EUROPEAN MEDICINES AGENCY
SCIENCE MEDICINES HEALTH

Curriculum Vitae

PERSONAL INFORMATION

Zoltan Papp

WORK EXPERIENCE

October 1989- Present

from research assistant to full professor and vice dean

University of Debrecen (Hungary)

university education and academic research

EDUCATION AND TRAINING

September 1983-September 1989

M.D.

University of Debrecen (Hungary)

general medicine

September 1992-August 1993

predoctoral research

KU Leuven (Belgium)

cardiac cellular electrophysiology research

January 1998-December 1999

postdoctoral research

Vrije Universiteit Amsterdam (Netherlands)

cardiac cellular physiology

October 1983-June 1995

Ph.D.

Department of Physiology, University of Debrecen (Hungary)

cardiac and skeletal muscle physiology

ADDITIONAL INFORMATION

Expertise

cellular and molecular aspects of cardiovascular pathophysiology, cardiomyocyte physiology, excitation-contraction coupling, mechanical and biochemical characterization of the contractile protein machinery in the human heart during various pathological conditions, positive inotropy, ischemia/reperfusion injury, chronic heart failure

Publications

Full list of publications and citations:

https://scholar.google.com/citations?user=vkdMKdMAAAAJ&hl=hu&oi=ao

Selected publications:

B. Bodi, PM Pilz, L. Martha, M. Lang, O Hamza, M Fagyas, PL Szabo, D Abraham, A Toth, BK Podesser, A Kiss, Z Papp.

Alterations in ACE and ACE2 Activities and Cardiomyocyte Signaling Underlie Improved Myocardial Function in a Rat Model

of Repeated Remote Ischemic Conditioning. Int J Mol Sci. 2021 Oct 14;22(20):11064. doi: 10.3390/ijms222011064.

D. Burkhoff, S. Rich, P. Pollesello, Z. Papp Levosimendan-induced venodilation is mediated by opening of potassium

channels. ESC Heart Fail. 2021 Dec;8(6):4454-4464. doi: 10.1002/ehf2.13669.

B. Bodi, E. Pasztorne Toth, L. Nagy, A. Toth, L. Martha, A. Kovacs, G. Balla, T. Kovacs, Z. Papp. "Titin isoforms are

increasingly protected against oxidative modifications in developing rat cardiomyocytes." Free Radical Biology & Medicine:

no. 113 (2017): 224-235. DOI: 10.1016/j.freeradbiomed.2017.09.015.

V. Harjola, W. Mullens, M. Banaszewski, J. Bauersachs, Hans-Peter Brunner-La Rocca, O. Chioncel, S. Collins, W. Doehner,

G. Filippatos, A. Flammer, V. Fuhrmann, M. Lainscak, J. Lassus, M. Legrand, J. Masip, C. Mueller, Z. Papp, J. Parissis, E.

Platz, A. Rudiger, F. Ruschitzka, A. Schafer, P. Seferovic, H. Skouri, M. Yilmaz, A. Mebazaa. "Organ dysfunction, injury and

failure in acute heart failure: From pathophysiology to diagnosis and management. A review on behalf of the Acute Heart

Failure Committee of the Heart Failure Association (HFA) of the European Society of Cardiology (ESC)." European Journal

of Heart Failure 19, no. 7 (2017): 821-836. DOI: 10.1002/ejhf.872.

A. Patsalos, A. Pap, T. Varga, G. Trencsenyi, G. Contreras, I. Garai, Z. Papp, B. Dezso, E. Pintye, L. Nagy. "In situ

macrophage phenotypic transition is affected by altered cellular composition prior to acute sterile muscle injury." Journal of

Physiology 595, no. 17 (2017): 5815-5842. DOI: 10.1113/JP274361.

C. Matyas, B. Nemeth, A. Olah, M. Torok, M. Ruppert, D. Kellermayer, B. Barta, G. Szabo, G. Kokeny, E. Horvath, B. Bodi,

Z. Papp, B. Merkely, T. Radovits. "Prevention of the development of heart failure with preserved ejection fraction by the

phosphodiesterase-5A inhibitor vardenafil in rats with type 2 diabetes." European Journal of Heart Failure 19, no. 3 (2017):

326-336. DOI: 10.1002/ejhf.711.

S. von Haehling, Z. Papp, S. Anker. "ESC Heart Failure A new journal aims to broaden heart failure views." European Journal

of Heart Failure 18, no.12 (2016): 1415-1419. DOI: 10.1002/ejhf.692.

