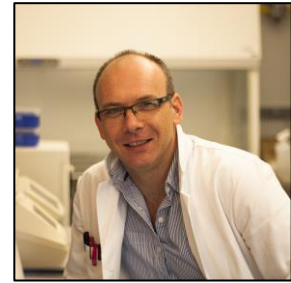


Curriculum vitae

Personal data

Name: Attila Brunyanszki, PhD
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Phone: +36-70-639-1351
Qualification: PhD in Biomedical Sciences
Nationality: Hungarian



Education, scientific degrees

2016 – 2017 CRA - Clinical Research Associate, University of Miskolc, Miskolc
2012 – 2015 Translational Research Team Management Certificate, University of Texas Medical Branch, Galveston, USA
2006 – 2011 PhD (16th September 2011, 104/2011. PhD), University of Debrecen, Debrecen
2000 – 2006 MSc in Biology (specialization in biotechnology, 24th June 2006, T-198/2006.), University of Debrecen, Debrecen
1999 – 2000 Computer software operator, Tokaj
1995 – 1999 Tokaji Ferenc High school, Tokaj

Workplace, position:

- **UD-GenoMed Medical Technologies Ltd, Debrecen (2017 –)**
 - Project Leader and coordinator, senior R&D scientist
 - Job description: **cell line development for recombinant protein production and bioassays**; design and implementation of projects; preparation and presentation of regular reports on projects for management and customer partners; coordination of working groups; technical and vocational education, training and development of staff, solving their professional problems.
- **Cell Therapy Center Ltd, Debrecen (2016 - 2017)**
 - Research and development scientist
 - Job description: **preparation and production of autologous and allogeneic stem cell products to transplant**; designing and developing the development possibilities of the manufacturing process; develop and initiate a QC lab development strategy; professional evaluation and support of tender materials; preparing professional reports.
- **University of Texas Medical Branch, Galveston (2012 - 2015)**
 - Postdoctoral Fellowship – UTMB, Galveston, Texas, USA
 - Job description: **co-ordination, organization and implementation of scientific projects** by using state of the art methods, techniques and instruments on high standard level; publication in academic journals.

- **University of Debrecen; Debrecen (2012)**
 - Research fellow – Molecular and Cell signalling group, Debrecen, Hungary
 - Job description: **co-ordination, implementation and reporting of projects**; performing experiments; presenting results in Hungarian and International conferences; tutoring medical students.
- **University of Debrecen; Debrecen (2012)**
 - Assistant lecturer - University of Debrecen, Hungary
 - Job description: **performing experiments**; presenting results in Hungarian and International conferences; mentoring undergraduate students.
- **University of Debrecen; Debrecen (2012)**
 - Junior research fellow - University of Debrecen, Hungary
 - Job description: performing educational and research tasks, coordinating and teaching TDK students, mentoring undergraduate students.

Molecular biology and biotechnology experience:

Mammalian (e.g.: **CHO**, HEK, U937, MIN6, MEF and etc.) and insect cell line (SF9) cultivation; DNA and RNA preparation; **Eukaryotic and prokaryotic expression vector design**; **Subcloning**; *In vitro* mutagenesis; Transformation; Transfection; Transduction; Protein expression in bacterial systems; **qPCR** (Applied Biosystem 7500 Real-time quantitative PCR, Roche Light Cycler 480, Bio-rad CFX-96), Luciferase assay for transcriptional transactivation; **Viral vector handling (Adeno-Associated Virus, Lentivirus)**, Cell line development for bioassays (**TALEN, CRISPR/Cas9**) and recombinant protein expression (**CHO cell lines**), Transposons (**PiggyBAC system**); mtDNA integrity analysis, Copy number variation analysis (**CNV**); Insertion site analysis; **Western blotting**; Enzyme kinetic measurements (inhibition, activation, specific activity determination), Ser-Thr specific phosphoprotein phosphatase activity measurement; Caspase activity measurement, MMP zymography, **Seahorse extracellular flux analyzer**, *in vitro* phosphorylation; VetScan VS2: chemistry, electrolyte, immunoassay and blood gas analyzer (Abaxis); **ELISA**; Luminex Magpix system; Immunoblot analysis: Western and dot blots; immunocytochemistry; **Flow cytometer and cell sorting** (BD FACSCalibur, BD FACSArray, BD FACSAriaIII); **immunfluorescence and immunhistochemistry**; Proximity ligation assay.

