Curriculum Vitae of Jean-Pierre Montani

Name, first name : MONTANI, Jean-Pierre
Date/country of Birth : 1951 / Switzerland
Nationality : Swiss
Occupation and title : Emeritus Professor (Chair of Physiology)
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GENERAL EDUCATION

Graduated from College St-Michel, Fribourg, Switzerland, 1970, Baccalaureate Type A (major in Latin, Greek and philosophy), mention I (very good). Special distinction for the highest scholastic average on a campus of 1'500 students (graduation year 1970).

MEDICAL EDUCATION

1970-1973 Preclinical studies (5-semester program in basic sciences) at the University of Fribourg, Switzerland, *summa cum laude* equivalent.
1973-1977 Clinical studies (4-year program) at the Medical School of Geneva, Switzerland, *summa cum laude* equivalent.

Practical (teaching, research or clinical) experience during medical studies

Fall 1970: *Substitute mathematics teacher* (3-month replacement for math professor on sick leave at College St-Michel, for last year pre-baccalaureate College students)
Spring 1972: *Two-month research program* at the Department of Anatomy (Prof. Luis María Gonzalo Sanz), University of Navarra, Pamplona, Spain
Summer 1973: Six-week course at the Nursing School of the University Hospital of Geneva, with *certification to practice nursing* (night shifts at the hospital)
Summer 1974: *Two-month clinical practice* in Internal Medicine (Dr. Eric Schwartz) at the Military Hospital of Novaggio, Ticino, Switzerland
1975-1976: *Practical year* with rotations in Pathology (Prof. Kapanci), Internal Medicine (Prof. Muller), Orthopedics (Prof. Taillard), Pediatrics (Prof. Ferrier), Ob-Gyn (Prof. de Watteville, Prof. Béguin) and Neurology (Prof. Gauthier) at the University Hospital of Geneva.

UNIVERSITY or PROFESSIONAL DEGREES

1977 Swiss Federal Diploma of Physician (**M.D. degree**)
1980 Thesis for the degree of **Doctor in Medicine**, of the Faculty of Medicine of the University of Geneva (Thesis No 3849: "Hemodynamic effects of exogenous and endogenous vasopressin at low plasma concentrations in the conscious intact and baroreceptor denervated dog").
1982 **Visa Qualifying Examination** (ECFMG Certificate), equivalent USMLE Steps 1+2CK
2005 **License to practice medicine** in the State of Fribourg, for clinical research.

POST-GRADUATE EDUCATION

Oct 1977 - Sep 1979: ***Research Assistant in Physiology***, at the Cardiovascular Institute of the University of Fribourg (Professor Jean-François Liard)

Oct 1979 - Sep 1982: ***Three year residency program in Internal Medicine***, at the Department of Internal Medicine, University Hospital of Geneva (Professor Alex F. Muller) with specialty rotations in intensive care unit, pulmonology, cardiology, nephrology, onco-hematology, neurology and medical informatics.

Oct 1982 - Nov 1982: ***Research Associate***, Dept. of Physiology & Biophysics, The University of Mississippi Medical Center, Jackson MS, USA (Prof. Arthur C. Guyton)

ACADEMIC APPOINTMENTS

Dec 1982 - Jan 1986: ***Visiting Assistant Professor***, Dept. of Physiology and Biophysics, The University of Mississippi Medical Center, Jackson MS, USA (Prof. Arthur C. Guyton)

Feb 1986 - Jun 1988: ***Assistant Professor***, Department of Physiology and Biophysics, The University of Mississippi Medical Center, Jackson MS, USA

Jul 1988 - Sept 1995: ***Associate Professor***, Department of Physiology and Biophysics, The University of Mississippi Medical Center, Jackson MS, USA (Professor Arthur C. Guyton, retired Sep 1989; Professor John E. Hall from Oct 1989)

Oct 1995 – July 2018: ***Professor and Chairman***, Institute of Physiology (renamed as Dept. of Medicine / Division of Physiology in 2001), University of Fribourg, Switzerland. ***Professor Emeritus*** from August 2018.

