

**CURRICULUM VITAE**  
**ANITA KRIŠKO**

Date of Birth: August 15<sup>th</sup>, 1979.

Place of Birth: [Varaždin](#), Croatia

**Contact Address**

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**Education and Positions**

<b>2001</b> , Bsc Molecular biology Maximum GPA 5.0	Department of Biology Faculty of Science University of Zagreb
<b>2002-2005</b> , postgraduate studies of biology	Department of Biology Faculty of Science University of Zagreb
<b>2002-2005</b> , PhD student	Rudjer Boskovic Institute Zagreb, Croatia
<b>2005 – 2007</b> , postdoctoral fellow	Rudjer Boskovic Institute, Zagreb, Croatia <a href="#">Equipe de Bioinformatique</a> Genomique et Moleculaire, Universite Denis Diderot – Paris 7, Paris, France
<b>2007 –</b> group leader	Mediterranean Institute for Life Sciences, Split, Croatia

Research interests	
<ul style="list-style-type: none"> <li>• Adaptation to life in extreme conditions</li> <li>• Macromolecular assembly structure by cryoelectron microscopy and theoretical approaches, structure-function relationship in macromolecules and supramolecular assemblies, interactions of macromolecules with small ligands, protein-protein interactions, protein interaction networks</li> <li>• The structure of human apolipoprotein B100, oligomerization properties of small heat shock proteins</li> </ul>	
Teaching activities	
<p><b>2000- 2005</b>, Teaching assistant</p>	<p>Faculty of Science, Zagreb            Practical course of Molecular biophysics            Practical course of Membranes (1 year)</p>
<p><b>2001-2005</b>, immediate supervisor of four B.Sc. thesis</p>	<p>Rudjer Boskovic Institute            Zagreb, Croatia</p>
Memberships	
<p><b>2001-</b></p>	<p>Croatian biophysical society</p>
<p><b>2005-</b></p>	<p>Croatian society of biochemistry and molecular biology</p>
Skills	
<p>Structural biology</p>	<p>Electron paramagnetic resonance (EPR) spectroscopy of proteins and lipoproteins, different spin labeling procedures of proteins and lipoproteins;            Steady-state fluorescence spectroscopy measurements of interactions and conformational changes of proteins and lipoproteins;            Ligand binding data analysis;            Experience with infrared measurements of structural modifications of low density lipoproteins.</p>

Bioinformatics

Knowledge of molecular modeling and visualization software (MolMod, SwissPDBViewer, RasMol, PyMol) and sequence analysis software (Clustal, GeneDoc, Tcoffee); similarity searching; genome and proteome databases; C and Python programming; genome and proteome analysis; molecular dynamics simulations of proteins; machine learning approaches.

Biochemistry

PAGE electrophoresis, agarose electrophoresis, assays for free cysteine, lysine and carbonyl determination, europium labeling; lipoprotein purification by ultracentrifugation; HPLC.

## Scientific Missions

**February, 2003.**

COST D22 fellowship for two weeks at the University of Southampton with Prof. Anthony Lee, working on the application of fluorescence spectroscopy on ligand binding studies and monitoring of macromolecular interactions.

**November, 2003.**

Five weeks at the University of Graz, Institute for Medical Chemistry with Prof. Guenther Juergens working on binding of low density lipoproteins (LDL) to the LDL-receptor. The investigation was a part of the Croatian-Austrian bilateral project.

**September, 2004.**

COST D22 fellowship for two weeks at the Free University of Brussels with Prof. Erik Goormaghtigh, working on the application of infrared spectroscopy for monitoring of structural changes of human low density lipoproteins upon their oxidation.

**November, 2004.**

French Government fellowship for 1 month in the laboratory of prof. Catherine Etchebest, University of Paris VII working on the modeling of the tertiary structure of human apolipoprotein B100.

**January, 2006.**

Fellowship of Austrian Academy (Werkvertrag) for three weeks at the Institute for Biophysical Research in the group of dr. Ruth Prassl, working of solubilizing of human apoB with amphipols.

