

CURRICULUM VITAE

Václav Hampl, PhD

November 2020

CURRENT AFFILIATION:

Professor, Department of Physiology,
Charles University Second Medical School, Prague, Czech Republic

ADDRESS:

Department of Physiology
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Charles University in Prague
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https://en.wikipedia.org/wiki/Václav_Hampl

MAJOR RESEARCH INTERESTS:

- Pulmonary vascular reactivity
- Pulmonary hypertension
- Vascular role of nitric oxide
- Oxygen sensing
- Regulation of fetoplacental vasculature

EDUCATION:

1985-1989 Charles University Prague: School of Pediatrics (postgradual)

1980-1985 Charles University Prague: School of Natural Sciences

ACADEMIC QUALIFICATIONS:

2001 **Dr.Sc.** (Normal and Pathological Physiology) Charles University, Prague
Thesis: Role of nitric oxide in the pathogenesis of pulmonary hypertension in

1990 **Ph.D.** (Physiology) Czechoslovak Academy of Sciences
Thesis: Pulmonary vascular reactivity to hypoxia in the rat

1985 **M.S.** (Biology) Charles University, Prague
Thesis: Thermogenic effect of noradrenaline in skeletal muscle perfused in vitro

RESEARCH AND PROFESSIONAL EXPERIENCE:

Charles University in Prague, Czech Republic:

- Rector: **2006** (Feb.) to **2014** (Jan.)

Charles University Second Medical School,
Department of Physiology, Prague, Czech Republic:

- Head: **2014** (April) - **2019** (March)

- Professor: since **2002**
- Associate Professor: **1998-2002**
- Assistant Professor: **1996-1998** and **1991**

University of Alberta School of Medicine, Edmonton, Canada:

- 2-3 months research visits each year: **1997-2000**

University of Minnesota Medical School,

Department of Medicine, Minneapolis, Minnesota, USA:

- Research Associate: **1992-1996**
- Postdoctoral Fellow: **1991-1992**

Charles University School of Pediatrics,

Department of Pathophysiology, Prague, Czechoslovakia:

- Research Associate: **1985-1990**

PROFESSIONAL MEMBERSHIP AND PUBLIC SERVICE:

Since **2019** Pulmonary Vascular Research Institute

Since **2018** Governing Board, University Pardubice, Czech Republic

Since **2015** Board, Institute for Christian-Democratic Politics, Prague, Czech Republic

2014-2018 Research Advisory Board, Czech Science Foundation (Grant Agency of the Czech Republic)

2014-2020 Senator, Parliament of the Czech Republic (elected as independent)
Chair, Senate Committee on the European Union Affairs

Since **2014** Chair of the Board, Center for Palliative Care, Prague, Czech Republic

2014-2019 Board, J. William Fulbright Commission in the Czech Republic
(vice-chair 2015-2016)

Since **2014** Coordinating Council for doctoral programs in biomedicine,
Charles University in Prague (Chair 2016-2019)

Since **2014** Research Council, Second Medical School, Charles University in Prague

2013-2015 Steering Committee, Council for Doctoral Education of the European University Association (EUA)

2013-2015 Thomson Reuters Research Analytics Advisory Board

2011-2015 Board member, European University Association

2011-2014 Permanent guest, Research and Development Council of the Czech Republic
(advisory body to the Government of the Czech Republic)

2012-2013 Chair, evaluation committee of the "Siemens Prize" in the category "Best academic teacher"

2011-2014 President, Czech rectors conference

2010-2011 Chair, Bioethical Committee of the Czech Republic
(approves research using stem cells and human embryonal tissue)

2010-2011 Research and Development Council

2009-2016 Research policy working group of the European University Association

2009-2014 Board of Trustees, Europaeum (association of 10 universities promoting European studies)

2007-2015 Research Council, Masaryk University, Brno, Czech Republic

2007-2015 Research Council, Comenius University, Bratislava, Slovakia

2006-2018 Research Council, Charles University in Prague (2006 -Jan. 2014 *ex offo* as rector, since 2018 honorary member)

