

Motivation Letter

To whom it may concern

I am Assoc. Prof. Dr Attila Kiss applying for “*a council member of the ISHR-European section*” where I can definitely advance my previous experience acquired as senior cardiovascular scientist, fellow of ESC and group leader at the Medical University of Vienna. My current research is a combination of drugs therapy and pathophysiology of myocardial ischemia/reperfusion-injury, heart failure, adverse and reverse cardiac remodeling. In addition, I have been fortunate enough to be a part and organize meeting and nucleus member of Austrian Society of Cardiology (Translational medicine working groups) and past president of Austrian Society of Experimental Surgery. Of importance, I have great interest to be active part again ISHR which I was joined as PhD student in 2007 and I have more experienced nowadays to increase further the reputation of ISHR, eg. make closer ISHR to ESC or AHA, as well as force to join meeting or section in ESC and AHA meetings.

With the state-of-the-art infrastructure available at the Medical University of Vienna and ISHR eminent guidance and team support, I hope that I can able to organize summer school for enthusiastic young scientists. I believe I am quickly grasp newer aspects regarding the part of ISHR Council and perform the expected responsibilities.

I am looking forward to your reply

Yours sincerely


Attila Kiss



Full name Attila Kiss

Citizenship Hungarian

Languages Hungarian, English, German (basic)

Contact attila.kiss@meduniwien.ac.at, katis83@gmail.com

Telephone +436602470903

Date of birth 09.08.1983, Karcag, Hungary

ORCID <https://orcid.org/0000-0003-4652-1998>

Current Position

2022 - Associate Professor (Extraordinary Professorship), Center for Biomedical Research, Medical University of Vienna, Vienna, Austria
2015 – 2022 Post doc Research associate – Center for Biomedical Research, Medical University of Vienna, Vienna, Austria

2021 – Ludwig Boltzmann Institute for Cardiovascular Research, Deputy Head for CARREM project

Past Position(s)

2011- 2015
Post doctoral fellow - Karolinska University Hospital, Karolinska Institute, Department of Medicine, Division of Cardiology, Stockholm, Sweden

Education

2002-2007 University of Szeged, Faculty of Science, Szeged, Hungary - majoring in biology

Qualification

2007 Biologist

Post gradual studies

2007-2011 Albert Szent-Györgyi Medical University, Department of Pharmacology and Pharmacotherapy

2011 University Doctor Degree (PhD) “*Summa cum laude*”

Scientific degree	<p>Ph.D. Theoretical Medical Science (2011) Title: The antiarrhythmic effect of exogenous peroxynitrite and preconditioning: the involvement of nitric oxide, superoxide and peroxynitrite. http://doktori.bibl.u-szeged.hu/868/</p>
Research experience	<p><i>In vivo</i>: acute ischemia/reperfusion model of dog, pig and rat. Electrical stimulation of vagus nerve (rat, pig), diabetic model on rat and mice. Myocardial infarction model on rats and mice. Isolated working heart model.</p> <p><i>In vitro</i>: Protein expression assay (Western blot), fluorescent staining, nitrate/nitrite assay, arginase activity, ELISA and histology. Assessment of vascular function <i>in vitro</i> (wire myograph). Basic knowledge of cell culture.</p> <p>FELASA C certification (ID:1058)</p>
Research interest	<p>Cardiovascular physiology, pathophysiology and pharmacology; experimental models of myocardial ischemia/reperfusion and infarction, testing of newly developed antiischemic compounds. Focus on the endogenous adaptation of the heart against ischemic and reperfusion injury (e.g remote conditioning).Cardioprotective mechanisms relate to nitric oxide signaling pathway. The adverse role of arginase upregulation in heart and in vascular system following ischemia/reperfusion and heart failure. The protective effect of vagal nerve stimulation on diseased heart and the possible cardioprotective mechanism of non-neuronal cholinergic system. Metabolic syndrome in vasculature and in myocardium. The mechanism of left ventricle remodeling and heart failure, neuregulin-1 mediates vascular- and cardioprotection. The importance of altered microRNAs expression and signaling pathways in the development of myocardial ischemia/reperfusion injury and adverse left ventricle remodeling. The pathophysiological role of Tenascin C in cardiovascular disorders. The role of extracellular matrix remodeling in the development of cardiac dysfunction in Duchenne Muscular Dystrophy. Cancer cardiomyopathy.</p>
Award and Fellowship	<p>2023 President – Austrian Society of Experimental Surgery 2022 Cluster for Cardiovascular Medicine, Medical University of Vienna – Best Publication prize – Basic Research Category 2021 Paul Dudley International Scholar Award – The American Heart Association Annual Meeting– Highest Ranked Abstract from Austria 2019 Theoder Körner Prize 2019 Fellow of the European Society of Cardiology 2018 European Society of Cardiology Congress 2018 Educational grant 2017 Best Basic Science Abstract – 25. Annual Meeting of the Alpe Adria Association of Cardiology, Budapest, Hungary 2014 Poster award (I. Prize) Cardiovascular Research Retreat Meeting – Karolinska Institutet, Stockholm, Sweden 2010 Poster award (I. prize) VI. International symposium on myocardial cytoprotection</p> <p>2008 Best Publication Award of Young Scientist at Department of Pharmacology and Pharmacotherapy Institute 2008 Scholarship of Albert Szent-Györgyi University of Szeged</p>

