Cristian-Marian Butnaru

Department of Bioinformatics and Structural Biochemistry, Institute of Biochemistry of the Romanian Academy, Bucharest, Romania

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Academic qualifications:

Institute of Biochemistry, Romanian Academy, Bucharest, Romania

Ph.D., Biology, November 2012- present

Thesis title: The Role of ER mannosidases in Glycoprotein Degradation Associated to the Endoplasmic Reticulum, Supervisor. Dr. Andrei J. Petrescu

University of Bucharest, Faculty of Physics, Bucharest, Romania

M.Sc., Physics-Specialization Biophysics, October 2010 -June, 2012

Thesis title: Mouse tyrosinase expression, purification and characterization by Mass Spectrometry; Supervisors: Prof. Aurel Popescu and Dr. Stefana M. Petrescu

B.Sc., Physics, October 2007 -June 2010

Thesis title: Bionics. Introduction to artificial neuronal networks; Supervisor: Prof. Aurel Popescu

Work experience:

- *March 2017-present:* Research Technician- Department of Cell and Developmental Biology, Center of Genomic Regulation, Barcelona, Spain, Head of department: Dr. Vivek Malhotra
- October 2012- August 2016: Research Assistant Department of Bioinformatics and Computational Biology, Institute of Biochemistry, Bucharest, Romania Head of department: Dr. Andrei J. Petrescu
- October 2011-September 2012: Research Internship Department of Molecular Cell Biology, Institute of Biochemistry, Bucharest, Romania Head of department: Dr. Stefana M. Petrescu
- <u>Lab techniques:</u> LC-MS/MS analysis, large datasets analysis, statistical analysis, SPR analysis of protein interactions, recombinant protein expression and purification, Western blotting, immunoprecipitation and WB, confocal microscopy and image analysis, cell culture methods, PCR, qRT-PCR, dot-blot.
- <u>Software</u>: Proficient with: Matlab, Proteome Discoverer, Perseus, MaxQuant, OriginLab, Programming and computer methods specific for homology modeling, Adobe and Microsoft office suite. Basic level: C, R, Labview and Unix.

Courses:

- 2013- LTQ Orbitrap Velos Pro Biotech Operations -training course -2 weeks
- 2012- Biacore 3000-GE Life science- training course-2 weeks
- 2007-2010- Courses in Pedagogy for teaching Physics for classes V-XII

- 2007- Computer skills certificate

Personal skills:

Mother tongue(s) Romanian

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	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C2	C1	C1
French	B2	B2	B2	B2	B2
Spanish	B2	A2	A2	A2	A1

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user

Organisational/managerial skills:

- -2015- Member of the organizing committee of the "Annual International Meeting of RSBMB", Bucharest, Romania
- -2008-2010- Student activities coordination to represent the Faculty of Physics at Children University Fair, Researchers Night, Education Fair

Societies and honoraries:

- 2012-present: Member of Romanian Society of Biochemistry and Molecular Biology.
- 2010-2011: Censor and treasurer of the Association of the Physics Students

Publications and manuscripts in preparation:

- 1. Cristian M. Butnaru, Marioara B. Chiritoiu, Gabriela N. Chiritoiu, Stefana M. Petrescu, Andrei J. Petrescu, "Inhibition of N-glycan processing modulates the network of EDEM3 interactors", BBRC, 486 (4): 978-984, (2017)
- Cristian M. Butnaru, Cristian V.A. Munteanu, Gabriela Chiritoiu, Simona Ghenea, Andrei J. Petrescu, Stefana M. Petrescu, "Comparison of protein extraction conditions for EDEM3 interactors in melanoma cells", ROM. J. BIOCHEM., 52, 1, 31–38 (2015)
- Marioara B. Chiritoiu, Gabriela N. Chiritoiu, Cristian M. Butnaru, Cristian V.A. Munteanu, Florin Pastrama, Erwin N. Ivessa, Stefana M. Petrescu: "The Intrinsically disordered region of EDEM1 selects ERAD clients for a SEL1L-HRD1 independent degradation pathway" manuscript in preparation
- Cristian M. Butnaru, Marioara B. Chiritoiu, Marius Surleac, Gabriela N. Chiritoiu, Cristian V.A. Munteanu, Andrei J. Petrescu, Stefana M. Petrescu: "Investigating and assigning functions to EDEM3 domains" - manuscript in preparation.
- Alexandra Circiumaru, Cristian M. Butnaru, Stefana M Petrescu, Andrei J Petrescu: "Identification of new biomarkers for rheumatoid and osteoarthritis by LC-MS/MS analysis"manuscript in preparation

Posters: 5 posters presented at international conferences