2006-2014 Europaeum Council (Chair in 2008)

2006-2011 Vicepresident, Czech rectors conference
2002-2006 Municipal council, Rudná, Czech Republic
2000-2005 Academic Senate, Charles University Prague, Czech Republic (Chair 2002-2005)
 Since **2000** Czech Physiological Society
 Since **1996** American Heart Association - Council on Cardiopulmonary and Critical Care
 Since **1994** American Physiological Society

PRIZES AND AWARDS:

2017 *Historic commemorative medal*, Charles University in Prague
2014 *Gold medal*, Charles University in Prague
2011 *Distinguished Leadership Award for Internationals*, University of Minnesota
2006 *One of the best 5 preclinical teachers in students' evaluation*, Charles University Second Medical School
2001 *Best scientific publication in 2000 Prize*, Czech Medical Society
1992 *John F. Perkins, Jr. Memorial Fellowship Award*, American Physiological Society
1991 *Charles E. Proshek, M.D. Fellowship in Medicine*, Proshek Foundation

GRANT SUPPORT (PRINCIPAL INVESTIGATOR):

2017-2019 "Ontogenetic mechanisms that determine pulmonary vascular disease in adults"
Grant Agency of the Czech Republic #17-11223S
 CZK 7.2 million (~ \$ 290,000)

2013-2017 "Vascular reactivity in pulmonary hypertension"
Grant Agency of the Czech Republic #13-01710S
 CZK 8.7 million (~ \$ 415,000)
 PI from 2014 (transferred from prof. Jan Herget)

2005-2007 "Dynamics and mechanisms of the chronic hypoxia-induced alterations in pulmonary and placental circulations"
Grant Agency of the Czech Republic #305/05/0672;
 CZK 6.7 million (~ \$ 250,000)
 PI only in 2005 (then transferred to prof. Jan Herget)

2004-2006 "Pathophysiology of the effects of chronic hypoxia on the fetoplacental vascular bed"
Grant Agency of the Charles University #82/2004/C/2.LF;
 CZK 600,000 (~\$ 23,000)
 PI 2004-2005

2003 "Does chronic hypoxia elevate vascular resistance in the placenta?"
Grant Agency of the Charles University #52/2003/C/2.LF
 CZK 300,000 (~\$ 11,500)

2000-2002 "Calcium release from the sarcoplasmic reticulum in the regulation of the pulmonary circulation during hypoxia"
Grant Agency of the Czech Republic #305/00/1432
 CZK 2.6 million (~ \$ 76,000)

1998-2000 "Hypoxic Fetoplacental Vasoconstriction"
Internal Grant Agency of the Czech Ministry of Health # 4538
 CZK 1.9 million (~ \$ 56,221)

- 1999** "Mechanism of hypoxic fetoplacental vasoconstriction: role of potassium channels"
NATO Science Program Collaborative Research Grant # LST.CLG 975202
 BEF 250,000 (~ \$ 6,700)
- 1997-1999** "Therapy for Pulmonary Hypertension"
Grant Agency of the Czech Republic # 306/97/0854
 CZK 1.25 million (~ \$ 37,000)
- 1994-1996** "Nitric Oxide in Experimental Pulmonary Hypertension"
American Heart Association—Minnesota Affiliate Grant-in-aid
 \$ 46,808

Co-investigator of several other grants from the Grant Agency of the Czech Republic, Internal Grant Agency of the Czech Ministry of Health, and the Grant Agency of the Charles University.

