CURRICULUM VITAE

Václav Hampl, PhD

February 2016

CURRENT AFFILIATION:

- Professor and Head, Department of Physiology,
  Charles University Second Medical School, Prague, Czech Republic
- Senator, Parliament of the Czech Republic (Chair, EU affairs committee)

ADDRESS:

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Second Medical School
Charles University in Prague
Plzeňská 130/221, 150 00 Prague 5, Czech Republic
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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 hypertensionin

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: since **2014** (April)
- 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 **2016** Chair**,** Coordinating Council for doctoral programs in biomedicine, Charles University in Prague (member since 2014)
Since **2015** Board, Institute for Christian-Democratic Politics, Prague, Czech Republic
Since **2014** Scientific Advisory Board, Czech Science Foundation (Grant Agency of the Czech Republic)
Since **2014** 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
Since **2014** Board, J. William Fulbright Commission in the Czech Republic (vice-chair 2015-2016)
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, European University Association
2011-2014 Permanent guest, Research and Development Council 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
(advisory body to the Government of the Czech Republic)
Since **2009** 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
2006-2014 Europaeum Council (Chair in 2008)
Since **2006** Research Council, Charles University in Prague (2006 -Jan. 2014 *ex offo* as rector)
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:

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):

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 "Pathophysilogy 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
- College Development Fund of the Czech Republic
- Grant Agency of the Charles University Prague

PEER REVIEWS OF MANUSCRIPTS FOR INTERNATIONAL SCIENTIFIC JOURNALS:

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

TEACHING:

Since **2015** Evaluation committee of the PhD program in Bioethics, Masaryk University, Brno, Czech Republic

2005 Participation in the Czech translation of a major physiology textbook (William F. Ganong - Review of Medical Physiology)

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)
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 Anual 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, travel, music

PUBLICATIONS (cited >2720, without autociatations >2600, H-index = 23 [Web of Science])**:**

Full primary research reports:

Original research papers

1. Beitl E, Baňasová A, Miková D, Hampl V: *Nitric oxide as an indicator for severity of injury in polytrauma*. **Bratislava Medical Journal** in press: 2016 (IF = 0.439).
2. 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.
3. 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.
4. 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.
5. 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.
6. 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.
7. 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.
8. Jakoubek V, Bíbová J, Venclíková K, Trnková A, Herget J, Hampl V: *Chronic hypoxia increases fetoplacental vascular resistance and vasoconstrictor reactivity in the rat*. **American Journal of Physiology-Heart and Circulatory Physiology** 294: H1638-H1644, 2008.
9. 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.
10. 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.
11. Jakoubek V, Bíbová J, Hampl V: *Voltage-gated calcium channels mediate hypoxic vasoconstriction in the human placenta*. **Placenta** 27: 1030-1033, 2006.
12. 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*. **American Journal of Physiology-Lung Cellular and Molecular Physiology** 290: L11-L20, 2006.
13. 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.
14. 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*. **American Journal of Physiology-Lung Cellular and Molecular Physiology** 285: L386-L392, 2003.
15. Herget J, Novotná J, Bíbová J, Povýšilová V, Vaňková M, Hampl V: *Metalloproteinase inhibition by Batimastat attenuates pulmonary hypertension in chronically hypoxic rats*. **American Journal of Physiology-Lung Cellular and Molecular Physiology** 285: L199-L208, 2003.
16. Hampl V, Bíbová J, Povýšilová V, Herget J: *Dehydroepiandrosterone sulfate reduces experimental pulmonary hypertension in rats*. **European Respiratory Journal** 21: 862-865, 2003.
17. 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*. **American Journal of Physiology-Heart and Circulatory Physiology** 283: H2440-H2449, 2002.
18. 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*. **Circulation Research** 90: 1307-1315, 2002.
19. Bělohlávková S, Šimák J, Kokešová A, Hniličková O, Hampl V: *Fenfluramine-induced pulmonary vasoconstriction: role of serotonin receptors and potassium channels*. **Journal of Applied Physiology** 91: 755-761, 2001 (IF = 3.027).

20. 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.
21. 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.
22. 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.
23. 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*. **Journal of Laboratory and Clinical Medicine** 134: 419-425, 1999.
24. 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.
25. 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.
26. 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.
27. Dillon WC, Hampl V, Shultz PJ, Rubins JB, Archer SL: *Origins of breath nitric oxide in humans*. **Chest** 110: 930-938, 1996.
28. 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.
29. 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.
30. Hampl V, Tristani-Firouzi M, Hutsell TC, Archer SL: *Nebulized nitric oxide/nucleophile adduct reduces chronic pulmonary hypertension*. **Cardiovascular Research** 31: 55-62, 1996.
31. 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*. **Circulation Research** 78: 431-442, 1996.
32. 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.
33. 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*. **Circulation Research** 77: 174-181, 1995.
34. 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.
35. 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.
36. 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.
37. 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.
38. 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.
39. 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.
40. 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.
41. 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: 187-196, 1993.
42. 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.