2007 National Students` Scientific Congress, First prize (biology)
2006 Scholarship of Hungarian Republic
2006 Scholarship of Szeged Town
2005 Talent students of Scholarship of Jász-Nagykun Szolnok county

Membership of Societies

Hungarian Society for Cardiology
International Society for Heart Research
European Society of Cardiology
European and Austrian Atherosclerosis Society
Österreichischen Gesellschaft Für Chirurgische Forschung
(Member of Board Committee, President in 2023)
Austrian Society of Diabetes
COST-EU Cardioprotection – Working Group 2 Nucleus Member
Austrian Society of Cardiology - Cardiovascular Biology and
Thrombosis Research (Nucleus Member)

Reviewer ad hoc

International Journal of Molecular Sciences, Clinical and Experimental Pharmacology and Physiology, The Lancet, European Heart Journal, Perfusion, Plos One, International Journal of Cardiology, Diabetology and metabolic syndrome, Life Science, Journal Interactive CardioVascular and Thoracic Surgery, European Journal of Cardio-Thoracic Surgery, BMC Cardiovascular Disorders, Vascular Pharmacology, Journal of Cardiovascular Pharmacology and Therapeutics, Oxidative Medicine and Cellular Longevity, Atherosclerosis, Experimental and Molecular Pathology, Clinical Epidemiology, Cells, IUBMB Life, Histology and Histopathology, Cardiovascular Drugs and Therapy, Frontiers in Physiology, Frontiers in Cardiovascular Medicine, European Journal of Pharmacology, Bioengineered, Ageing Cell, Nature Communication, Antioxidants and Redox Signaling, JACC: Basic to Translational Science, American Journal of Cardiovascular Drugs, British Journal of Pharmacology, Geroscience

Editors

Editorial Board Members

- 1) Journal of Cardiovascular Pharmacology and Therapeutics (2019 – now)
- 2) International Journal of Cardiology (2019 - now)
- 3) Frontiers in Cardiovascular Medicine (Reviewer Editor, 2021-)
- 4) BMC Cardiovascular Disorders (Editorial Board Member, 2022-)

Grant review for

- 1) National Science Center Poland
- 2) OeAD-GmbH – Austria's Agency for Education and Internationalisation

3) External expert / Open Call - COST (European Cooperation in Science and Technology)

PhD examiner:

- 1) Edmonton, Canada
- 2) Medical University of Vienna, Austria
- 3) University of Szeged, Hungary
- 4) University of Debrecen, Hungary