PEER REVIEWS OF GRANT APPLICATIONS:

- The Wellcome Trust
- American Heart Association - Minnesota Affiliate
- Grant Agency of the Czech Republic
- Slovak Research and Development Agency (SRDA)
- College Development Fund of the Czech Republic
- Grant Agency of the Charles University Prague

PEER REVIEWS OF MANUSCRIPTS FOR INTERNATIONAL SCIENTIFIC JOURNALS:

- *Acta Pharmacologica Sinica*
- *American Journal of Pathology*
- *American Journal of Physiology-Cell Physiology*
- *American Journal of Physiology-Heart and Circulatory Physiology*
- *American Journal of Physiology-Lung Cellular and Molecular Physiology*
- *American Journal of Physiology-Regulatory, Integrative and Comparative Physiology*
- *Anesthesia and Analgesia*
- *Biomedicine & Pharmacotherapy*
- *Circulation Research*
- *Clinical Biochemistry*
- *Endocrinology Studies*
- *European Journal of Pharmacology*
- *European Respiratory Journal*
- *Experimental and Clinical Cardiology*
- *Human Reproduction*
- *Hypertension*
- *Immunobiology*
- *Journal of Applied Physiology*
- *Journal of Laboratory and Clinical Medicine*
- *Life Sciences*
- *Neuropeptides*
- *Physiological Research*

- *Placenta*
- *Reproduction*
- *Respiratory Research*

TEACHING:

2020-2021 Mentor (together with Dr. Adam Eckhardt) of Eduardo Klöpel, MSc., a PhD student from São Paulo State University (Universidade Estadual Paulista – Unesp), Botucatu Medical School, Brazil, during his 1-year research visit in our laboratory funded by Programa de Duotorado Sanduíche from Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES), Brazil.

Since **2019** Evaluation committee of the PhD program in Bioethics, Masaryk University, Brno, Czech Republic

Since **2003** Evaluation committee of the PhD program in Physiology, Charles University in Prague

Since **1996** Concept, preparation, organization of and teaching in the general skills training course for PhD students of biomedicine at Charles University

Since **1998** Supervisor of doctoral students

Since **1996** Lectures in physiology (2nd year medical students)

1996-2005 Seminars and practicals in physiology (2nd year medical students)

1996-2005 Creation and maintenance of teaching resources on the departmental website ([http:// physiology.lf2.cuni.cz](http://physiology.lf2.cuni.cz))

1992-1996 Research training of cardiology residents

1987-1991 Practicals in physiology (2nd and 3rd year medical students)

INTERNATIONAL CONFERENCES ORGANIZED:

2009 **Host**, 5th Convention of European University Association „Facing Global Challenges: European strategies for Europe’s universities“, Prague, Czech Republic, March 18-21.

1999 **Scientific secretary**, International Symposium "Pulmonary Circulation VII.", Prague, Czech Republic, June 27-30.

INVITED LECTURES (INTERNATIONAL):

2013 "Nitric oxide in Pulmonary Circulation"
Invited to the international seminar on "Legacy of Nitric Oxide Discovery: Impact on Disease Biology", Thiruvananthapuram, India, November 5 (canceled due to injury in car accident).

2007 "Oxygen Sensing in Fetoplacental Vessels"
Presented at the "Oxygen Sensing: From Fetal Programming to Postnatal Remodelling" symposium at the Joint Meeting of The Slovak Physiological Society, The Physiological Society and The Federation of European Physiological Societies, Bratislava, Slovakia, September 14.

2006 "Pulmonary Vascular Function and NO"
Presented at the "Gaseous Signaling in Health and Diseases" workshop at the European Society for Clinical Investigation 40th Annual Scientific Meeting, Prague, Czech Republic, March 16.

2000 "Hypoxic Fetoplacental Vasoconstriction - The Body's "Other" Lung"
Presented at the "Update on the Acute Cardiovascular Responses to Hypoxia -

From Bench Top to Mountain Top" session at the American Heart Association's 73rd Scientific Sessions, New Orleans, LA, USA, November 12.

2000 "Regulation of Pulmonary Vascular Tone"

Presented at "The Breathing Club", Prague, Czech Republic, April 1.