## Fellowships and Awards

**2001.**

Rector's Award at the University of Zagreb

**2004.**

French Government Fellow

**2006.**

Award of the Rotary Club Varazdin, Croatia, Best PhD in 2005.

**2006.**

UNESCO-L'Oreal prize 'For Women in Science'

**2007.**

Selected participant at the 57th Meeting of Nobel Laureates, Lindau, Germany

## Invited seminars and lectures

**2004.** Invited speaker at the Bioinformatics Workshop at Rudjer Boskovic Institute

**2005.** Group leader at Summer School of Science (homology modeling and protein structure analysis), Visnjan, Croatia

**1/2006.** Invited seminar at Institute for Biophysical Research, Graz, Austria, title: Theoretical model of apolipoprotein B100 structure

**4/2006.** Invited seminar at Institut de Biologie Physico-Chimique, Paris, title: The solubilization of apolipoprotein B100 by using amphipol molecules

**7/2006.** Invited speaker at 1st Summer School 'Structure and Evolution: From Bench to Terminal', Split, Croatia, title: Determination of macromolecular assembly structure – theory meets experiment

**8/2006.** Invited speaker at Summer School of Science, Visnjan, Croatia, title: Lonely proteins: structure and dynamics of protein assemblies

**6/2007.** Invited seminar at Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture, University of Split, Split, Croatia, title: Development of Bioinformatics

**6/2007.** Invited seminar at Ecole Polytechnique Federale de Lausanne, Lausanne, Switzerland, title: Adaptation of macromolecules to extreme conditions of life

**8/2007.** Invited speaker at the Summer School of Science, Visnjan, Croatia, title: Some like it hot: Living in extreme conditions

## Publications

1. Kveder M., **Kriško A.**, Pifat G., Steinhoff H.J. (2003) *The study of structural accessibility of free thiol groups in human plasma low density lipoproteins*, **Biochimica et Biophysica Acta – Molecular and Cell Biology of Lipids** 1631 (3): 239 – 245.
- 2.\* **Kriško A.**, Piantanida I., Kveder M., Pifat G. (2004) *The analysis of  $\beta$ -carotene absorbance for studying structural properties of human plasma low density lipoproteins*; **Analytical Biochemistry**, 331: 177-182.
- 3.\* **Kriško A.**, Kveder M., Pifat G. (2005) *Effect of caffeine to oxidation susceptibility of human plasma low density lipoproteins*; **Clinica Chimica Acta**, 355: 47-53.
- 4.\* **Kriško A.**, Piantanida I., Kveder M., Pifat G., Lee A., Greilberger J., Kipmen-Korgun D., Jürgens G. (2005) *The effect of heparin on structural and functional properties of low density lipoproteins*, **Biophysical Chemistry**, 119: 234-239.
5. Kveder M., Marinić Ž., **Kriško A.**, Vikić-Topić D., Pifat G. (2006) *Lipid-protein interactions in low density lipoprotein evidenced by magnetic resonance*, **Chemistry and Physics of Lipids**, 141:225-229.
- 6.\* **Kriško A.** and Etchebest C. (2006) Theoretical model of human apolipoprotein B100 tertiary structure, **Proteins: Structure, Function, and Bioinformatics**, 66:342-358.
- 7.\* **Kriško A.**, Stjepanović G., Pifat G., Ruyschaert JM., Goormaghtigh E. (2007) Detection of apolipoprotein B100 early conformational changes during oxidation, **BBA-Biomembranes**, in press.

\* corresponding author

## Other activities

- Referee for Analytical Biochemistry
- Member of the Organizing Committee and web master for 3<sup>rd</sup> Workshop COST D22 Protein-Lipid Interactions, October 6<sup>th</sup> – 9<sup>th</sup>, 2005, Dubrovnik, Croatia
- Member of the Organizing Committee for the 1<sup>st</sup> Summer School of the Mediterranean Institute for Life Sciences ‘**Structure and Evolution: From Bench to Terminal**’, Split, Croatia
- Co-author of the exhibition of protein structures and cellular components ‘**Science in pictures - hidden reality**’