Teaching and other activities

Organiser and lecturer: “Summer School for Biomedical Research focus on Cardiovascular Research” (2015, 2016, 2017, 2018, 2019, 2022, 2023)

Lecturer: Journal Club: Experimental Animal Models for Regenerative Medicine in Basic Science and Clinical Research; Small and Large animal models of heart failure

From 2021 – Board Member of Ethical Committee for Animal research – Medical University of Vienna

Mentoring and Supervision

1. **Patrick Pilz** (PhD supervision, Medical University of Vienna) – Max Kade Postdoc Fellowship (2021) - Stanford Cardiovascular Institute, PhD completed in 2019
2. **Lujza Szabo – PhD supervision** (2017-2023) – PhD completed in 2023
3. **Zsuzsanna Arnold** (PhD supervision) – Best Basic Science Abstract Prize, Annual Meeting of Austrian Society of Cardiology, 2020
4. **Simon Watzinger**, Best Poster Prize, Cardiovascular Research Days , Weissensee, Austria, 2020
5. **Bettina Kronstein** (PhD supervision) – Best poster award, Young Scientist Association; Medical University of Vienna, Austria, 2021
6. **Christopher Dostal** (PhD; 2022-2025); CBCS Summer School 2023 in BCC
7. **Werff, L.J. van der Leanne** – ERASMUS Master student – 2023 (8 months)
8. **Johanna Reiner** – Bachelor student (University of Vienna), YSA PhD Symposium 2023, Poster Session Award
9. **Fabian Titz** – Medical Student, MD Thesis 2023 (Medical University of Vienna)
10. **Ibrahim Aykac** - Medical Student, MD Thesis 2023 (Medical University of Vienna), MD PhD program
11. **Laurenz Wolner** - Medical Student, MD Thesis 2023, co-supervisor (Medical University of Vienna) - The impact of the novel St Thomas' Hospital polarizing cold blood cardioplegia on hemodynamic recovery in infarcted rat hearts, MDPhD program

Grants

- 2024 – Austrian-Hungarian Bilateral Research grant (Mitochondriale Energieveränderungen im Herze; PI: Attila Kiss, 10.000 EUR)
- 2023-2025 – Industrial grant - Biontech (Germany) – modRNA therapeutic for the improvement of post myocardial infarction remodelling (PI: Attila Kiss, 613000 EUR)
- 2022 - Plectin function in normal and diseased hearts (Investigator, PI: Lilli Winter, FWF standalone project; 15000 EUR)
- 2021 - Role of Tenascin-C in dystrophic cardiomyopathy (CO-PI: 175000 EUR, PI: Karlheinz Hilber)
- 2021 - Burgermeister Found Wien, Co-applicant (Research grant: 13870 EUR)
- 2020 – Österreichische Musckelforschung (Resarch grant – PI: Kiss – 12700 EUR)
- 2020 - Austrian – Hungarian Bilateral Research Grant (PI: Kiss and Nadasy – 7000 EUR)
- 2020 - Austrian – Hungarian Bilateral Research Grant (PI: Kiss and Nadasy – 7000 EUR)
- 2020-2021 - Austrian-France- SciTechFrance2020 (PIs: Kiss and Pinet - 15000 EUR)
- 2019-2022 – FWF - TRPA1 in ischemic cardiovascular disease (PI: Fischer; CO-PI: Kiss, 50% - 406000 EUR)
- 2018–2021 – Horizon2020 - A neuroprosthesis to restore the vagal-cardiac closed-loop connection after heart transplantation (consortium member, 6.7 M EUR)
- 2016, 2017, 2018 – Austrian – Hungarian Bilateral Research Grant (PI, 20000 EUR)
- 2017-2020 – Ludwig Boltzmann Cluster for Cardiovascular Research (REM project, 50000 EUR)
- 2017 – Burgermeister Found Wien, Co-principal Investigator (Co-PI, 20000 EUR)
- 2010–2011 - Richter Gedeon Pharmautical Company, Stand Alone project; Project Leader (PI- 10000 EUR)