EXTRACURRICULAR INTERESTS AND SKILLS:

Skiing, biking, hiking, canoeing, sailing, travel, music, ballroom dancing

PUBLICATIONS

Web of Science: cited >3320, without autocitations >3170 (>95%), H-index = 26

Google Scholar: cited >5050, H-index = 31

Original research papers

1. Žaloudíková M, Vytášek R, Rašková M, Vízek M, Uhlík J, Hampl V: *The effect of exposure to hypoxia on superoxide formation by alveolar macrophages is indirect.* **Life Sciences** 236: 116864, 2019.
2. Žaloudíková M, Eckhardt A, Vytášek R, Uhlík J, Novotný T, Bačáková L, Musílková J, Hampl V: *Decreased collagen VI in the tunica media of pulmonary vessels during exposure to hypoxia – a novel step in pulmonary arterial remodeling.* **Pulm. Circ.** 9: 1–10, 2019.
3. Jakoubek V, Hampl V: *Alcohol and fetoplacental vasoconstrictor reactivity.* **Physiological Research** 67: 509-513, 2018.
4. Vajnerova O, Kafka P, Kratzerova T, Chalupsky K, Hampl V: *Pregestational diabetes increases fetoplacental vascular resistance in rats.* **Placenta** 63: 32-38, 2018.
5. Beitzl E, Baňasová A, Miková D, Hampl V: *Nitric oxide elevation in polytrauma is driven by oxygen radicals.* **Physiological Research** 66: S561-S565, 2017.
6. Žaloudíková M, Vytášek R, Vajnerová O, Hniličková O, Vízek M, Hampl V, Herget J: *Depletion of alveolar macrophages attenuates hypoxic pulmonary hypertension but not hypoxia-induced increase in serum concentration of MCP-1.* **Physiological Research** 65: 763-768, 2016.
7. Kafka P, Vajnerová O, Hampl V: *Chronic hypoxia increases fetoplacental vascular resistance in rat placenta perfused with blood.* **Bratislava Medical Journal** 117: 583-586, 2016.
8. Beitzl E, Baňasová A, Miková D, Hampl V: *Nitric oxide as an indicator for severity of injury in polytrauma.* **Bratislava Medical Journal** 117: 217-220, 2016.
9. Hampl V, Herget J, Bíbová J, Baňasová A, Husková Z, Vaňourková Z, Jíchová Š, Kujal P, Vernerová Z, Sadowski J, Červenka L: *Intrapulmonary activation of the angiotensin-converting enzyme type 2/angiotensin 1-7/G-protein-coupled Mas receptor axis attenuates pulmonary hypertension in Ren-2 transgenic rats exposed to chronic hypoxia.* **Physiological Research** 64: 25-38, 2015.
10. Červenka L, Bíbová J, Husková Z, Vaňourková Z, Kramer HJ, Herget J, Jíchová Š, Bürgelová M, Sadowski J, Hampl V: *Combined suppression of the intrarenal and circulating vasoconstrictor renin-ACE-ANG II axis and augmentation of the vasodilator ACE2-ANG 1-7-Mas axis attenuates the systemic hypertension in Ren-2 transgenic rats exposed to chronic hypoxia.* **Physiological Research** 64: 11-24, 2015.