Teaching activity

2009-2012 Real-time quantitative PCR, Ph.D. seminar
 2006-2012 Medical Chemistry (practical class, seminar)
 2006-2012 Molecular Biology (practical class, seminar)
 2006-2012 Basic Medical Chemistry (seminar)
 2004-2005 Demonstrator (Univ. Debrecen, Dept. of Medical Chemistry) in medical chemistry (practical class) and molecular biology (practical class)

Honors

- 2012 Publication award of the University of Debrecen for Szanto et al. Cellular and Molecular Life Sciences 2012 (second author).
2010 Publication award of the Dept. of Medical Chemistry for Brunyánszki et al. *J. Invest. Dermatol.* 2010.
2010 FEBS Collaborative Experimental Scholarships for Central and Eastern Europe
2008 FEBS Youth Travel Foundation
2007 FEBS Youth Travel Foundation
2004 Summer Scientific Fellowship from the University of Debrecen

Language proficiencies

- 2011 Basic grade university examination in German
2006 English B2 (European Council of Languages) - fluent

Memberships

- 2011- Public body at the Hungarian Academy of Sciences
2005- Member of the Student's Scientific Committee
2004- Hungarian Biochemical Society

Scientific visits

2010. June 1. – 2010. June 30. EPFL – Lausanne (Switzerland)
2009. Sept. 1. – 2009. Sept. 5. Soleil – Gif-sur-Yvette (France)
2008. Oct. 1. – 2008. Oct. 31. CNRS UMR 7175 - IGBMC, Strasbourg (France)
2007. Aug. 1. – 2007. Aug. 14. Univ. of Tartu, Institute of Tech., Tartu (Estonia)

List of publications

The list below reflects the status upon submission. Up-to-date list of my publications and citations can be found in the MTMT database of the Hungarian Academy of Sciences (<https://vm.mtmt.hu/www/index.php?AuthorID=10027974>)

In extenso publications

Vida A, Abdul-Rahman O, Mikó E, **Brunyánszki A**, Bai P. Poly(ADP-ribose) polymerases in aging - friend or foe? *Curr Protein Pept Sci*. 2016 Apr 19. [Epub ahead of print] PubMed PMID: 27090903.
7,IF: 3.154

Brunyánszki A, Szczesny B, Virág L, Szabo C. Mitochondrial poly(ADP-ribose) polymerase: The Wizard of Oz at work. *Free Radic Biol Med*. 2016 Mar 8. pii:S0891-5849(16)00075-7. doi: 10.1016/j.freeradbiomed.2016.02.024. [Epub ahead of print] PubMed PMID: 26964508.
IF: 5.74

Szczesny B, **Brunyánszki A**, Ahmad A, Oláh G, Porter C, Toliver-Kinsky T, Sidossis L, Herndon DN, Szabo C. (2015). Time-Dependent and Organ-Specific Changes in Mitochondrial Function, Mitochondrial DNA Integrity, Oxidative Stress and Mononuclear Cell Infiltration in a Mouse Model of Burn Injury. *PLoS One*. 10(12):e0143730.
IF: 3.23

Brunyánszki A, Erdelyi K, Szczesny B, Olah G, Salomao R, Herndon DN, Szabo C. (2015) Upregulation and mitochondrial sequestration of hemoglobins occurs in circulating leukocytes during critical illness, conferring a cytoprotective phenotype. *Mol Med*. [Epub ahead of print]
IF: 4.51

Coletta C, Módis K, Szczesny B, **Brunyánszki A**, Oláh G, Rios EC, Yanagi K, Ahmad A, Papapetropoulos A, Szabo C. (2015) Regulation of Vascular Tone, Angiogenesis and Cellular Bioenergetics by the 3-Mercaptopyruvate Sulfurtransferase/H₂S Pathway: Functional Impairment by Hyperglycemia and Restoration by DL- α -Lipoic Acid. *Mol Med*. 21:1-14
IF: 4.51

