

PROFILE FOR INSTITUTE WEBSITE

Current photo in graphic file e.g. 2024, 2023.	
Name and surname, Title	Dominik Skiba, dr
Position	Assistant Professor
Hirsch Index and Number of citations (according to Scopus) on the day of completing the form	Hirsch Index: 14 Number of citations: 1177
Research areas (in points, min. 200 characters, max. 500 characters)	– the role of the opioid system in the pathogenesis of atherosclerosis and hypertension – the role of the immune system in the development of cardiovascular diseases (arterial hypertension, atherosclerosis, etc.) – therapeutic use of naltrexone in low doses
Total number of completed research projects; currently implemented research projects (title and number) and selected max. 3 completed projects (title and number) from the newest ones, i.e. 2024, 2023, 2022...	– 2020 The effect of Hmnr gene and its interaction with the endogenous opioid system as a novel mechanism and a therapeutic target for blood pressure regulation – 2012 Mechanisms of anti-atherosclerotic action of Mas receptor stimulation for angiotensin 1-7 in mouse model of atherosclerosis with knockout apoE gene.
Total number of publications; ORCID (number and hyperlink to the profile); SCOPUS (number and hyperlink to the profile); indicate selected publications (max. 5)	– Total number of publications: 23 – https://www.scopus.com/authid/detail.uri?authorId=53865711000 – https://orcid.org/0000-0002-5910-2955 – Skiba D, Jaskuła K, Nawrocka A, Poznański P, Łazarczyk M, Szymański Ł, Żera T, Sacharczuk M, Cudnoch-Jędrzejewska A, Gaciong Z. The Role of Opioid Receptor Antagonists in Regulation of Blood Pressure and T-Cell Activation in Mice Selected for High Analgesia Induced by Swim Stress. Int J Mol Sci. 2024 Feb 23;25(5):2618. – Skiba DS, Szczepaniak P, Siedliński M, Poznański P, Łazarczyk M, Jaskuła K, Religa P, Sacharczuk M, Gaciong Z. Hypertensive Effect of Downregulation of the Opioid System in Mouse Model of Different Activity of the Endogenous Opioid System. Int J Mol Sci. 2021 Apr 17;22(8):4179. – Skiba DS, Nosalski R, Mikolajczyk TP, Siedlinski M, Rios FJ, Montezano AC, et al. Anti-atherosclerotic effect of the angiotensin 1-7 mimetic AVE0991 is mediated by inhibition of perivascular and plaque inflammation in early atherosclerosis. Brit J Pharmacol. 2017; 174(22): 4055-69. – Jaskuła K, Sacharczuk M, Gaciong Z, Skiba DS. Cardiovascular Effects Mediated by HMMR and CD44. Mediators Inflamm. 2021 Jul 10;2021:4977209.

	– Guzik TJ, Skiba DS, Touyz RM, Harrison DG. The role of infiltrating immune cells in dysfunctional adipose tissue. Cardiovasc Res. 2017; 113(9): 1009-23.
Total number of patents; selected patents (max. 2) and a hyperlink to personal patent achievements (UP RP), on the day of completing the form	–
Selected scientific achievements from the newest, i.e. 2023, 2022, 2021... (in points, min. 800 characters, max. 1000 characters)	– Demonstration for the first time that the development of perivascular inflammation precedes vascular dysfunction and oxidative stress in the aorta at the early stage of atherosclerosis development in ApoE-/- mice. – Proving that the administration of an angiotensin 1-7 mimetic reduces the area of atherosclerotic plaque and perivascular inflammation, among others. by reducing the expression of pro-inflammatory chemokines for T lymphocytes (RANTES) and monocytes (MCP-1) and by reducing the number of pro-inflammatory monocytes circulating in the blood in a mouse model of atherosclerosis. – Demonstration that mice selected for high post-stress analgesia are characterized by lower blood pressure than mice selected for high post-stress analgesia. Blockade of opioid receptors using an opioid receptor antagonist causes an increase in blood pressure in mice selected for high post-stress analgesia.
Number and list of defended PhD students from the latest, i.e. 2024, 2023, 2022...	–
Organizational activities, dissemination of knowledge and others (in points, min. 300 characters, max. 1000 characters)	– Numerous speeches at international scientific conferences, including: International Symposium on Atherosclerosis in Sydney, AHA High Blood Pressure Scientific Sessions in San Francisco, World Congress of Basic & Clinical Pharmacology in Glasgow. Research internship at the University of Manchester Institute of Biotechnology, University of Glasgow Institute of Cardiovascular and Medical Sciences.