11. Kafka P, Vajnerová O, Herget J, Hampl V: *Rho-kinase inhibition attenuates acute hypoxic fetoplacental vasoconstriction in the rat*. **Physiological Research** 61: S43-S48, 2012.
12. Chovanec M, Novotná J, Wilhelm J, Hampl V, Vízek M, Herget J: *Hypercapnia attenuates hypoxic pulmonary hypertension by inhibiting lung radical injury*. **Physiological Research** 58: S79-S85, 2009.
13. Hodyc D, Hniličková O, Hampl V, Herget J: *Pre-arrest administration of the cell-permeable free radical scavenger tempol reduces warm ischemic damage of lung function in non-heart-beating donors*. **Journal of Heart and Lung Transplantation** 27: 890-897, 2008.
14. Baňasová A, Maxová H, Hampl V, Vízek M, Povýšilová V, Novotná J, Vajnerová O, Hniličková O, Herget J: *Prevention of mast cell degranulation by disodium cromoglycate attenuates the development of hypoxic pulmonary hypertension in rats exposed to chronic hypoxia*. **Respiration** 76: 102-107, 2008.
15. Jakoubek V, Bíbová J, Venclíková K, Trnková A, Herget J, Hampl V: *Chronic hypoxia increases fetoplacental vascular resistance and vasoconstrictor reactivity in the rat*. **Am. J. Physiol. Heart Circ. Physiol.** 294: H1638-H1644, 2008.
16. Ošťádalová I, Vobecký M, Chvojková Z, Miková D, Hampl V, Wilhelm J, Ošťádal B: *Selenium protects the immature rat heart against ischemia/reperfusion injury*. **Molecular and Cellular Biochemistry** 300: 259-267, 2007.
17. Vajner L, Vytášek R, Lachmanová V, Uhlík J, Konrádová V, Novotná J, Hampl V, Herget J: *Acute and chronic hypoxia as well as 7-day recovery from chronic hypoxia affects the distribution of pulmonary mast cells and their MMP-13 expression in rats*. **International Journal of Experimental Pathology** 87: 383-391, 2006.
18. Jakoubek V, Bíbová J, Hampl V: *Voltage-gated calcium channels mediate hypoxic vasoconstriction in the human placenta*. **Placenta** 27: 1030-1033, 2006.
19. Hampl V, Bíbová J, Baňasová A, Uhlík J, Miková D, Hniličková O, Lachmanová V, Herget J: *Pulmonary vascular iNOS induction participates in the onset of chronic hypoxic pulmonary hypertension*. **Am. J. Physiol. Lung Cell. Mol. Physiol.** 290: L11-L20, 2006.
20. Lachmanová V, Hniličková O, Povýšilová V, Hampl V, Herget J: *N-acetylcysteine inhibits hypoxic pulmonary hypertension most effectively in the initial phase of chronic hypoxia*. **Life Sciences** 77: 175-182, 2005.
21. Hampl V, Bíbová J, Ošťádalová I, Povýšilová V, Herget J: *Gender differences in the long-term effects of perinatal hypoxia on the pulmonary circulation in rats*. **Am. J. Physiol. Lung Cell. Mol. Physiol.** 285: L386-L392, 2003.
22. Herget J, Novotná J, Bíbová J, Povýšilová V, Vaňková M, Hampl V: *Metalloproteinase inhibition by Batimastat attenuates pulmonary hypertension in chronically hypoxic rats*. **Am. J. Physiol. Lung Cell. Mol. Physiol.** 285: L199-L208, 2003.
23. Hampl V, Bíbová J, Povýšilová V, Herget J: *Dehydroepiandrosterone sulfate reduces experimental pulmonary hypertension in rats*. **European Respiratory Journal** 21: 862-865, 2003.
24. Hampl V, Bíbová J, Straňák Z, Wu X, Michelakis ED, Hashimoto K, Archer SL: *Hypoxic fetoplacental vasoconstriction in humans is mediated by potassium channel inhibition*. **Am. J. Physiol. Heart Circ. Physiol.** 283: H2440-H2449, 2002.
25. Michelakis ED, Hampl V, Nsair A, Wu X, Harry G, Haromy A, Gurtu R, Archer S: *Diversity in mitochondrial function explains differences in vascular oxygen sensing*. **Circ. Res.** 90: 1307-1315, 2002.