Kiss B, Szántó M, Szklenár M, **Brunyánszki A**, Marosvölgyi T, Sárosi E, Remenyik É, Gergely P, Virág L, Decsi T, Rühl R, Bai P. (2014) PARP-1 ablation alters eicosanoid and docosanoid signaling and metabolism in a murine model of contact hypersensitivity. *MOLECULAR MEDICINE REPORTS* 11(4):2861-7.
IF: 1.55

Oláh G, Szczesny B, **Brunyánszki A**, López-García IA, Gerö D, Radák Z, Szabo C. (2015) Differentiation-Associated Downregulation of Poly(ADP-Ribose) Polymerase-1 Expression in Myoblasts Serves to Increase Their Resistance to Oxidative Stress. *PLoS One* 10(7):e0134227.
IF: 3.23

Brunyánszki A, Olah G, Coletta C, Szczesny B, Szabo C. (2014) Regulation of mitochondrial poly(ADP-Ribose) polymerase activation by the β -adrenoceptor/cAMP/protein kinase A axis during oxidative stress. *Mol Pharmacol.*, 86(4):450-62.
IF: 5.74

Coletta C, Módis K, Oláh G, **Brunyánszki A**, Herzig DS, Sherwood ER, Ungvári Z, Szabo C. (2014) Endothelial dysfunction is a potential contributor to multiple organ failure and mortality in aged mice subjected to septic shock: preclinical studies in a murine model of cecal ligation and puncture. *Crit Care.* 18(5):511.
IF: 4.48

M. Szántó, **A. Brunyánszki**, J. Márton, Gy. Vámosi, L. Nagy, T. Fodor, B. Kiss, L. Virág, P. Gergely, P. Bai. (2013) Deletion of PARP-2 induces hepatic cholesterol accumulation and decrease in HDL levels. *Biochimica et Biophysica Acta (BBA)-Molecular Basis of Disease.* 1842(12):2529-30
IF: 4.88

Szczesny B, **Brunyánszki A**, Olah G, Mitra S, Szabo C. (2014) Opposing roles of mitochondrial and nuclear PARP1 in the regulation of mitochondrial and nuclear DNA integrity: implications for the regulation of mitochondrial function. *Nucleic Acids Research.* 42(21):13161-73
IF: 8.808

L. Nagy, T. Docsa, M. Szántó, **A. Brunyánszki**, Cs. Hegedűs, J. Márton, B. Kónya, L. Virág, L. Somsák, P. Gergely, P. Bai. (2013) Glycogen Phosphorylase Inhibitor N-(3, 5-Dimethyl-Benzoyl)-N'-(β -D-Glucopyranosyl) Urea Improves Glucose Tolerance under Normoglycemic and Diabetic Conditions and Rearranges Hepatic Metabolism. *PLoS one* 8(7):e69420
IF: 3.23

M Szántó, **A Brunyánszki**, B Kiss, L Nagy, P Gergely, L Virág, P Bai. (2012) Poly (ADP-ribose) polymerase-2: emerging transcriptional roles of a DNA-repair protein. *Cellular and Molecular Life Sciences* 69 (24), 4079-4092
IF: 5.81

Bai P, Canto C, **Brunyánszki A**, Huber A, Szántó M, Cen Y, Yamamoto H, Houten SM, Kiss B, Oudart H, Gergely P, Schreiber V, Sauve AA, Menissier-de Murcia J, Auwerx J (2011) The absence of PARP-2 promotes SIRT1 expression and enhances whole body energy expenditure. *Cell Metabolism* 13(4):450-60.
IF: 17.57

Bai P, Canto C, Oudart H, **Brunyánszki A**, Cen Y, Thomas C, Yamamoto Y, Huber A, Kiss B, Houtkooper RH, Schoonjans K, Schreiber V, Sauve AA, Menissier-de Murcia J, Auwerx J (2011) PARP-1 inhibition increases mitochondrial metabolism through SIRT1 activation. *Cell Metabolism* 13(4):461-8.
IF: 17.57

