

## **Curriculum vitae:** Assoc. Prof. RNDr. Iveta Waczulikova, Ph.D.

### **Address of the place of work:**

Department of Nuclear Physics and Biophysics,  
Faculty of Mathematics, Physics, and Informatics  
Mlynska dolina F1  
842 48 Bratislava  
Slovakia

### **PERSONAL DATA:**

Name	Waczulikova
Surname	Iveta
Date of birth	August 11, 1966
Place of birth	Marianske Lazne, Czech Republic
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### **PROFESSIONAL EXPERIENCE:**

#### **Education:**

**2010** Associate Professor (docent), Habilitation in Physics at Comenius University, Faculty of Mathematics, Physics and Informatics,

**2004** received CAE - University of Cambridge ESOL Certificate in Advanced English at St. Mark's International College, Perth, Western Australia,

**2000** graduated with a Ph.D. degree in Biochemistry at Comenius University, Medical Faculty

**2000** graduated with a RNDr (Rerum Naturalium Doctor) degree in Physics at Comenius University, Faculty of Mathematics, Physics and Informatics

**1990** graduated with a Master degree in Biophysics at Comenius University, Faculty of Mathematics, Physics and Informatics

#### **Training courses:**

**Oct. 2003 - Apr. 2004** English studies at St. Mark's International College, Perth, Western Australia, 10 weeks- General English course, 10 weeks- Certificate in Advanced English course (CAE)

**2009-2010** Certificate in Biomedical Statistics I, II and III. Statsoft CR, Prague.

**Present position and previous appointments:**

2011	Associate Professor (docent), Department of Nuclear Physics and Biophysics, Faculty of Mathematics, Physics, and Informatics, Comenius University in Bratislava
2000 - 2010	Research Fellow/Academic Tutor, Department of Nuclear Physics and Biophysics, Faculty of Mathematics, Physics, and Informatics, Comenius University in Bratislava
1997-2000	Maternity leave
1996 -1997	Researcher/Assistant in the Department of Medical Chemistry, Biochemistry and Clinical Biochemistry, Medical Faculty, Comenius University

Pedagogical activities at the Department of Nuclear Physics and Biophysics, Faculty of Mathematics, Physics, and Informatics as well as at the Department of Medical Chemistry, Biochemistry and Clinical Biochemistry, Medical Faculty, Comenius University during the postgraduate study.

**Fellowships:**

1996 up to now	Frequent short research stays at the Institute of Biophysics, University of Lodz, Poland
2000 - 2007	Frequent short research stays at the Laboratory of Haemostasis and Haemostatic Disorders, Medical University of Lodz, Poland

**PROFESSIONAL ACTIVITIES**

**Research interest and expertise**

- biophysics of artificial and cellular membranes
- cell energetics and physical state and transport across biological membranes in selected clinical disorders
- biophysical aspects of sarcolemmal and mitochondrial membranes in experimental models of diabetes, cardiomyopathy, essential hypertension, hypercholesterolemia
- biophysical approach to studying endogenous protective mechanisms and signalling in the selected pathologies
- investigation of pharmacologically active compounds (anti-glycation and anti-radical agents etc.)
- cyanine dyes as fluorescent markers and as photosensitizers in photodynamic therapy

- expert in the use of spectroscopic and microscopic techniques in the analysis and characterization of biological samples
- expert in applications of biophysical techniques to the studies of membranes, proteins and protein:ligand interactions
- expert in designing experimental studies and clinical trials in biomedical research
- expert in statistical consulting, assessment and evaluation

### **Professional Society Memberships**

ISCB – International Society for Clinical Biostatistics

ISHR – International Society for Heart Research

EBSA - European Biophysical Societies' Association,

JSMF - Jednota slovenských matematikov a fyzikov (The Union of Slovak Mathematicians and Physicists)

SKBS - Slovenská biofyzikálna spoločnosť (Slovak Biophysical Society) – *Appointed Secretary*

SSB MB SAV - Slovenská spoločnosť pre biochémiu, molekulárnu biológiu, pri SAV Bratislava (The Slovak Society for Biochemistry and Molecular Biology)

SCHS - Slovenská chemická spoločnosť (Slovak Chemical Society)

### **Journal peer review activities**

Appointed Editor of the Central European Journal of Chemistry (CEJC)

Field Editor of the General Physiology and Biophysics journal (GPB)

Occasional manuscript reviewer for the following International Journals: Central European Journal of Chemistry, General Physiology and Biophysics, Bioelectrochemistry, Colloids and Surfaces B: Biointerfaces, Central European Journal of Public Health, Pharmacological Research, Methods and Findings in Experimental and Clinical Pharmacology, Journal of Medicinal Chemistry, Nephron, Obesity Research etc.