26. Bělohlávková S, Šimák J, Kokešová A, Hnilíčková O, Hampl V: *Fenfluramine-induced pulmonary vasoconstriction: role of serotonin receptors and potassium channels*. **Journal of Applied Physiology** 91: 755-761, 2001.
27. Archer SL, London B, Hampl V, Wu X, Nsair A, Puttagunta L, Hashimoto K, Waite RE, Michelakis ED: *Impairment of hypoxic pulmonary vasoconstriction in mice lacking the voltage gated potassium channel, Kv1.5*. **FASEB Journal** 15: 1801-1803, 2001.
28. Novotná J, Bíbová J, Hampl V, Deyl Z, Herget J: *Hyperoxia and recovery from hypoxia alter collagen in peripheral pulmonary arteries similarly*. **Physiological Research** 50: 153-163, 2001.
29. Hampl V, Bíbová J, Herget J: *Perinatal history of hypoxia leads to lower vascular pressures and hyporeactivity to angiotensin II in isolated lungs of adult rats*. **Physiological Research** 49: 567-575, 2000.
30. Cornfield DN, Martin EB, Hampl V, Archer SL: *Aerosol delivery of diethylenetriamine/nitric oxide, a nitric oxide adduct, causes selective pulmonary vasodilation in perinatal lambs*. **J. Lab. Clin. Med.** 134: 419-425, 1999.
31. Herget J, Kawiková I, Hampl V: *Adrenalectomy in rats depresses hypoxic pulmonary vasoconstriction in vitro but does not attenuate the pulmonary hypertension of chronic hypoxia in vivo*. **Experimental and Clinical Cardiology** 3: 28-32, 1998.
32. Archer SL, Souil E, Dinh-Xuan AT, Schremmer B, Mercier J-C, El Yaagoubi A, Nguyen-Huu L, Reeve HL, Hampl V: *Molecular identification of the role of voltage-gated K⁺ channels, Kv1.5 and 2.1 in hypoxic pulmonary vasoconstriction and control of resting membrane potential in rat pulmonary artery myocytes*. **Journal of Clinical Investigation** 101: 2319-2330, 1998.
33. Weir EK, Reeve HL, Huang JMC, Michelakis E, Nelson DP, Hampl V, Archer SL: *Anorexic agents aminorex, fenfluramine, and dexfenfluramine inhibit potassium current in rat pulmonary vascular smooth muscle and cause pulmonary vasoconstriction*. **Circulation** 94: 2216-2220, 1996.
34. Dillon WC, Hampl V, Shultz PJ, Rubins JB, Archer SL: *Origins of breath nitric oxide in humans*. **Chest** 110: 930-938, 1996.
35. Sidney EJ, Hampl V, Nelson DP, Archer SL, Foegh ML, Cathapermal SS, Weir EK: *The somatostatin analog angiopeptin does not reduce chronic hypoxic pulmonary hypertension in rats*. **Proceedings of the Society for Experimental Biology and Medicine** 213: 43-49, 1996.
36. Hampl V, Tristani-Firouzi M, Nelson DP, Archer SL: *Chronic infusion of nitric oxide in experimental pulmonary hypertension: pulmonary pressure-flow analysis*. **European Respiratory Journal** 9: 1475-1481, 1996.
37. Hampl V, Tristani-Firouzi M, Hutsell TC, Archer SL: *Nebulized nitric oxide/nucleophile adduct reduces chronic pulmonary hypertension*. **Cardiovascular Research** 31: 55-62, 1996.
38. Archer SL, Huang JMC, Reeve HL, Hampl V, Tolarová S, Michelakis E, Weir EK: *Differential distribution of electrophysiologically distinct myocytes in conduit and resistance arteries determines their response to nitric oxide and hypoxia*. **Circ. Res.** 78: 431-442, 1996.
39. Hampl V, Cornfield DN, Cowan NJ, Archer SL: *Hypoxia potentiates nitric oxide synthesis and transiently increases cytosolic calcium levels in pulmonary artery endothelial cells*. **European Respiratory Journal** 8: 515-522, 1995.