Brunyánszki A, Hegedűs Cs, Szántó M, Erdélyi K, Kovács K, Schreiber V, Gergely Sz, Kiss B, Szabó É, Virág L, Bai P (2010) Genetic ablation of PARP-1 protects against oxazolone-induced contact hypersensitivity by modulating oxidative stress. *Journal of Investigative Dermatology* 130, 2629–2637.
IF: 7.22

Bai P, Hegedűs Cs, Szabó E, Gyüre L, Bakondi E, **Brunyánszki A**, Gergely Sz, Szabó C, Virág L. (2009) Poly(ADP-ribose) polymerase mediates inflammation in a mouse model of contact hypersensitivity. *Journal of Investigative Dermatology* 129, 234–238.
IF: 7.22

Juhász L, Docsa T, **Brunyánszki A**, Gergely P, Antus S. (2007) Synthesis and glycogen phosphorylase inhibitor activity of 2,3-dihydrobenzo[1,4]dioxin derivatives. *European Journal of Organic Chemistry* 15(12):4048-4056.
IF: 3.07

Benlifa M, Vidal S, Fenet B, Msaddek M, Goekjian P G, Praly J-P, **Brunyánszki A**, Docsa T, Gergely P. (2006) In the Search of Glycogen Phosphorylase Inhibitors: 5-Substituted 3-C-Glucopyranosyl-1,2,4-Oxadiazoles from β -d-Glucopyranosyl Cyanides upon Cyclization of O-Acyl-amidoxime Intermediates. *European Journal of Organic Chemistry*, 18:4242-4256
IF: 3.07

Györgydeák Z, Hadady Zs, Felföldi N, Krakomperger A, Nagy V, Tóth M, **Brunyánszki A**, Docsa T, Gergely P, Somsák L. (2004) Synthesis of N-(α -D-glucopyranosyl)- and N-(2-acetamido-2-deoxy- α -D-glucopyranosyl) amides as inhibitors of glycogen phosphorylase. *Bioorg. & Med. Chem.* 12(18):4861-4870
IF: 2.79

Overall impact factor: around 125

Citations: Google: 1368; Researchgate: 1044; Database of the Hungarian Academy of Sciences (MTMT): 348

H-factor: 18

Complete List of my Published Work in MyBibliography (19 publications):

https://www.ncbi.nlm.nih.gov/sites/myncbi/1RE-c_tUbwQ4j/bibliography/56949447/public/?sort=date&direction=ascending

My Published Work and Citations in Researchgate (42 items, 1044 citations):

https://www.researchgate.net/profile/Attila_Brunyanszki

Posters:

A Brunyanszki, G Olah, C Coletta, B Szczesny, Cs Szabo (2014). Regulation of mitochondrial poly(ADP-ribose)polymerase activation by the beta-adrenoceptor/cAMP/Protein kinase axis during oxidative stress. SFRBM, Seattle, USA.

A Brunyanszki, Gabor Olah, Ciro Coletta, Bartosz Szczesny, Csaba Szabo (2014). Oxidative stress induces an early-onset mitochondrial poly(ADP-ribose)polymerase activation in U937 cells. SFRBM, Seattle, USA.

B Szczesny, **A Brunyanszki**, G Olah, Cs Szabo (2014) Mitochondrial PARP1 Negatively Regulates Mitochondrial DNA Repair and Biogenesis sensitizing Cells to Oxidative Stress. SFRBM, Seattle, USA.

Cs Szabo, **A Brunyanszki**, K Erdelyi, G Olah, C Coletta, K Yanagi, B Szczesny, D Herndon (2014) Upregulation of Intracellular Hemoglobin in Peripheral Blood Mononuclear Cells during Burn Injury Serves as an Antioxidant and Cytoprotectant. SFRBM, Seattle, USA.

B Szczesny, C Porter, **A Brunyanszki**, G Olah, T Toliver-Kinsky, L Sidossis, Cs Szabo (2014). Development of Mitochondrial Dysfunction in a Murine Model of Burn Injury. SFRBM, Seattle, USA.