### **Major research projects**

- NATO PDD(CP)-(LST.CLG.980106) „Molecular mechanisms of differentiated platelet response to pharmacologically active compounds“ (2003-2005), principal investigator from SK
- NATO CBP.EAP.CLG 981751: Prion proteins and Alzheimer's Peptides: Molecular Studies (2005-2007); investigator
- VEGA 2/7126/27 „Effect of selected types of antihypertensive therapy on functional properties of mitochondria and some calcium-modulated signaling pathways in hearts and kidneys of rats with genetically conditioned hypertension“ (2007-2009), principal investigator from Comenius University (UK) in mutual projects with SAS
- APVV, SR SK–PL-0034-09 „Dendrimers as carriers for siRNA targeted against HIV-1 virus – interactions with membranes“ (2010-2012), principal investigator from SK, (with Prof. Maria Bryszewska, DrSc. as principal investigator from PL)

- KEGA ME SR 003UK-4/2012 „Establishment of the classroom and creation of didactic materials for teaching of biostatistics in the curricula of Biophysics and Biomedical Physics at the first stage up to the third stage of the university education“ (2012-2013), principal investigator
- VEGA 2/0094/12 „Study of the redox and radical regulation of chloride channels from rat heart mitochondria under oxidative stress“ (2012-2014), principal investigator from UK
- VEGA 2/0101/12 „The role of mitochondria in adaptation of cardiac energetics to various pathological stimuli and noxae: ischemia, diabetes, hypertension“ (2012-2014), principal investigator from UK
- SK-PL-0070-12: „Studies of interaction between lipid membranes and HIV-derived peptides complexed with carbosilane dendrimers.“ (2013-2014). Principal investigator from SK, (with Prof. Maria Bryszewska, DrSc. as principal investigator from PL).
- NFP26140230036 (call OPV-2012-4-2-04-SORO): „Tvorba študijného programu MPH (Master of Public Health) na Univerzite Komenského v Bratislave v anglickom jazyku“. (2013-2014). Investigator.

Researcher and co-researcher of over 20 research projects

### **Organization of scientific events**

Chairman of the Local Organizing Committee in the 16th International Symposium on Bioelectrochemistry and Bioenergetics, Bratislava, 1.-6.6.2001.

Chairman of the Science Committee in the Faculty and National events of the Student Science Conference 2007, 2008, and member of the Science Committee in the Student Science Conference 2009.

### **Other academic activities**

Supervisor and consultant of many Bachelor, Master and PhD theses; activities related to the teaching and advising of undergraduate, graduate, and postgraduate students.

Activities in the project PREVEDA, focused on promoting young scientists at all stages of their research and education. (Editor and section moderator positions)

<http://www.preveda.sk/conference/page/odborni-garanti=41/>

<http://www.preveda.sk/conference/page/recenzenti-a-moderatori-sekcii=35/>

### **Publications**

Author of over 300 original, commentary and review papers, communications, invited lectures and presentations.

Citation indices: Cumulative citation index: 326; registered in the Database of Publication Activities at Comenius University Academic Library - EVIPUB (up to the date 25.10.2012), Web-of-Knowledge-based scientometric analysis: H=13.

SCOPUS-based scientometric analysis: 71 cited documents with total citations 254, (self citations of all authors are excluded), h index – 10, i10 index – 10.

Google Scholar-based scientometric data: Cumulative citation index with auto-citations included: 597 (425 since 2008), h index – 13 (12 since 2008), i10 index – 25 (12 since 2008).

## **OTHER PERSONAL INTERESTS AND EXPERTISES**

### **Languages**

English: CAE (Certificate in Advanced English) certificated by the University of Cambridge ESOL Examinations in 2004.

Fluent in Czech and Polish languages

Sound knowledge of Russian and German languages.

### **Computer skills**

Knowledge from middle to high level of the following softwares: MS Office Professional, Statistica, StatsDirect, GraphPad (statistical software), Origin (data analysis and technical graphics), CorelDraw, Zoner Photo Studio, PhotoShop and Internet research tools.

### **Sports**

Habitual practice of hiking and biking, eventual participation in biking events, as well as individual sports, such as swimming and downhill skiing.

In Bratislava, 9<sup>th</sup> of April, 2013