Publication List

1. MY. Emmert, J Bonatti, E Caliskan, M Gaudino, M Grabenwöger, MT. Grapow, PP Heinisch, T Kieser-Prieur, KB Kim, **A Kiss**, F Mouriquhe, M Mach, A Margariti, J Pepper, L Perrault, B K. Podesser, J Puskas, DP. Taggart, OP. Yadava, B Winkler. Expert Consensus Documents - Graft Treatment in Cardiovascular Bypass Graft Surgery **Frontiers in Cardiovascular Medicine – accepted for publication**
2. J Sauer, J Marksteiner, E Lilliu, B Hackl, H Todt, H Kubista, C Dostal, BK Podesser, **A Kiss**, X Koenig, K Hilber. Empagliflozin treatment rescues abnormally reduced Na currents in ventricular cardiomyocytes from dystrophin-deficient mdx mice. **AJP- Heart & Circ Physiol accepted doi: 10.1152/ajpheart.00729.2023**
3. H Dinh, Zs Z.A. Kovács, M Kiss, K Kupecz, A Sejbén, G Szűcs, F Márványkövi, A Siska, M Freiwan, SzO Pósa, G Zsolt, KE Ibos, É Bodnár, GY Lauber, E Acar, A Kriston, F Kovács, P Horváth, I Földesi, P Monostori, G Cserni, BK Podesser, P Pokreisz, A Kiss, L Dux, K Csabafi, M Sárközy. The KISS1 receptor agonist kisspeptin 13 aggravates uremic cardiomyopathy and chronic kidney disease in 5/6-nephrectomized rats. **Geroscience doi: 10.1007/s11357-023-01017-8**
4. M Kest, A Ágoston, GT Szabó, **A Kiss**, Á Üveges, D Czuriga, A Komócsi, I Hizoh, Zs Kőszegi. Comprehensive Review on Angiography-based Coronary Microvascular Assessment with and without Intracoronary Pressure Measurements. **Clinical Research in Cardiology doi: 10.1007/s00392-023-02338-6.**
5. E Boxhammer, B Wernly, **A Kiss**, M Mirna, V Paar, A Aigner, E Acar, S Watzinger, BK. Podesser, R Zauner, V Wally, M Hackl, UC. Hoppe, M Lichtenauer. microRNA-30d – a potential new therapeutic target for prevention of ischemic cardiomyopathy after myocardial infarction? **Cells. 2023 Sep 27;12(19):2369. doi: 10.3390/cells12192369.**
6. H Dinh, Zs ZA. Kovács, GY Lauber, E Acar, G Szűcs, K Kupecz, M Freiwan, M Kis, A Siska, KE Ibos, É Bodnár, A Kriston, F Kovács, P Horváth, I Földesi, G Cserni, BK. Podesser, P Pokreisz, **A Kiss**, L Dux, K Csabafi, M Sárközy. The Kisspeptin-1 receptor antagonist peptide-234 accelerates the development of uremic cardiomyopathy in a rat model. **Sci Rep. 2023 Aug 28;13(1):14046. doi: 10.1038/s41598-023-41037-0**
7. C Bueno-Beti, C Lim, A Protonotarios, P Szabo, J Westaby, M Mazic, M Sheppard, E Behr, O Hamza, **A Kiss**, B Podesser, M Hengstschläger, T Weichhart, and A Asimak. A mTORC1-dependent mouse model for cardiac sarcoidosis. **J Am Heart Assoc 2023 Sep 26;e030478. doi: 10.1161/JAHA.123.030478**
8. X Koenig, B Hackl, E Zabrodska, S Gewessler, E Lilliu, EM Putz, **A Kiss**, B Podesser, R Ristl, H Todt K Hilber. The type of suture material affects transverse aortic constriction induced heart failure development in mice: A repeated measures correlation analysis. **Frontiers in Cardiovascular Medicine - Volume 10 - 2023 | https://doi.org/10.3389/fcvm.2023.1242763**
9. Zs Onódi, PL Szabó, D Kucsera, P Pokreisz, C Dostal, K Hilber, GY Oudit, BK Podesser, P Ferdinandy, ZV Varga, **A Kiss**. Distinct patterns of inflammasome signalling in the cardiac and skeletal muscle from mouse and rat model of Duchenne muscular dystrophy. **Int J Mol Sci. 2023 May 9;24(10):8497. doi: 10.3390/ijms24108497.**
10. M Lenz, **A Kiss**, P Haider, M Salzmänn, M Brekalo, KA Krychtiuk, O Hamza, K Huber, C Hengstenberg, BK Podesser, J Wojta, PJ Hohensinner, WS Speidl. Short-term toll-like receptor 9 inhibition leads to left ventricular wall thinning after myocardial infarction. **ESC Heart Failure doi.org/10.1002/ehf2.14403**
11. PL Szabo, J Marksteiner, Janine Ebner, C Dostal, BK. Podesser, J Sauer, H Kubista, H Todt, X Koenig, B Hackl, **A Kiss***, and K Hilber. Ivabradine acutely improves cardiac Ca handling and function in a rat model of Duchenne muscular dystrophy. **Physiol Rep 2023 Apr;11(7):e15664. doi: 10.14814/phy2.15664.** *correspondence