43. Hampl V, Herget J: *Acute pneumonia reversibly inhibits hypoxic vasoconstriction in isolated rat lungs*. **Physiological Research** 41: 147-150, 1992.
44. Hampl V, Herget J: *Vascular reactivity in isolated lungs of rats with spontaneous systemic hypertension*. **Physiological Research** 40: 367-371, 1991.
45. 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.
46. 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

47. Hampl V, Jakoubek V: *Regulation of fetoplacental vascular bed by hypoxia*. **Physiological Research** 58: S87-S93, 2009.
48. Hampl V, Herget J: *Role of nitric oxide in the pathogenesis of chronic pulmonary hypertension*. **Physiological Reviews** 80: 1337-1372, 2000.
49. Bíbová J, Hampl V: *Anorektika a plicní hypertenze (Anorectics and pulmonary hypertension [in Czech])*. **Casopis lékaru ceskych** 139: 67-70, 2000.
50. 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.
51. 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.
52. 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.
53. 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.
54. Hampl V: *Hypoxická plicní hypertenze (Hypoxic pulmonary hypertension [in Czech])*. **Československá fyziologie** 40: 255-271, 1991.
55. Hampl V, Herget J: *Possible mechanisms of oxygen sensing in the pulmonary circulation*. **Physiological Research** 40: 463-470, 1991.
56. Hampl V, Herget J: *Tkáňové působky ovlivňující hypoxickou plicní vazokonstrikci (Tissue factors involved in hypoxic pulmonary vasoconstriction [in Czech])*. **Ceskoslovenská fyziologie** 40: 1-23, 1991.
57. Hampl V, Herget J: *Reaktivita plicních cév při plicní hypertenzi (Reactivity of the pulmonary vessels in hypoxic pulmonary hypertension [in Czech])*. **Ceskoslovenská fyziologie** 37: 193-209, 1988.

Book chapters

58. Hampl V, Herget J: *Patofyziologie plicního oběhu (Pathophysiology of the Pulmonary Circulation [in Czech])*. In: Patologická fyziologie srdce a cév, edited by B Ošťádal, and M Vízek. **Karolinum**, Praha 2003, pp. 124-141.
59. Hampl V, Archer SL: *The role of endogenous nitric oxide in acute hypoxic pulmonary vasoconstriction*. In: Nitric Oxide and the Lung, edited by WM Zapol, and KD Bloch. **Marcel Dekker**, New York 1997, pp. 113-135.
60. Archer SL, Hampl V, Huang JMC, Nelson DP, Tolarova S, Shultz PJ, Weir EK: *Nitric oxide and cyclic guanosine monophosphate: effects on potassium channels and vascular tone*. In: Nitric Oxide and Radicals in the Pulmonary Vasculature, edited by EK Weir, SL Archer, and JT Reeves. **Futura**, Armonk 1996, pp. 391-413.
61. Hampl V, Tristani-Firouzi M, Weir EK, Huang JMC, Archer SL: *Cyclic guanosine monophosphate as a hyperpolarizing factor*. In: Endothelium-Derived Hyperpolarizing Factor, edited by PM Vanhoutte. **Harwood Academic Publishers**, Amsterdam 1996, pp. 153-161.
62. Hampl V, Walters CL, Archer SL: *Determination of nitric oxide by the chemiluminescence reaction with ozone*. In: Methods in Nitric Oxide Research, edited by M Feelisch, and JS Stamler. **Wiley**, Chichester 1996, pp. 310-318.
63. Hampl V, Cornfield DN, Huang J, Shultz PJ, Weir EK, Archer SL: *Nitric oxide*. In: Pulmonary Circulation: A Handbook for Clinicians, edited by AJ Peacock. **Chapman and Hall**, London 1996, pp. 99-114.
64. Herget J, Hampl V: *Pulmonary circulation*. In: Biomechanics of the Cardiovascular System, edited by BB Srámek, J Valenta, and F Klimes. **Czech Technical University Press**, Prague 1995, pp. 327-336.
65. Archer SL, Hampl V, Huang J, Cowan N: *The importance of calcium in the regulation of EDRF synthesis in the pulmonary vasculature*. In: Ion Flux in Pulmonary Vascular Control, edited by EK Weir, JR Hume, and JT Reeves. **Plenum**, New York 1993, pp. 223-246.
66. Herget J, Hampl V: *Pulmonary vasculature of adult rats is influenced by perinatal experience of hypoxia*. In: Pulmonary Blood Vessels in Lung Disease, edited by J Widimsky, and J Herget. **Karger**, Basel 1990, pp. 70-76.

67. Herget J, Hampl V, Paleček F: *Effect of perinatal hypoxia on hypoxic vascular reactivity in adult rats*. In: Interaction between Heart and Lung, edited by S Daum. **Thieme**, Stuttgart 1989, pp. 63-66.

Translation

68. Ganong WF: Přehled lékařské fyziologie (Review of Medical Physiology, twentieth edition). Galén, Prague 2005.

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