

CURRICULUM VITAE

Qualifications

- 2024 DSc, MTA degree, MTA VIII. Biological Sciences Department
- 2019 habilitation, Theoretical Medicine
- 2002-2005 PhD degree, University of Szeged, Interdisciplinary Medical Sciences;
Title of thesis: The role of cytokines and apoptosis in *in vitro* infections and cardiomyopathies
- 1997-2002 University of Szeged, Biologist, Specialization in Microbiology and Comparative Physiology
- 1997-2002 University of Szeged, Certified biology teacher
- 1994-1999 József Attila University, Certified physics teacher

Positions and posts

- 2020 - University of Szeged, Albert Szent-Györgyi Medical School, Department of Immunology, associate Professor, Head of Department
- 2012-2020 University of Szeged, Faculty of Dentistry, associate Professor, Head of Department, vice dean
- 2008- Eötvös Loránd Research Network, Szeged Biological Research Centre, Institute of Biochemistry, research fellow
- 2008-2011 National Centre for Epidemiological Research, Microbiology Research Group, research fellow
- 2006-2007 National Institute of Health, National Cancer Institute-Frederick, Laboratory of Molecular Immunoregulation, postdoctoral fellow

The most important research proposals and grants

- 2022 OTKA K 143255 Investigation of tumor-derived extracellular vesicle-induced immune responses and their diagnostic potential (2022-2026), Leader
- 2021 Hungarian Academy of Sciences, Post-COVID proposal, Detection and prediction of the immunological background of post-COVID syndrome based on the molecular profile of extracellular vesicles (2021-2023), operational leader
- 2019 ÚNKP Bolyai Plus Research Scholarship
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- 2017 "János Bolyai" Research Scholarship (2017-2020)
- 2016 GINOP-2.3.2-15-2016-00015: "The role of intercellular communication in inflammatory and immunological diseases of the interfaces (skin, intestinal tract)" (2016-2020); participant
- 2015 OTKA K 112493 thematic research grant, Investigation of molecular interactions between tumor cell-derived exosomes and the tumor microenvironment (2015-2018); Leader
- 2012 TÁMOP-4.2.2. A-11/1/KONV-2012-0025, Molecular oncology, (2012-2015); subproject leader
- 2010 OTKA PD 84064 Effects of bacterial infection and chemoattractant treatment on metastatic recurrence (2010-2013); topic leader

Major Grants

- 2010 International Technology Transfer Fellowship, UICC, NIH, NCI-Frederick
- 2006-2007 National Institute of Health, National Cancer Institute-Frederick, Laboratory of Molecular Immunoregulation, postdoctoral fellow

Educational activities

- 2012- PhD supervisor, defended theses: Annamária Marton,  Zsednyei; Edina Gyukity-Sebestyn, Gbor Decsi, Mria Harmati, Gabriella Dobra, Mtys Bukva; PhD in progress: Tmea Brczky
- 2009- TDK supervisor, defended theses: Dra Garai, Viktria Temesfi, Gbor Bakos, Anna Farag, Mtys Bukva, Mrton Polgr, Eszter Ivn
- 2008- Thesis leader at the International Training Course of the Szeged Biological Research Centre (ITC student: Tanja Kalic)
- 2002- University teaching in immunology at the University of Szeged. Seminars, practicals and classroom lectures at the Faculty of General Medicine, Faculty of Dentistry, Faculty of Science and Informatics, Faculty of Health Sciences.