12. B Kronsteiner, M Haberbusch, P Aigner, AM Kramer, BK Podesser, **A Kiss**, F Moscato. A novel ex-vivo isolated rabbit heart preparation to explore the cardiac effects of cervical and cardiac vagus nerve stimulation. *Sci Rep.* 2023 Mar 14;13(1):4214. doi: 10.1038/s41598-023-31135-4.
13. M Sárközy, S Watzinger, Zs Z. A. Kovács, E Acar, F Márványkövi, G Szűcs, A Siska, I Földesi, A Kriston, F Kovács, P Horváth, B Kóvári, G Cserni, PL Szabó, G Szabó, K Zins, D Abraham, T Csont, P Pokreisz, BK Podesser, **A Kiss**. Neuregulin-1 β improves uremic cardiomyopathy and renal dysfunction in rats. *JACC: Basic to Translational Science* accepted for publication
14. C Hoebart*, **A Kiss***. P Pilz, PL Szabo, BK. Podesser, M J.M. Fischer*, S Heber*. The role of TRPA1 in myocardial infarction. *International Journal of Molecular Science* 2023 Jan 28;24(3):2516. doi: 10.3390/ijms24032516. * These authors contributed equally
15. F Dorninger, **A Kiss**, P Rothauer, A Stiglbauer, M Schranz, S Kummer, W Fallatah, MP Gonyalves, O Hamza, T König, MB. Bober, T Cavalle-Garrido, NE. Braverman, S Forss-Petter, C Pifl, J Bauer, RE. Bittner, TH. Helbich, BK. Podesser, H Todt, J Berger. Overlapping and distinct features of cardiac pathology in inherited human and murine ether lipid deficiency. *International Journal of Molecular Science* 2023 Jan 18;24(3):1884. doi: 10.3390/ijms24031884.
16. **A Kiss**, GL Nadasy, A Fees, Zs Arnold, I Aykac, C Dostal, PL Szabó, M Szekeres, L Hunyady and BK Podesser. Alterations in coronary resistance artery network geometry in diabetes and the role of Tenascin C. *Rev. Cardiovasc. Med. Med.* 2023, 24(1), 6; <https://doi.org/10.31083/j.rcm2401006>
17. M Haberbusch, B Kronsteiner, AM Kramer, **A Kiss**, B Podesser, F Moscato. Closed-loop vagus nerve stimulation for heart rate control evaluated in the Langendorff-perfused rabbit heart. *Scientific Reports* 12(1):18794. doi: 10.1038/s41598-022-23407-2.
18. **A Kiss**, PL Szabo, C Dostal, Zs Arnold, D Geisler, I Crailsheim, S Folkmann, M Grabenwöger, BK Podesser, B Winkler. Vascular graft storage solution preserves endothelial function. *Rev. Cardiovasc. Med.* 2022; 23(11): 368