40. Archer SL, Hampl V, Nelson D, Sidney E, Peterson DA, Weir EK: *Dithionite increases radical formation and decreases vasoconstriction in the lung: evidence that dithionite does not mimic alveolar hypoxia.* **Circ. Res.** 77: 174-181, 1995.
41. Hampl V, Huang JM, Weir EK, Archer SL: *Activation of the cGMP-dependent protein kinase mimics the stimulatory effect of nitric oxide and cGMP on calcium-gated potassium channels.* **Physiological Research** 44: 39-44, 1995.
42. Herget J, Hampl V, Povýšilová V, Slavík Z: *Long-term effects of prenatal indomethacin administration on the pulmonary circulation in rats.* **European Respiratory Journal** 8: 209-215, 1995.
43. Hampl V, Weir EK, Archer SL: *Endothelium-derived nitric oxide is less important for basal tone regulation in the pulmonary than the renal vessels of adult rat.* **Journal of Vascular Medicine and Biology** 5: 22-30, 1994.
44. Archer SL, Huang JM-C, Hampl V, Nelson DP, Shultz PJ, Weir EK: *Nitric oxide and cGMP cause vasorelaxation by activation of a charybdotoxin-sensitive K channel by cGMP-dependent protein kinase.* **Proceedings of the National Academy of Sciences of the United States of America** 91: 7583-7587, 1994.
45. Isaacson TC, Hampl V, Weir EK, Nelson DP, Archer SL: *Increased endothelium-derived nitric oxide in hypertensive pulmonary circulation of chronically hypoxic rats.* **Journal of Applied Physiology** 76: 933-940, 1994.
46. Hampl V, Archer SL, Nelson DP, Weir EK: *Chronic EDRF inhibition and hypoxia: effects on pulmonary circulation and systemic blood pressure.* **Journal of Applied Physiology** 75: 1748-1757, 1993.
47. Hampl V, Archer SL, Bach R, Nelson DP, Weir EK: *Chronic hypoxic pulmonary hypertension: is thrombin involved?* **American Review of Respiratory Diseases** 148: 1043-1048, 1993.
48. Hampl V, Archer SL, Russell JC, Nelson DP, Weir EK: *Lack of endothelial dysfunction in the young genetically hyperlipidemic JCR:LA-cp rats.* **Journal of Vascular Medicine and Biology** 4: 186-195, 1993.
49. Archer SL, Hampl V: *N^G-monomethyl-L-arginine causes nitric oxide synthesis in isolated arterial rings: trouble in paradise.* **Biochemical and Biophysical Research Communications** 188: 590-596, 1992.
50. Hampl V, Herget J: *Acute pneumonia reversibly inhibits hypoxic vasoconstriction in isolated rat lungs.* **Physiological Research** 41: 147-150, 1992.
51. Hampl V, Herget J: *Vascular reactivity in isolated lungs of rats with spontaneous systemic hypertension.* **Physiological Research** 40: 367-371, 1991.
52. Falus F, Herget J, Hampl V: *Almitrine in low dose potentiates vasoconstrictor responses of isolated rat lungs to moderate hypoxia.* **European Respiratory Journal** 4: 688-693, 1991.
53. Hampl V, Herget J: *Perinatal hypoxia increases hypoxic pulmonary vasoconstriction in adult rats recovering from chronic exposure to hypoxia.* **American Review of Respiratory Diseases** 142: 619-624, 1990.

Review articles

54. Egea J, Fabregat I, Frapart YM, Ghezzi P, Görlach A, Kietzmann T, Kubaichuk K, Knaus UG, Lopez MG, Olaso-Gonzalez G, Petry A, Schulz R, Vina J, Winyard P, Abbas K, Ademowo S, Afonso CB, Andreadou I, Antelmann H, Antunes F, Aslan M, Bachschmid MM, Barbosa RM, Belousov V, Berndt C, Bernlohr D, Bertrán E, Bindoli A, Bottari SP,