Feb-Apr 2002: ***Visiting Professor of Neuropharmacology***, laboratory of Professor Geoffrey Head, Baker Medical Research Institute, Melbourne, Australia

Apr 2003 - 2012: ***Invited Professor in Physiology***, University of Neuchâtel, Switzerland

Feb-Apr 2007: ***Visiting Professor of Physiology***, laboratory of Professor Simon Malpas, Department of Physiology, University of Auckland, New Zealand

Spring 2013, Spring 2014: Visit and conferences at various Universities during ***Sabbatical stay in Japan***, Prof. Ryusuke Kakigi, NIPS at Okazaki / Prof. Yoshitaka Oku, Hyogo College of Medicine / Prof. Hiroshi Nose, Shinshu University at Matsumoto / Prof. Kenju Miki, Nara Women's University / Prof. Satoshi Mori, Kawasaki Med School at Kurashiki / Prof. Keiji Naruse, Okayama Medical School.

TEACHING ACTIVITIES

- **In the USA at The University of Mississippi Medical Center (until 1995)**

A. 1986-1995, ***Medical Physiology Course***, Metabolism-Temperature Regulation (1986, 1987), Blood, Immunity, Clotting disorders (1988-1995); Electrocardiogram (1993-1995)

B. 1986-1995, ***Physiology for Dental and Pharmacy students***, Lectures on Heart and Circulation (1986), Metabolism and Temperature Regulation (1987, 1992-1995), Neurophysiology (1988, 1989), Special Senses (1988-1994), Blood, Immunity, Clotting (1989-1992, 1994), Endocrine and Reproductive Physiology (1991)

C. 1987 and 1988, ***Physiology for Nurses*** (Undergraduate and Graduate Nurses), Lecturer: Neurophysiology and Special Senses

- **In Switzerland (since 1995)** : Teaching in French and/or German

A. 1995 - 2018: ***Medical Physiology Course for 1st and 2nd year medical students***, *University of Fribourg*, Course Director and Lecturer on: Introduction to Systems, Visceroception and

Vegetative Nervous System, Blood, Cardiovascular Physiology, Renal Physiology, Acid-Base Disorders, Special chapters on Respiratory and Endocrine Functions.

B. 1996 - 2010: ***Physiology for pharmacy, biology and biochemistry students***, *Uni Fribourg*, Course Director and Lecturer on Blood, Cardiovascular, Respiratory and Renal Physiology.
C. 2003 - 2012: ***Physiology for 1st year medical / biology students***, *University of Neuchâtel,* Introductory course to General and Systems Physiology
D. 2007 - 2017: ***Pathophysiology for students in biomedical sciences (2nd and 3rd year)***, *University of Fribourg,* selected chapters (new study program started in 2007)
E. 1999 – 2021: ***Biophysics and Systems Regulation in Physiology***, *Uni Fribourg*
F. 2009 – present: ***Renal pathophysiology for 3rd year medical students***, *University of Fribourg,* selected chapters (new study program started in 2009)
G. 2009 – present: ***Modeling course for Master students in biomedical sciences***, *University of Bern,* selected chapters (new study program started in 2009)

EDITORIAL ASSISTANCE

- *Associate Editor (2010-present), Frontiers in Integrative Physiology*
- *Associate Editor (1999-2003)*, Experimental Physiology (Pub. The Physiological Society)
- *Editorial board* of: (a) the *American Journal of Physiology*: Regulatory, Integrative and Comparative Physiology (2002-2009); (b) *Clinical and Experimental Pharmacology and Physiology* (2004-2008); (c) *Frontiers in Computational Physiology and Medicine* (2010-present); (d) *Current Hypertension reports* (2014-); (e) *Frontiers in Hypertension* (2014-).
- Regular contributions as scientific reviewer (ad hoc) for various scientific journals: American Journal of Physiology (Renal section; Heart section, Endocrine section), Journal of Physiology, Journal of Applied Physiology, Hypertension, European Journal of Physiology, European Journal of Clinical Nutrition, J Am Society of Nephrology, IEEE Biomed Engineering, Obese Rev, Int J Obesity, Chronobiol Int, …
- Grant reviewer for the Swiss National Science Foundation