Departmental and academic activities

- 2020 University of Szeged SZAOK-TTIK, establishment of the Department of Immunology
- 2020 Development of the curriculum of Immunology in Hungarian, English, German

Membership of scientific panels

- International Society for Extracellular Vesicles (member since 2012)
- Hungarian Society of Immunology (member since 2004), board member, treasurer
- Member of MTA Public Board (since 2005)

Academic public activity

- MTA Szeged Academic Committee of the Hungarian Academy of Sciences Working Committee on Immunology, Chair from 2020 onwards
- MTA Szeged Academic Committee, Immunology Working Committee, Secretary 2017-2020
- Immunology Workshops in Hungary Scientific update lecture series (2015-2017)
- SZTE Faculty of Dentistry, Scientific Committee, member 2012-2020

Review activities for scientific journals

- Plos One
- Scientific Reports
- British Journal of Pharmacology
- Acta Microbiologica and Immunologica Hungarica
- Pathology and Oncology Research
- Cancers
- National Research, Development and Innovation Office, Evaluation of OTKA proposals

Language Skills

English (conversational), German (basic), Russian (basic)

Scientific interest

- Plasticity of the tumor cell microenvironment.
- Role of exosomal information transfer in metastatic mechanisms.
- 3D in vitro tumor models, cancer spheroids.
- Use of complex spectroscopic methods in vesicle-based tumor diagnostics.

National and international research relations

Major national and international scientific collaborations documented through publications and successful proposals:

Péter Horváth (HUN-REN, Biological Research Centre of Szeged)

Attila Gácsér (SZTE, Department of Microbiology)

Éva Kondorosi (HUN-REN, Biological Research Centre of Szeged)

Lajos Kemény (SZTE, Department of Dermatology and Allergology)

Attila Borics (HUN-REN, Biological Research Centre of Szeged)

Zoltán Kónya (SZTE, Department of Applied and Environmental Chemistry)

Zack Howard (NIH, NCI, USA)

Filippo Piccinini (University of Bologna, Bologna, Italy)

Barzó Pál (SZTE, Department of Neurosurgery)

Judit Oláh (SZTE, Oncology Clinic)

Márta Széll (SZTE, Institute of Medical Genetics)

Klekner Álmos (DE, Department of Neurosurgery)

Anna Sebestyén (SE, Institute of Pathology and Experimental Cancer Research)

Edit Buzás (SE, Institute of Genetics, Cell and Immunobiology)

Scientometria:

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| Number of in extenso communications | 52 |
| in Hungarian: | 1 |
| in English: | 51 |
| Number of in extenso publications before PhD: | 4 |
| Number of in extenso publications after PhD: | 38 |
| Number of first author publications in extenso: | 7 |
| Number of publications by last author in extenso: | 13 |
| Total impact factor: | 226,5 |
| Number of independent references: | 6153 |
| Number of book chapters: | 1 |
| Higher education textbook chapters: | 0 |
| Hirsch index: | 22 |

Szeged, 02. September 2025

Krisztina Buzas

SELECTED PUBLICATIONS:

Dobra, Gabriella ; Gyukity-Sebestyén, Edina ; Bukva, Mátyás ; Harmati, Mária ; Nagy, Valentina ; Szabó, Zoltán ; Pankotai, Tibor ; Klekner, Álmos ; Buzás, Krisztina
 MMP-9 as Prognostic Marker for Brain Tumours: A Comparative Study on Serum-Derived Small Extracellular Vesicles
 CANCERS 15 : 3 Paper: 712 , 21 p. (2023)
 DOI WoS REAL Scopus PubMed SZTE Publicatio
 Nyilvános idéző összesen: 25, Független: 25, Független: 0, Nem jelölt: 0

Böröczky, Tímea ; Dobra, Gabriella ; Bukva, Mátyás ; Gyukity-Sebestyén, Edina ; Hunyadi-Gulyás, Éva ; Darula, Zsuzsanna ; Horváth, Péter ; Buzás, Krisztina** ; Harmati, Mária
 Impact of Experimental Conditions on Extracellular Vesicles' Proteome: A Comparative

Study

LIFE-BASEL 13 : 1 Paper: 206 , 16 p. (2023)

DOI WoS REAL Scopus PubMed Egyéb URL

Nyilvános idéző összesen: 6, Független: 6, Függő: 0, Nem jelölt: 0

Bukva, Matyas ; Dobra, Gabriella ; Gomez-Perez, Juan ; Koos, Krisztian ; Harmati, Maria ; Gyukity-Sebestyen, Edina ; Biro, Tamas ; Jenei, Adrienn ; Kormondi, Sandor ; Horvath, Peter et al.