- Brito PM, Carrara G, Casas AI, Chatzi A, Chondrogianni N, Conrad M, Cooke MS, Costa JoG, Cuadrado A, Dang PM-C, Smet BD, Debelec-Butuner B, Dia I, Dunn JD, Edson AJ, Assar ME, El-Benna J, Ferdinandy Pt, Fernandes AS, Fladmark KE, Förstermann U, Giniatullin R, Giricz Zn, Görbe A, Griffiths H, Hampl V, Herget J, Hernansanz-Agustín P, Hillion M, Huang J, Ilikay S, Jansen-Dürr P, Jaquet V, Joles JA, Kalyanaraman B, Kaminsky D, Karbaschi M, Kleanthous M, Klotz L-O, Korac B, Korkmaz KS, Koziel R, Kračun D, Krause K-H, Křen Vr, Krieg T, Laranjinha Jo, Lazou A, Li H, Ruiz AMn-, Matsui R, McBean GJ, Meredith SP, Messens J, Miguel Vn, Mikhed Y, Milisav I, Milković L, Miranda-Vizuete A, Mojović M, Monsalve Ma, Mouthuy P-A, Mulvey J, Münzel T, Muzykantov V, Nguyen ITN, Oliveira NG, Palmeira CM, Papaevgeniou N, Pavićević A, Pedre Bn, Peyrot F, Phylactides M, Pircalabioru GG, Pitt AR, Poulsen HE, Prieto I, Rigobello MP, Robledinos-Antón N, Rodríguez-Mañas L, Rolo AP, Rousset F, Ruskovska T, Saraiva N, Sasson S, Schröder K, Semen K, Seredenina T, Shakirzyanova A, Smith GL, Soldati T, Sousa BC, Spickett CM, Stancic A, Stasia MJ, Steinbrenner H, Stepanić Vn, Steven S, Tokatlidis K, Tuncay E, Turan B, Ursini F, Vacek J, Vajnerova O, Valentová Ki, Varisli L, Veal EA, Weber A, Yalçın AS, Yelisyeyeva O, Žarković N, Zatloukalová M, Zielonka J, Touyz RM, Papapetropoulos A, Grune T, Lamas S, Schmidt HH, Lisa FD, Daiber A: *European contribution to the study of ROS: A summary of the findings and prospects for the future from the COST Action BM1203 (EU-ROS)*. **Redox Biology** 13: 94–162, 2017.
55. Hampl V, Jakoubek V: *Regulation of fetoplacental vascular bed by hypoxia*. **Physiological Research** 58: S87-S93, 2009.
56. Hampl V, Herget J: *Role of nitric oxide in the pathogenesis of chronic pulmonary hypertension*. **Physiological Reviews** 80: 1337-1372, 2000.
57. Bíbová J, Hampl V: *Anorektika a plicní hypertenze (Anorectics and pulmonary hypertension [in Czech])*. **Čas. Léč. čes.** 139: 67-70, 2000.
58. Hampl V: *Oxid dusnatý a regulace plicních cév (Nitric oxide and the regulation of the pulmonary vessels [in Czech])*. **Československá fyziologie** 49: 22-29, 2000.
59. Hampl V: *Úloha oxidu dusnatého v normálním plicním oběhu a při plicní hypertenzi (The role of nitric oxide in normal pulmonary circulation and in pulmonary hypertension [in Czech])*. **Lékařské zprávy LF UK v Hradci Králové** 43: 145-151, 1998.
60. Archer SL, Shultz PJ, Warren JB, Hampl V, DeMaster EG: *Preparation of standards and measurement of nitric oxide, nitroxyl, and related oxidation products*. **Methods: A Companion to Methods in Enzymology** 7: 21-34, 1995.
61. Archer S, Hampl V, McKenzie Z, Nelson D, Huang J, Shultz P, Weir EK: *Role of endothelial-derived nitric oxide in normal and hypertensive pulmonary vasculature*. **Seminars in Respiratory and Critical Care Medicine** 15: 179-189, 1994.
62. Hampl V: *Hypoxická plicní hypertenze (Hypoxic pulmonary hypertension [in Czech])*. **Československá fyziologie** 40: 255-271, 1991.
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