**Institute of Biology Bucharest (IBB) [coordinator]**

Cristina PURCAREA, Dr. ­ 49 years old, Biochemist, Senior Scientist Grade I, specialty: environmental microbiology and biochemistry

EXPERTISE: extremophilic microorganisms, protein biochemistry, molecular microbiology, cave ice microbiota, molecular adaptation mechanisms to extreme environments. 30 publications in scientific journals (ISI) and 3 book chapters. More than 338 citations, Hirsch index 9 (ISI database). 24 years research experience, 15 years in Research Institutions from France (7), Belgium (1) and USA (7)

STUDIES

1991­1995: Doctorate in Enzymology, University Paris XI, Orsay, France; 1990­1991: MSc (Diplôme d’Etudes Approfondies) in Enzymology, University Paris XI, Orsay, France; 1983­1988: BS in Biochemistry, Polytechnical Institute of Bucharest, Romania

PROFESSIONAL POSITIONS

2007­2014: Senior Scientist Ist grade, Institute of Biology Bucharest, Romania; 2005­2007: Senior scientist gr. III, Institute of Cellular Biology and Pathology “N. Simionescu”, Bucharest, Romania; 2001­2002: Project manager, Avidis, Clermont­Ferrand, France; 2003­2005 & 1997­2001: Research Associate, Wayne State University School of Medicine, Detroit, USA; 1995­1996: Postdoctoral Fellow, Vrije University, Brussels, Belgium; 1990­1993: Research Scientist, Institute of Biochemistry, Bucharest, Romania

AWARDS

(2014) Romanian Academy Prize "Emil Racovita"; (1995) Doctorate in Enzymology, Highest mention “Mention Très honorable avec félicitations du jury”, University Paris XI, France; (1988) Valedictorian, Faculty of Biochemistry, Polytechnic Institute of Bucharest;

PUBLICATIONS – selection

(1) Brad T, Fekete A, Sandor MS, Purcarea C (2014) Natural attenuation potential of selected karst systems in Carpathian Mountains (Romania). doi: 10.2166/ws.2014.092;

(2) Hillebrand A, Itcus C, Ardelean I, Rusu A, Persoiu A, Brad T, Popa E, Onac BP, Purcarea C. Searching for cold­adapted microorganisms in the underground glacier of Scarisoara Ice Cave, Romania. Acta Carsologica in press

(3) Popa E, Perera N, KibédiSzabo CZ, Guy­Evans H, Evans DR, Purcarea C (2012) The smallest active carbamoyl phosphate synthetase was identified in the human gut archaeon Methanobrevibacter smithii, J Mol Microbiol Biotechnol 22: 287­99;

(4) Zhang P, Martin PD, Purcarea C, et al. (2009) Dihydroorotase from the hyperthermophile Aquifex aeolicus is activated by stoichiometric association with aspartate transcarbamoylase and forms a one­pot reactor for pyrimidine biosynthesis. Biochemistry 48: 766­78;

(5) Purcarea C et al. (2008) The sole serine/threonine protein kinase and its cognate phosphatase from Aquifex aeolicus targets pyrimidine biosynthesis. Mol Cell Biochem 311: 199­213;

(6) Martin P, Purcarea C et al. (2005) The crystal struc­ture of a novel one­zinc dihydroorotase from Aquifex aeolicus. J Mol Biol 348: 535­47;

(7) Purcarea C et al. (2003) Aquifex aeolicus aspartate transcarbamoylase: an enzyme specialized for the efficient utilization of unstable carbamoyl phosphate at elevated temperature. J Biol Chem 27: 52924­34

CONFERENCES ­ selection

(1) 10th International Congress on Extremophiles, Sankt Petersburg, Russia, 2014. Purcarea C. Oral presentation;

(2) 5th International Conference of Polar and Alpine Microbiology, Big Sky, USA, 2013. Purcarea C. Oral presentation;

(3) 16th International Congress of Speleology, Brno, Czech Republic, 2013. (i) Hillebrand­Voiculescu A, Oral presentation (ii) Itcus C Poster

RESEARCH FUNDING­ selection

(1) PNII­II­ID­PCE­2011­3­0742, Biodiversity and chronological distribution of micro­organisms in perennial ice deposits from Scărişoara Ice Cave (Romania). (2012­2015) PI, 349 K Euro;

(2) PNII­ID­PCE­1023, Archaealmediated obesity control in Methanobrevibacter smithii as a target for regulating nutrient uptake. (2009­2011) PI, 280 K Euro;

(3) PN­II­PT­PCCA­2011­3.1­1619 ANCS­UEFISCDI. Resilience of hydrothermal sulfide­rich groundwater systems against natural and anthropogenic disturbances. (2012­2016), partner­PI, 32 K Euro