19. B. Kronsteiner, LM. Zopf, P. Heimel, G. Oberoi, AM. Kramer, P. Slezak, WJ Weninger, BK. Podesser, **A. Kiss**, F. Moscato. Mapping the functional anatomy and topography of the cardiac autonomic innervation for selective cardiac neuromodulation using MicroCT. *Frontiers in Cell and Developmental Biology* doi.org/10.3389/fcell.2022.968870
20. **A Kiss**, X Lu, M Schleder, PM Pilz, PL Szabo, P Wu, L Weber, C Vaka, V Pichler, M Mitterhauser, X Zhang, D Abraham, BK Podesser, M Hacker, Xiang Li. Sympathetic nerve innervation and metabolism in ischemic myocardium in response to remote ischemic conditioning. *Basic Research in Cardiology* 117(1):42.doi: 10.1007/s00395-022-00946-3.
21. S Ambrosini, F Montecucco, D Kolijn, D Pedicino, A Akhmedov, SA Mohammed, M Herwig, E Gorica, PL Szabó, L Weber, G Russo, R Vinci, CM. Matter, G Liuzzo, PJ. Brown, FM.V. Rossi, GG. Camici, S Sciarretta, AP Beltrami, F Crea, B Podesser, F Ruschitzka, TF. Lüscher, **A Kiss**, N Hamdani, S Costantino, and F Paneni. Methylation of the Hippo Effector YAP by the Methyltransferase SETD7 Drives Myocardial Ischemic Injury: a Translational Study. *Cardiovascular Research* doi: 10.1093/cvr/cvac102
22. AM Kramer, **A Kiss**, S Heber, DJ Chambers, S Hallström, PM Pilz, D Santer, BK Podesser. Normothermic blood polarizing vs depolarizing cardioplegia in a porcine model of cardiopulmonary bypass. *Interactive CardioVascular and Thoracic Surgery* 35(1):ivac152. doi: 10.1093/icvts/ivac152.
23. PM. Pilz, AI Jha, WT Chang, JE. Ward, **A Kiss**, JE Ward, S Fisch, BK Podesser, R Liao. Large and Small Animal Models of Heart Failure with Reduced Ejection Fraction. *Circulation Research* 2022; 130:1888–1905, doi.org/10.1161/CIRCRESAHA.122.320246
24. AK Schaefer, **A Kiss**, A Oszwald, F Nagel, E Acar, A Aliabadi-Zuckermann, M Hackl, A Zuckermann, R Kain, A Jakubowski, P Ferdinandy, S Hallström and BK Podesser. Single donor infusion of S-Nitroso-Human-Serum-Albumin attenuates cardiac isograft fibrosis and preserves myocardial Micro-RNA-126-3p in a murine heterotopic heart transplant model *Transplant International* 35:10057. doi: 10.3389/ti.2022.10057. eCollection 2022.