G Olah, B Szczesny, **A Brunyanszki**, Zs Radak, Cs Szabo (2014). Role of PARP1 in Oxidative Stress Resistance in the Context of Muscle Cell Differentiation. SFRBM, Seattle, USA.

Cs Szabo, C Coletta, K Modis, G Olah, **A Brunyanszki**, Z Ungvari (2014). Endothelial Dysfunction Is a Potential Contributor to Multiple Organ Failure and Mortality in Aged Mice Subjected to Septic Shock: Preclinical Studies in a Murine Model of Cecal Ligation and Puncture SFRBM, Seattle, USA.

K Yanagi, B Szczesny, **A Brunyanszki**, E Rios, Cs Szabo (2014) High Glucose Exposure Induces a Compensatory Up-Regulation of Mitochondrial Function, Resulting in Cellular Resistance to Oxidative Stress in Human Endothelial Cells. SFRBM, Seattle, USA.

Cs Szabo, C Coletta, K Modis, G Olah, **A Brunyanszki**, E Rios, K Yanagi, B Szczesny, A Papapetropoulos (2014). Regulation of Vascular Tone and Angiogenesis by the 3-Mercaptopyruvate Sulfur Transferase/Hydrogen Sulfide System under Physiological Conditions and during Diabetes. SFRBM, Seattle, USA.

A Brunyanszki, B Szczesny, G Olah, C Coletta and Cs Szabo (2014). Propranolol regulates the catalytic activity of PARP-1 via modulating protein kinase A activation. CSHL The PARP Family & Friends: Gene Regulation and Beyond 2014, New York, USA.

B Szczesny, **A Brunyanszki**, S Mitra and Cs Szabo (2014). Opposing role of nuclear and mitochondrial PARP1 in the maintenance of the DNA integrity. CSHL The PARP Family & Friends: Gene Regulation and Beyond 2014, New York, USA

A Brunyanszki, G Olah, B Szczesny and Cs Szabo (2013). Propranolol regulates the catalytic activity of PARP-1 via modulating protein kinase A activation. 19th International Conference on ADP-ribosylation , Quebec, Canada.

Fodor T, Szántó M, Nagy L, **Brunyánszki A**, Kiss B, Gergely P, Virág L, Bai P (2013) The role of PARP10 in metabolic regulation. Conference of the Hungarian Society for Physiology, Budapest, Hungary.

Fodor T, Szántó M, Nagy L, **Brunyánszki A**, Gergely P, Virág L, Bai P (2013) The role of PARP10 enzyme in mitochondrial metabolism. Hungarian Molecular Life Sciences 2013, Siófok, Hungary

Szántó M, **Brunyánszki A**, Márton J, Csumita M, Vámosi Gy, Kiss B, Virág L, Gergely P, Bai P (2012) PARP-2 modulates cholesterol homeostasis through regulating the expression of SREBP transcription factors. MBKE Conference on Signal Transduction, Esztergom, Hungary

Nagy L, Docsa T, Szántó M, **Brunyánszki A**, Hegedus Cs, Márton J, Kónya B, Virág L, Somsák L, Gergely P, Bai P (2012) Investigation of the effect of glycogen phosphorylase inhibitor N-(3,5-dimethyl-benzoyl)-N'-(β -D-glucopyranosyl)urea on energy homeostasis. MBKE Conference on Signal Transduction, Esztergom, Hungary

Nagy L, Docsa T, Szántó M, **Brunyánszki A**, Hegedűs Cs, Márton J, Kónya B, Virág L, Somsák L, Gergely P, Bai P (2012) Glycogen phosphorylase inhibitor N-(3,5-dimethyl-benzoyl)-N'-(β -D-

glucopyranosyl)urea induces energy expenditure. EMBL Diabetes and Obesity Symposium, Heidelberg, Germany

Bai P, Canto C, **Brunyánszki A**, Cen Y, Szántó M, Kiss B, Schreiber V, Sauve AA, Auwerx J (2012) Metabolic consequences of PARP inhibition: a novel enzyme family regulating oxidative metabolism. EMBL Diabetes and Obesity Symposium, Heidelberg, Germany