L. Nagy, P. Pollesello, H. Haikala, A. Vegh, T. Sorsa, J. Levijoki, S. Szilagyi, I. Edes, A. Toth, Z. Papp, G. Papp. "ORM-3819

promotes cardiac contractility through Ca2+ sensitization in combination with selective PDE III inhibition, a novel approach to

inotropy." European Journal of Pharmacology no. 775 (2016): 120-129. DOI: org/10.1016/j.ejphar.2016.02.028.

L. Nagy, A. Kovacs, B. Bodi, E. Pasztorne Toth, G. Fulop, A. Toth, I. Edes, Z. Papp. "The novel cardiac myosin activator

omecamtiv mecarbil increases the calcium sensitivity of force production in isolated cardiomyocytes and skeletal muscle fibres

of the rat." British Journal of Pharmacology 172, no. 18 (2015): 4506-4518. DOI: 10.1111/bph.13235.

V. Csato, A. Peto, G. Fulop, I. Rutkai, E. Pasztorne Toth, M. Fagyas, J. Kalasz, I. Edes, A. Toth, Z. Papp. "Myeloperoxidase

evokes substantial vasomotor responses in isolated skeletal muscle arterioles of the rat." Acta Physiologica 214, no. 1 (2015):

109-123. DOI: 10.1111/apha.12488.

Z. Papp, A. Borbely and W. J. Paulus. "CrossTalk opposing view: The late sodium current is not an important player in the

development of diastolic heart failure (heart failure with a preserved ejection fraction)." The Journal of Physiology 592, no. 3

(2014): 415-417. DOI: 10.1113/jphysiol.2013.262261.

A. Balogh, D. Santer, E. T. Pasztor, A. Toth, D. Czuriga, B. K. Podesser, K. Trescher, K. Jaquet, F. Erdodi, I. Edes and Z.

Papp. "Myofilament protein carbonylation contributes to the contractile dysfunction in the infarcted LV region of mouse

hearts." Cardiovascular Research 101, no. 1 (2013): 108-119. DOI: 10.1093/cvr/cvt236.

Z. Papp, D. Czuriga, L. Balogh, A. Balogh and A. Borbely. "How Cardiomyocytes Make the Heart Old." Current

Pharmaceutical Biotechnology 13, no. 13 (2012): 2515-2521.

Curriculum Vitae of Zoltan Papp 2022

Z. Papp, I. Edes, S. Fruhwald, S. G. De Hert, M. Salmenpera, H. Leppikangas, A. Mebazaa, G. Landoni, E. Grossini, P.

Caimmi, A. Morelli, F. Guarracino, R. H. Schwinger, S. Meyer, L. Algotsson, B. G. Wikstrom, K. Jorgensen, G. Filippatos, J.

T. Parissis, M. J. Gonzalez, A. Parkhomenko, M. B. Yilmaz, M. Kivikko, P. Pollesello and F. Follath. "Levosimendan:

molecular mechanisms and clinical implications: consensus of experts on the mechanisms of action of levosimendan."

International Journal of Cardiology 159, no. 2 (2012): 82-87. DOI: 10.1016/j.ijcard.2011.07.022.

A. Borbely, I. Falcao-Pires, L. van Heerebeek, N. Hamdani, I. Edes, C. Gavina, A. F. Leite-Moreira, J. G. Bronzwaer, Z. Papp,

J. van der Velden, G. J. Stienen and W. J. Paulus. "Hypophosphorylation of the Stiff N2B titin isoform raises cardiomyocyte

resting tension in failing human myocardium." Circulation Research 104, no. 6 (2009): 780-786. DOI:

10.1161/CIRCRESAHA.108.193326.

Z. Hertelendi, A. Toth, A. Borbely, Z. Galajda, I. Edes, A. Tosaki and Z. Papp. "The peroxynitrite evoked contractile

depression can be partially reversed by antioxidants in human cardiomyocytes." Journal of Cellular and Molecular Medicine

13, no. 8B (2009): 2200-2209. DOI: 10.1111/j.1582-4934.2008.00445.x.

I. F. Edes, A. Toth, G. Csanyi, M. Lomnicka, S. Chlopicki, I. Edes and Z. Papp. "Late-stage alterations in myofibrillar

contractile function in a transgenic mouse model of dilated cardiomyopathy (Tgalphaq*44)." Journal of Molecular and

Cellular Cardiology 45, no. 3 (2008): 363-372. DOI: 10.1016/j.yjmcc.2008.07.001.