25. S Heber, PM Haller, **A Kiss**, B Jäger, K Huber, MJM Fischer. Association of plasma methylglyoxal increase after myocardial infarction and left-ventricular ejection fraction. *Biomedicines* **2022**, 10(3), 605; <https://doi.org/10.3390/biomedicines10030605>
26. Y Lu; Y Tian; T Mou; Y Zhou; J Tian; M Yun; **A Kiss**; BK Podesser; M Hacker; X Li, Xiaoli Zhang. Transient cardioprotective effects of remote ischemic postconditioning on non-reperfused myocardial infarction: longitudinal evaluation study in pigs. *International Journal of Cardiology* - S0167-5273(22)00257-1. doi: 10.1016/j.ijcard.2022.02.022.
27. F Nagel; AK Schaefer; IF Gonçalves; E Acar; A Oszwald; P Kaiser; R Kain; K Trescher; WH Eilenberg; C Brostjan; D Santer; A Kiss; BK Podesser. The expression and role of tenascin C in abdominal aortic aneurysm formation and progression. *Interactive Cardiovascular and Thoracic Surgery*; ivac018, <https://doi.org/10.1093/icvts/ivac018>
28. PM Haller; IF Gonçalves, E Acar, B Jäger, PM Pilz, J Wojta, K Huber, **A Kiss**, B Podesser. Relationship between plasma Neuregulin-1 and cardiac function in patients with ST-elevation myocardial infarction. *Reviews in Cardiovascular Medicine* 2022 Feb 14;23(2):63. doi: 10.31083/j.rcm2302063.
29. Bódi, PM, Pilz, L Mártha, M Lang, O Hamza, M Fagyas, PL Szabo, A Tóth, 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. *International Journal of Molecular Science* 14;22(20):11064
30. I Aykac, BK. Podesser, **A Kiss**. Reverse remodeling in diabetic heart failure: the role of extracellular matrix (2022). *Minerva Cardiology and Angiology* 70(3):385-392. doi: 10.23736/S2724-5683.21.05794-X.
31. PL Szabó, C Dostal, O Hamza, PM Pilz, E Acar, S Watzinger, S Mathew, S Hallström , BK Podesser, **A Kiss**. Remote ischaemic preconditioning ameliorates myocardial ischemia and reperfusion-induced coronary endothelial dysfunction and aortic stiffness in rat (2021). *Journal of Cardiovascular Pharmacology and Therapeutics* 26(6):702-713.
32. C Hoebart, NS Rojas-Galvan, CI. Ciotu, I Aykac, LF. Reissig, WJ. Weninger, **A Kiss**, BK. Podesser, MJM Fischer, Stefan Heber. No functional TRPA1 in cardiomyocytes (2021). *Acta Physiologica* 5:e13659
33. MP Gonzalez*, **A Kiss***, M Holzweber, P Kaiser, F Nagel, S Watzinger, E Acar, PL Szabo, IF Gonçalves, L Weber, PM Pilz, L Budinsky, TH Helbich and BK. Podesser. The Role of Tenascin C in Cardiac Reverse Remodeling Following Banding–Debanding of the Ascending Aorta (2021). *International Journal of Molecular Science* *shared first authorship 18;22(4):2023
34. M Mirna, V Paar, A Topf, T Kraus, K Sotlar, A Aigner, A Ewe, S Watzinger, BK Podesser, M Hackl, R Pistulli, UtC Hoppe, **A Kiss***, M Lichtenauer *. A New Player in the Game: Treatment with antagomiR-21a-5p Significantly Attenuates Histological and Echocardiographic Effects of Experimental Autoimmune Myocarditis (2022). *Cardiovascular Research (accepted)*senior author*, 118(2):556-572
35. PL Szabó, J Ebner, X Koenig, O Hamza, S Watzinger, S Trojanek, D Abraham, H Todt, H Kubista, K Schicker, S Remy, I Anegon, **A Kiss***, B K Podesser, K Hilber. Cardiovascular phenotype of the Dmd^{mdx} rat – a suitable animal model for Duchenne muscular dystrophy (2021). *Disease Models & Mechanisms* 14(2):dmm047704. *correspondence
36. O Hamza, **A Kiss**, A M Kramer, S Trojanek, D Abraham, E Acar, F Nagel, V E Tretter, M Kitzwögerer, B K. Podesser. Tenascin C promotes valvular remodeling in two large animal models of ischemic mitral regurgitation (2020). *Basic Research in Cardiology* 115(6):76.
37. GT Szabo, **A Kiss**, Z Csanádi, D Czuriga. Hypothetical dysfunction of the epithelial sodium channel may justify neurohumoral blockade in coronavirus disease 2019 (2020). *ESC Heart Failure* 8(1):171-174.
38. PM Haller, B Jäger, E Piackova, L Sztulman, C Wegberger, J Wojta, M Gyöngyösi, **A Kiss**, B K Podesser, A Spittler, K Huber. Changes in circulating extracellular vesicles in patients with ST-elevation myocardial infarction and additional treatment with remote ischemic conditioning – a randomized controlled trial (2020). *Biomedicines* 8(7):218

