defective in cytochrome *f* maturation. *J. Biol. Chem.* 274, 22957-22967 (1999).
9. F.-A. Wollman, L. Minai and R. Nechushtai, The biogenesis and assembly of photosynthetic proteins in thylakoid membranes' *Biochim. Biophys. Acta.* 1411, 21-85 (1999).
10. L. Minai, Y. Cohen, P.R. Chitnis and R. Nechushtai. The precursor of *PsaD* assembles into the photosystem I complex in two steps. *Proc. Natl. Acad. Sci. USA.*, 93, 6338-6342 (1996).

### Conference Proceedings

1. L. Minai and R. Nechushtai, The assembly of the peripheral *PsaD* subunit into the photosystem I complex of different organisms. Proceedings of the 12<sup>th</sup> International Congress of Photosynthesis, August 2001.
2. L. Minai, Y. Cohen, M. Dalla-Chiesa, P. Chitnis and R. Nechushtai. Proceedig of the Assembly and biogenesis of PSI. *Workshop: Domain Organization in Membranes: Biological Implications.* Jerusalem, Israel 1998.
3. L. Minai, Y. Cohen, M. Dalla-Chiesa, P. Chitnis and R. Nechushtai. Proceedings of the Assembly and biogenesis of PSI. *Workshop: Domain Organization in Membranes: Biological Implications.* Jerusalem, Israel 1998.
4. L. Minai, Y. Cohen, M. Dalla-Chiesa, P.R. Chitnis and R. Nechushtai. Proceeding of Assembly and biogenesis of PSI. *ESF Workshop on PSI Type Reaction Centers: Structure, Biochemistry and Function.* Munzingen, Germany 1996.

5. L. Minai, Y. Cohen, P. Chitnis, M. Dalla Chiesa and R. Nechushtai. Proceeding of The assembly of pre-PsaD/PsaD into the chloroplast thylakoid membranes. *The Annual Meeting of the Israeli Societies of Botany and of Plant Molecular Biology and Tissue Culture*. Ben-Gurion University, Beer-Sheva, Israel 1996.
6. L. Minai and R. Nechushtai. Electrostatic interactions are involved in the assembly of PsaD into photosystem I. In: *Photosynthesis: From Light to Biosphere*, (Mathis P., ed.) Kluwer Academic Publishers; vol III. pp. 807-810 (1995).
7. L. Minai, Y. Cohen, P.R. Chitnis and R. Nechushtai. The assembly of PsaD, a peripheral subunit of photosystem I. *The Xth International Photosynthesis Congress*. Montpellier - 1995; published in: *Photosynthesis Research*, 34 , P-15-16-019, p. 157 (1995).
8. L. Minai, Y. Cohen, S. Yalovsky, Z.-Y. He, D. Michaeli and R. Nechushtai. Proceeding of The assembly of photosynthetic proteins into the chloroplast thylakoid membranes. *The 2nd Poland - Israel Conference on Peptides*. The Weizmann Institute and The Hebrew University, Jerusalem, Israel 1995.
9. L. Minai, Y. Cohen, D. Michaeli and R. Nechushtai. Proceeding of the Assembly of photosystem I. *The Israeli-Hungarian Conference on Plants and the Environment*. The Weizmann Institute, Rehovot, Israel 1995.
10. L. Minai, Y. Cohen and R. Nechushtai. Proceeding of The assembly of PsaD, a peripheral subunit of photosystem I, into the thylakoid membranes. *The Annual Meeting of the Israeli Societies of Botany and of Plant Molecular Biology and Tissue Culture*. Technion, Haifa, Israel 1995.
11. Y. Cohen, L. Minai, D. Michaeli and R. Nechushtai. The integration and organization in the thylakoid membranes of PsaD - a stromal-facing peripheral subunit of photosystem I. *The 2nd Robert Hill Conference on Photosynthesis*. London, England 1994.
12. Y. Cohen, Z.Y. He, S. Yalovsky, L. Minai, D. Michaeli and R. Nechushtai. Proceeding of The biogenesis and assembly of the antennae complex of photosystem II (LHCIIB chlorophyl-protein complex) in higher plants. *The Annual Meeting of the Israeli Societies of Botany and of Plant Molecular Biology and Tissue Culture*. Rehovot, Israel 1994.