Z. Hertelendi, A. Toth, A. Borbely, Z. Galajda, J. van der Velden, G. J. Stienen, I. Edes and Z. Papp. "Oxidation of

myofilament protein sulfhydryl groups reduces the contractile force and its Ca2+ sensitivity in human cardiomyocytes."

Antioxidants & Redox Signaling 10, no. 7 (2008): 1175-1184. DOI: 10.1089/ars.2007.2014.

A. Borbely, A. Toth, I. Edes, L. Virag, J. G. Papp, A. Varro, W. J. Paulus, J. van der Velden, G. J. Stienen and Z. Papp.

"Peroxynitrite-induced alpha-actinin nitration and contractile alterations in isolated human myocardial cells." Cardiovascular

Research 67, no. 2 (2005): 225-233. DOI: 10.1016/j.cardiores.2005.03.025.

A. Borbely, J. van der Velden, Z. Papp, J. G. Bronzwaer, I. Edes, G. J. Stienen and W. J. Paulus. "Cardiomyocyte stiffness in

diastolic heart failure." Circulation 111, no. 6 (2005): 774-781. DOI: 10.1161/01.CIR.0000155257.33485.6D.

Z. Papp, K. Csapo, P. Pollesello, H. Haikala and I. Edes. "Pharmacological mechanisms contributing to the clinical efficacy of

levosimendan." Cardiovasc Drug Reviews 23, no. 1 (2005): 71-98.

S. Szilagyi, P. Pollesello, J. Levijoki, H. Haikala, I. Bak, A. Tosaki, A. Borbely, I. Edes and

Z. Papp. "Two inotropes with

different mechanisms of action: contractile, PDE-inhibitory and direct myofibrillar effects of levosimendan and enoximone."

Journal of Cardiovascular Pharmacology 46, no. 3 (2005): 369-376.

Z. Papp, J. Van Der Velden, A. Borbely, I. Edes and G. J. Stienen. "Effects of Ca2+ -sensitizers in permeabilized cardiac

myocytes from donor and end-stage failing human hearts." Journal of Muscle Research and Cell Motility 25, no. 3 (2004): 219-

224.

S. Szilagyi, P. Pollesello, J. Levijoki, P. Kaheinen, H. Haikala, I. Edes and Z. Papp. "The effects of levosimendan and OR-1896

on isolated hearts, myocyte-sized preparations and phosphodiesterase enzymes of the guinea pig." European Journal of

Pharmacology 486, no. 1 (2004): 67-74. DOI: 10.1016/j.ejphar.2003.12.005.

J. Van der Velden, Z. Papp, R. Zaremba, N. M. Boontje, J. W. de Jong, V. J. Owen, P. B. Burton, P. Goldmann, K. Jaquet and

G. J. Stienen. "Increased Ca 2+-sensitivity of the contractile apparatus in end-stage human heart failure results from altered

phosphorylation of contractile proteins." Cardiovasc Research 57, no. 1 (2003): 37-47.

Projects

Scientific grant supports: ETT 424/1993(1994-1996); OTKA T016957(1995-1998); OMFB-TeT F-11,French-Hungarian(1995-1996); NWO-OTKA 048-010-100-00-96(1995-1998); NWO-OTKA N 25094(1997-1999); OTKA T 026577(1998-2001); ETT 096/2000(2000-2002); OTKA T 035279(2001-2004); MMM(2000-2002); Richter (2002);NKFP

1/007/2001(2001-2004); TeT F-31/02 French-Hungarian(2003-2004); ETT 39/2003(2003-2005); NKFP 1A008_04(2004-2007); GVOP 3.2.1.-2004-04-0165/3.0(2004-2005); TeT PL-12/05 Polish-Hungarian(2006-2008); ETT 449/2006 (2006-2008); OTKA K 68363(2007-2011); TeT AT-22/2008 Austrian-Hungarian(2009-2010); MEDIA-EU-FP7-HEALTH-2010-single-stage Proposal No: 261409 (2011-2015); OTKA K109083 (2013-2017); GINOP2.3.2-15-2016-00043 (2017-2020);GINOP2.3.2-15-2016-00048 (2017-2020); GINOP2.3.2-15-2016-00050 (2017-2020); EFOP-3.6.2-16-2017-00006 (2017-

2019); OMA 92ou8 Austrian-Hungarian (2016-2017); 1067/1/2017/KP MTA (2017-2022); OMA 98ou15 Austrian-Hungarian(2017-2018).