39. D Santer, F Nagel, IF Gonçalves, C Kaun, J Wojta, M Fagyas, M Krššák, Á Balogh, Z Papp, A Tóth, V Bánhegyi, K Trescher, **A Kiss**, BK. Podesser. Tenascin-C aggravates ventricular dilatation and angiotensin converting enzyme activity after myocardial infarction in mice (2020). *ESC Heart Failure* 7(5):2113-2122.
40. J Ebner, P Uhrin, PL. Szabo, **A Kiss**, BK Podesser, H Todt, K Hilber, X Koenig (2020). Reduced Na current in Purkinje fibers explains cardiac conduction defects and arrhythmias in Duchenne muscular dystrophy. *American Journal of Physiology Heart and Circulatory Physiology* 318(6):H1436-H1440.
41. **A Kiss**, S Heber, M Hackl, S Skalicky, S Hallström, BK Podesser, D Santer (2020). MicroRNA expression profile changes after cardiopulmonary bypass and ischemia/reperfusion-injury in a porcine model of cardioplegic arrest. *Diagnostics* 10(4), 240
42. B. Wernly, V- Paar, A. Aigner, PM Pilz, BK. Podesser, M. Foerster, C. Jung, J Pinon Hofbauer, B. Tockner, M. Wimmer, T Kraus, LJ Motloch, M- Hackl, UC. Hoppe, **A. Kiss**, M. Lichtenauer (2020). Anti-CD3 antibody treatment reduces scar formation in a rat model of myocardial infarction. *Cells*, 9(2), 295
43. PM. Pilz, M. Lang, O. Hamza, LP. Szabo, M. Inci, AM. Kramer, M Koch, J Huber, BK. Podesser, **A. Kiss**. (2020). Semi-Minimal Invasive Method to Induce Myocardial Infarction in Rats and the Assessment of Cardiac Function by an Isolated Working Heart System. *J. Vis. Exp.* (160), e6103
44. J. Ebner, M. Cagalinec, H. Kubista, H. Todt, P.L. Szabo, **A. Kiss**, B.K. Podesser, H.C. Szappanos, L.C. Hool, K. Hilber, and X. Koenig (2019). Neuronal nitric oxide synthase regulation of calcium cycling in ventricular cardiomyocytes is independent of Cav1.2 channel modulation under basal conditions. *Pflügers Archiv - European Journal of Physiology*, 472 (1), 61-74.
45. E Kaniusas, S Kampusch, M Tittgemeyer, F Panetsos, R F Gines, M PAPA, **A Kiss**, B K Podesser, A M. Cassara', E Tanghe, A M Samoudi, T Tarnaud, W Joseph, V Marozas, A Lukosevicius, N Ištuk, A Šarolic, S Lechner, W Klonowski, G Varoneckas, J C Szeles (2019). Current Directions in the Auricular Vagus Nerve Stimulation I - a physiological perspective *Frontiers in Neuroscience*, 13:854.
46. E Kaniusas, S Kampusch, M Tittgemeyer, F Panetsos, R F Gines, M Papa, **A Kiss**, B Podesser, A Cassara, E Tanghe, A M Samoudi, T Tarnaud, W Joseph, V Marozas, A Lukosevicius, N Ištuk', A. S Lechner, W Klonowski, G Varoneckas, C Szeles and A Šarolic (2019). Current Directions in the Auricular Vagus Nerve Stimulation II - an engineering perspective. *Frontiers in Neuroscience* 13:772.
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