## Conference Presentations

1. L. Minai, D. Yeheskely-Hayon, L. Golan, G. Bisker, D. Yelin. Plasmonic targeting of cancer cells using single femtosecond pulses. SPIE/OSA European conferences on biomedical optics, 8092-43. Munich, Germany. May 2011.
2. L. Minai, D. Yeheskely-Hayon, L. Golan, G. Bisker, D. Yelin. Damaging cancer cells using femtosecond laser pulses and gold nanospheres. Photonic West, BIOS, 7944-20, San Francisco CA, USA, January 2011.

## Other Presentations:

1. L. Golan, L. Minai, and D. Yelin. Flow cytometry of blood using spectrally encoded confocal microscopy. Photonic West, BIOS, 7906-02, San Francisco CA, USA, January 2011.
2. L. Golan, L. Minai, and D. Yelin. Imaging of flowing blood cells using spectrally encoded confocal microscopy. Photonic West, BIOS, 7893-16, San Francisco CA, USA, January 2011.
3. G. Bisker, L. Minai, and D. Yelin. Plasmonic manipulations of biomolecular targets using single femtosecond pulses. Photonic West, BIOS, 7944-19, San Francisco CA, USA, January 2011.
4. O. Warshavski, L. Minai, and D. Yelin. The Effect of Single Femtosecond Pulses on Gold Nanoparticles in an Aqueous Environment. European Conferences on Biomedical Optics, WB4, Munich, Germany, June 2009.

## Poster Presentations:

1. L. Minai, D. Chrétien, F. Razavi, A. Munnich, A. Rötig. Mitochondrial respiratory chain assembly and function during human fetal development. American Society of Human Genetics, San Diego California. October 2007.
2. L. Minai, D. Chrétien, A. Munnich, F. Encha-Razavi, J. Martinovic-Bourriel, H. Etchevers, C. Esculpavit, T. Attie-Bitach, A. Rötig. Characterization of the mitochondrial respiratory chain during human fetal development. European Human Genetics Conference, Nice, France, June, 2007.
3. L. Minai, D. Chrétien, A. Munnich, A. Rötig. Characterization of the foetal respiratory chain in time and place. FEBS advanced course: Mitochondria in life, death and disease. Aussois, France, April 2007.
4. L. Minai, F.-A. Wollman, Y. Choquet. The Role of the CES Process in the Biogenesis of the Photosystem II complex: Hierarchical Synthesis of the Different Subunits of the Complex. Gordon research conference. *Mitochondria and Chloroplast*. Kimball Union Academy, Meriden, NH. USA. 2004.
5. L. Minai, F.-A. Wollman, Y. Choquet. Characterization of the CES process in the biogenesis of the Photosystem II complex in the green algae *Chlamydomonas reinhardtii*. *Journées de la société Française de Photosynthèse*. Paris, France. 2004.
6. L. Minai, A. Fish, M. Darash-Yahana, Lilya Verchovsky and R. Nechushtai. The assembly of the peripheral PsaD subunit into the photosystem I complex of different organisms. *International Conference on Sequence, Structure and Function in Membrane Protein Systems*. Zichron Ya'acov, Israel 2001.
7. L. Minai, A. Fish. and R. Nechushtai. The peripheral PsaD subunit assembles into the photosystem I complex via an exchange mechanism. *Jaques Monond Conference*, Roscoff, France 2000.

8. M. Darash-Yahana, L. Minai, Y. Cohen and R. Nechushtai. The assembly and organization of Psal, a peripheral stromal-facing subunit of photosystem I. *The 2nd Congress of the Federation of the Israel Societies of Experimental Biology*, Eilat, Israel 1998.
9. D. Michaeli, L. Verchovski, Z.-Y. He, Z. Zhong, R. Velupillaimani, L. Minai, A. Fish, M. Darash-Yahana, A. Lushi and R. Nechushtai. Transfer and organization of photosystem I subunits in the thylakoid membranes. *The 2nd Congress of the Federation of the Israel Societies of Experimental Biology*, Eilat, Israel 1998.