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Website: https://klinfiz.unideb.hu/en/colleagues/staff/zoltan-papp-md-phd-dsc/72

European Comission Expert Profile: CT-EX2014D173706-105

Organizer of scientific events: 10 National and international conferences

Invited lectures: over 100

European Patent: Toth, A., Fagyas, M., Papp, Z., Edes, I.: Dilution based inhibition assay.

https://patents.google.com/patent/HU230404B1/en

Memberships

Positions held in scientific associations:

a) In Hungarian associations

2007- member of the advisory board of the Hungarian Society of Cardiology

2007- member of the scientific committee of the Hungarian Society of Cardiology

2006-2009 secretary of the Experimental Working Group of the Hungarian Society of Cardiology

2009-2013 chairperson of the Experimental Working Group of the Hungarian Society of Cardiology

2011-2017 secretary of the 1st Doctoral Committee at the Medical Division of the Hungarian Academy of Sciences

2003-2025 secretary/vice president (domestic or international affairs) of the Hungarian Society of Cardiology

b) In international associations

2008-2014 Board member of the Heart Failure Association of the European Society of Cardiology

2011- 2014 member of the European Society of Cardiology Training and Research Grants Committee

2012-2014 chairman of the Basic Science Section of the Heart Failure Association of the European Society of Cardiology

2014- member of the Council of the International Academy of Cardiovascular Sciences (European section)

2015- member of the Council of the International Society for Heart Research (European section)

2018-2023 secretary of the International Society for Heart Research (European section)

Other Relevant Information

Education/qualifications/titles:

1989 M.D. (No.:1989/10-105 OTE.sz., University of Debrecen)

1995 Ph.D. (No.:G 44-89/195. OTE, University of Debrecen)

2004 Med.Habil. (No.:31/2004. Hab., University of Debrecen)

2010 D.Sc. (No.:4933, Hungarian Academy of Sciences)

2010 FESC (Fellow of the European Society of Cardiology)

Position: Department of Cardiology, Division of Clinical Physiology, University of

Debrecen, Faculty of Medicine, Hungary:

2010 - Full Professor, Head of Division

2010 - 2026 Vice-Dean for Educational/Scientific Affairs at the Faculty of

Medicine, University of Debrecen, Hungary

Tutor in the Student Scientific Society: in various topics of cardiovascular pathophysiology, tutor of a total 26 students with awarded thesis and lectures in student conferences

Ph.D. supervision: accredited Ph.D. supervisor since 2000, core member of the Kalman Laki Doctoral School (MAB

2015/1/XI/26/2/816. sz.: 2009/7/XIII/2/318; of 2009. X. 2; valid till 2019. December 31); organizer of Ph.D. courses

Formerly supervised Ph.D. students: total number of graduated Ph.D. students: 13

Editorial boards:

Cardiovascular Therapeutics (formerly Cardiovascular Drug Reviews): 2006-2021

Cardiovascular Research: 2013-

ESC Heart Failure (founding deputy editor): 2014-

Molecular and Cellular Biochemistry: 2015-

Reviews in Cardiovascular Medicine: 209-

Ad hoc reviewer for Circulation, Journal of Physiology, Pflugers Arch. European Journal of Physiology, Cardiovascular

Research, Naunyn-Schmiedeberg's Arch. Pharmacol., British Journal of Pharmacology, General Physiology and Biophysics,

Antioxidants and Redox Signaling, Journal of Cellular and Molecular Medicine, Journal of Molecular and Cellular Cardiology

Awards, prizes:

1. KU-Leuven-Soros-scholarship: 11 months at the Katholieke Universiteit Leuven, Leuven, Belgium, 1992-1993

2. Scholarship of the Soros Foundation: 2 months at the University of Cincinnati, School of Medicine, Oh. USA, 1996

3. NWO-OTKA postdoctorial fellowship: 24 months at the Vrije Universiteit of Amsterdam, the Netherlands, 1998-1999

4. Best lecturer of the Faculty of Medicine, 2003, 2010, 2013, 2021

5. Bolyai Janos Research Fellowship, 2001-2004, 2006-2009

6. Pro Cura Ingenii prize of the University of Debrecen, 2009

7. Makoto Nagano Award for Achievements in Cardiovascular Education, International Academy of Cardiovascular

Sciences, 2011

8. Distinguished lecturer of the University of Debrecen, Faculty of Medicine, 2013

9. Jan Slezak Award for excellence in cardiovascular sciences, International Academy of Cardiovascular Sciences, 2016

10. Gold Medal for Mastering Scientific Tutoring at the University of Debrecen: 2017

11. Grant Pierce Award for excellence in cardiovascular sciences, International Academy of Cardiovascular Sciences, 2019