Raman Spectral Signatures of Serum-Derived Extracellular Vesicle-Enriched Isolates May Support the Diagnosis of CNS Tumors

CANCERS 13 : 6 Paper: 1407 , 19 p. (2021)

DOI WoS REAL Scopus PubMed SZTE Publicatio

Nyilvános idéző összesen: 19, Független: 17, Függő: 2, Nem jelölt: 0

Peirsman, Arne ; Blondeel, Eva ; Ahmed, Tasdiq ; Anckaert, Jasper ; Audenaert, Dominique ; Boterberg, Tom ; Buzas, Krisztina ; Carragher, Neil ; Castellani, Gastone ; Castro, Flávia et al.

MISpheroID: a knowledgebase and transparency tool for minimum information in spheroid identity.

NATURE METHODS 18 : 11 pp. 1294-1303. , 10 p. (2021)

DOI WoS REAL Scopus PubMed

Nyilvános idéző összesen: 61, Független: 38, Függő: 23, Nem jelölt: 0

Dobra, Gabriella ; Bukva, Matyas ; Szabo, Zoltan ; Bruszel, Bella ; Harmati, Maria ; Gyukity-Sebestyen, Edina ; Jenei, Adrienn ; Szucs, Monika ; Horvath, Peter ; Biro, Tamas et al.

Small Extracellular Vesicles Isolated from Serum May Serve as Signal-Enhancers for the Monitoring of CNS Tumors

INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES 21 : 15 Paper: 5359 , 20 p. (2020)

DOI WoS REAL Scopus PubMed SZTE Publicatio

Nyilvános idéző összesen: 30, Független: 26, Függő: 4, Nem jelölt: 0

Gyukity-Sebestyén, Edina ; Harmati, Mária ; Dobra, Gabriella ; Németh, István B ; Mihály, Johanna ; Zvara, Ágnes ; Hunyadi-Gulyás, Éva ; Katona, Róbert ; Nagy, István ; Horváth, Péter et al.

Melanoma-Derived Exosomes Induce PD-1 Overexpression and Tumor Progression via Mesenchymal Stem Cell Oncogenic Reprogramming

FRONTIERS IN IMMUNOLOGY 10 Paper: 2459 , 22 p. (2019)

DOI REAL WoS Scopus PubMed SZTE Publicatio

Nyilvános idéző összesen: 45, Független: 43, Függő: 2, Nem jelölt: 0

Harmati, M. ; Gyukity-Sebestyen, E. ; Dobra, G. ; Janovak, L. ; Dekany, I. ; Saydam, O. ; Hunyadi-Gulyas, E. ; Nagy, I. ; Farkas, A. ; Pankotai, T. et al.

Small extracellular vesicles convey the stress-induced adaptive responses of melanoma cells

SCIENTIFIC REPORTS 9 : 1 Paper: 15329 , 19 p. (2019)

DOI WoS REAL Scopus PubMed SZTE Publicatio

Nyilvános idéző összesen: 62, Független: 59, Függő: 3, Nem jelölt: 0

Harmati, M ; Tarnai, Z ; Decsi, G ; Kormondi, S ; Szegletes, Z ; Janovak, L ; Dekany, I ; Saydam, O ; Gyukity-Sebestyen, E ; Dobra, G et al.

Stressors alter intercellular communication and exosome profile of nasopharyngeal carcinoma cells

JOURNAL OF ORAL PATHOLOGY AND MEDICINE 46 : 4 pp. 259-266. , 8 p. (2017)

DOI REAL Egyéb katalógus WoS Scopus PubMed SZTE Publicatio

Nyilvános idéző összesen: 50, Független: 44, Független: 6, Nem jelölt: 0