Brunyánszki A, Hegedus Cs Szántó M, Gergely P, Schreiber V, Virág L, Bai P (2012) PARP-1 and PARP-2 in the contact hypersensitivity reaction. FEBS3+ Opatija, Croatia

Brunyánszki A, Szántó M, Fodor K, Sandt C, Dumas P, Bai P (2011) Investigation of protein acetylation and poly(ADP-ribosyl)ation by synchrotron FTIR microspectroscopy. Conference of the Hungarian Biochemical Society, Pécs, Hungary

Brunyánszki A, Hegedus Cs, Szántó M, Gergely P, Virág L, Bai P (2011) Role of PARP-1 and PARP-2 in contact hypersensitivity. Conference of the Hungarian Biochemical Society, Pécs, Hungary

Bai P, Houten SM, Schreiber V, Kiss B, **Brunyánszki A**, de Murcia G, Auwerx J, Menissier-de Murcia J. (2010) Poly(ADP-ribose) polymerase-2 is a cofactor of the RXR-PPAR α transcriptional machinery. 18th International Conference on ADP-ribose metabolism, Zürich, Switzerland

Brunyánszki A, Hegedus Cs, Szántó M, Gergely P, Schreiber V, Virág L, Bai P (2010) Genetic ablation of PARP-1 protects against oxazolone-induced contact hypersensitivity by modulating oxidative stress. 18th International Conference on ADP-ribose metabolism, Zürich, Switzerland

Szántó M, **Brunyánszki A**, Schreiber V, Gergely P, Virág L, Bai P (2010) Poly(ADP-ribose) polymerase-1 activation is necessary for the function of the retinoid X receptor/peroxisome proliferator activated receptor- α complex. (18th International Conference on ADP-ribose metabolism, Zürich, Switzerland)

Bai P, Houten SM, Huber A, Schreiber V, Kiss B, **Brunyánszki A**, de Murcia G, Auwerx J, Menissier-de Murcia J (2009) Identification of poly(ADP-ribose) polymerase-2 as a cofactor of the RXR-PPAR α transcriptional machinery. Nuclear Receptor Conference, Dubrovnik, Croatia

Brunyánszki A, Sipos A, Kiss B, Huber A, Schreiber V, Gergely P, Virág L, Bai P (2008) The role of poly(ADP-ribose) polymerase-2 in adipocyte differentiation and function. Conference of the Hungarian Biochemical Society, Szeged, Hungary

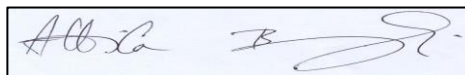
Brunyánszki A, Sipos A, Kiss B, Huber A, Schreiber V, Gergely P, Virág L, Bai P (2008) The role of poly(ADP-ribose) polymerase-2 in adipocyte differentiation and function. Lipids as regulators of cell function FEBS workshop, Spetses, Greece

Brunyánszki A, Sipos A, Huber A, Schreiber V, Kiss B, Gergely P, Virág L, Bai P (2007) Detection of the activity of poly(ADP-ribose) polymerase-2 on the course of adipocyte differentiation. Conference of the Hungarian Biochemical Society, Debrecen, Hungary

Bai P, Houten SM, Huber A, Kiss B, **Brunyánszki A**, Sipos A, de Murcia G, Menissier-de Murcia J, Auwerx J (2007) The interaction of poly(ADP-ribose) polymerase-2 and PPAR α in the development of the adipose tissue. 14th Cell- and Developmental Biology Conference, Balatonfüred, Hungary

Brunyanszki A, Sipos A, Kiss B, Gergely P, Virag L, Bai P. (2007) Detection of poly(ADP-ribose) polymerase-2 activity in differentiating preadipocytes. 14th Cell- and Developmental Biology Conference, Balatonfüred, Hungary

27th November 2019, Debrecen, Hungary

A rectangular box containing a handwritten signature in black ink. The signature is cursive and appears to be 'A. Brunyanszki'.

sign