

## PERSONAL INFORMATION

Zuzana BEDNÁRIKOVÁ, PhD.



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Date of birth 14/05/1988

Sex Female

Nationality Slovakia

## WORK EXPERIENCE

2021 – present

**Senior scientist**

Department of Biophysics, Institute of Experimental Physics Slovak Academy of Sciences (IEP SAS)

- preparation and realization of experiments, data analysis, writing scientific manuscripts and projects

**Scope of interest:** amyloid aggregation of intrinsically disordered proteins, amyloidosis treatment options

2017 - 2020

**SAV post doc fellowship “Štefan Schwarz support fund”**

Department of Biophysics, Institute of Experimental Physics Slovak Academy of Sciences (IEP SAS)

- preparation and realization of experiments, analysis of data and preparation of scientific manuscripts

**Scope of interest:** amyloid aggregation of proteins, anti-amyloid low molecular compounds

2012 - 2018

**Research assistant**

Department of Biophysics, Institute of Experimental Physics Slovak Academy of Sciences

- preparation and realization of experiments, analysis of data and preparation of scientific manuscripts

**Business or sector** science and education

## EDUCATION AND TRAINING

2016

**Philosophiae doctor (PhD.) degree in Biochemistry**

Faculty of Sciences, Pavol Jozef Šafárik University in Košice, Slovakia

- dissertation thesis: *Inhibitors of amyloid self-assembly of proteins*

2014

**Renum Naturalium Doctor (RNDr.) degree in Biochemistry**

Faculty of Sciences, Pavol Jozef Šafárik University in Košice, Slovakia

2012 - 2016

**PhD. studies in Biochemistry**

Department of Biochemistry, Faculty of Sciences, Pavol Jozef Šafárik University in Košice, Slovakia

2007 - 2012

**Master degree studies**

Faculty of Sciences, Pavol Jozef Šafárik University in Košice, Slovakia

- diploma thesis: *Amyloid aggregation of proteins in presence of magnetic nanoparticles*

## PERSONAL SKILLS

Mother tongue(s)

Slovak language

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	B2	B2
Replace with name of language certificate. Enter level if known.					
German	A2	A2	A1	A1	A1
Replace with name of language certificate. Enter level if known.					

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

[Common European Framework of Reference for Languages](#)

## Communication skills

- good communication skills gained through my experience as research assistant at the Department of Biophysics IEP SAS and basketball coach

## Organisational / managerial skills

- leadership - supervisor of 3 Bachelor and 2 Diploma theses
- leadership - currently responsible for a basketball team of 20 girls under age of 13 years
- principal investigator - University grant VVGS UPJS 2013-2014
- member of organizing committee of International Conference Structure and Stability of Biomacromolecules 2013, 2015, 2017 and 2019 held in Košice, Slovakia
- participant - Night of Researchers in Košice 2013, 2014, 2015, 2016, 2019

## Job-related skills

- experimental techniques used for study of amyloid properties of proteins
- work skills and expertise of cell cultures handling and cytotoxicity assessment

## Digital competence

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
Proficient user	Proficient user	Independent user	Proficient user	Independent user

Levels: Basic user - Independent user - Proficient user

- good command of office suite (word processor, spread sheet, presentation software)

## ADDITIONAL INFORMATION

## Publications

TOTAL NUMBER of PUBLICATIONS: 44 (Scopus)

H- index: 14 (without self-citations)

## Projects

Running National projects:

VEGA - UNRAVELING THE EARLY EVENTS OF PROTEIN AMYLOID AGGREGATION - FROM MECHANISM TO THERAPY (2021 – 2024), investigator

APVV - MULTIHIT - MULTI-TARGET INHIBITORS OF POLY/PEPTIDES ASSOCIATED WITH ALZHEIMER'S DISEASE (2019 – 2023), investigator

Running International projects:

MAD SAS – PAS: AZOBENZENES AS POTENTIAL ALZHEIMER'S THERAPEUTICS (2023 – 2024), PI: Zuzana Bednáriková

COST action CA21160: NON-GLOBULAR PROTEINS IN THE ERA OF MACHINE LEARNING (2022 – 2026), vice-chair of the Action

## Honours and awards

- **2022:** Young Scientist of the SAS Award – winner  
Research team award: SAS Award for the results of scientific research
- **2021:** Young Scientist of the IEP SAS Award - winner  
Podcast for kids about science: Science Bedtime Stories about Alzheimer's disease
- **2020:** research team award: Best international cooperation result of IEP SAS
- **2019:** Scientific team of the year awarded by Ministry of Education, Science, Research and Sport of the Slovak Republic
- **2018:** Young Researcher up to 35 years awarded by Slovak Biophysical Society
- **2017:** Young Scientist Award – 10<sup>th</sup> international conference Structure and Stability of Biomacromolecules (SSB 2017)
- **2016:** Young scientific researcher up to 35 years at the IEP SAS Award - winner
- **2015:** Biophysical Journal Outstanding Poster Award - International Conference "Polymers and Self-Assembly: From Biology to Nanomaterials", held in October 2015 in Rio de Janeiro (Brazil)
- Young Scientist of the IEP SAS Award - 2nd place
- **2014:** Poster Award - Slovak Biophysical Congress held in Martin (Slovakia)
- **several travel bursaries:**
- EBSA Travel Bursary in 2015, 2013, 2017, 2019, 2021 - participation on 9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, 12<sup>th</sup> and 13<sup>th</sup> EBSA European Biophysical Congress
- Young Scientist Travel Award in 2014 - participation on 18th International Biophysical Congress (IUPAB) held in Brisbane (Australia)

## Short term fellowships:

- Winter School on Disorder in Disorders - Pathogenic mechanisms of Intrinsically Disordered Proteins, Brixen, Italy (2020)
- Winter School on Experimental Methods for Protein Disorders and Aggregation, Marseille, France (2017)
- CNR- ISMN Institute for Nanostructured Materials Studies, Bologna, Italy (2015, 2016), 3 weeks
- Biophysics Department, UMF "Carol Davila" Bucharest, Romania (2014, 2015), 2 weeks
- Summer school in Joint Institute for Nuclear Research, Dubna, Russia (2014), 3 weeks

**Invited lectures/ talks**

2022: CasProt Summer School Košice, Slovakia: Amyloid aggregation of proteins  
13th AFOB Regional Symposium, Kinmen County, Taiwan: Protein amyloid fibrils bionano-technology and biological significance  
2019: School of Pharmacy, East China University of Science and Technology: A novel approach for treatment of Alzheimer disease  
2018: 4th NGP-Net symposium, Druskininkai, Lithuania: Effect of curcumin derivatives on A $\beta$ 40 fibrils (poster selected as flash oral presentation)

**Memberships**

- member of Slovak Biophysical Society, European Biophysical Society, COST consortium – action BM 1405 Non-globular proteins in molecular physiopathology, action CA11620 ML4NGP Non-globular proteins in the era of machine learning

**Citations**

TOTAL NUMBER of CITATIONS: 443

In Košice, Slovakia, 7/2/2023



**Zuzana Bednáriková, PhD**