GRANTS (new projects starting on or after 2000, as P.I. or Project leader)

A. **Swiss Heart Foundation, 2017-18 (12 months):** Acute cardiovascular and energy expenditure response to the ingestion of tea (Yerba Mate): comparing hot versus cold tea.
B. **Swiss Foundation for Alcohol Research, 2016-17 (12 months)**. P276: Cardiovascular interaction of acute alcohol consumption with soft drinks (alcopops).
C. **Swiss National Science Foundation, 2015-2017 (24 months)**. Project 32003B-159512: Cardiovascular effects of acute alcohol consumption: interaction with festive meals.
D. **Swiss National Science Foundation, NCCR-Kidney.CH, 2014-2018 (4 years, phase II).** Kidney control of homeostasis. P.I. François Verrey, UniZH. JP Montani, project on: Dietary impact of amino acids.
E. **Swiss National Science Foundation, NCCR-Kidney.CH, 2010-2014 (4 years, phase I).** Kidney control of homeostasis. P.I. François Verrey, UniZH. JP Montani, project leader on: Regulation of energy metabolism by the kidney (project 2.2).
F. **Swiss National Science Foundation, 2010-2013 (4 years)**. Project 3200B0-122554: Mechanisms of cardiovascular and autonomic dysregulation induced by caffeinated soft drinks in humans.
G. **Swiss National Science Foundation, 2007-2011 (4 years)**. Project 3100-118041: Weight Cycling during Growth: a Risk Factor for Cardiovascular and Renal Diseases.
H. **Swiss Heart Foundation, 2006 (12 months)**. Project: Adverse cardiovascular effects of soft drinks – the contributions of fructose and added caffeine.

I. **Swiss Heart Foundation, 2004-2005 (24 months)**. Project: Weight cycling during childhood: a risk factor for cardiovascular and metabolic diseases.
J. **Swiss National Science Foundation, 2003-2007 (4 years).** Project 3100-102146.03: Obesity-induced hypertension and weight cycling: the contributory role of progressive vascular dysfunction.
K. **Swiss National Science Foundation, 2000-2003 (3 years).** Project 3100-061634.00: Mechanisms of obesity-induced hypertension.

PROFESSIONAL MEMBERSHIPS

American Association for the Advancement of Sciences (member, 1986)
Mississippi Academy of Sciences (life member, 1986)
American Society of Hypertension (charter member, 1986)
National Honor Society of Phi Kappa Phi (life member, 1988)
Microcirculatory Society (member, 1990)
American Physiological Society (member, 1996)
Natural Sciences Society of Fribourg (life member, 1996)
Swiss Physiological Society (member, 1996)
Swiss Society against High Blood Pressure (member, 1996)
European Society of Hypertension (member, 1997)

HONORARY and ACADEMIC CHARGES

Current (selected)
Professor Emeritus, Faculty of Science and Medicine, University of Fribourg (as of 1.8.2018)
Member of the Swiss Academy of Medical Sciences (elected as individual member in 2009)
President of the Medical Alumni Association of Fribourg (MedAlumni) (since 2019)
Member of the Scientific Committee of the Fribourg Registry of Tumors (since 2006)

Former (selected)
Head of the Division of Physiology, Dept. of Medicine, University of Fribourg (1995-2018)
Vice-Dean of the Faculty of Sciences (4-years: 1998-2002; 2x6 months in 2009 and in 2010)
Member of the Federal Executive Committee for Exams in Medicine (1998-2007)
Member of the Foundation Council of the Swiss National Science Foundation (2002-2016)
Head of the Curriculum Committee and Pedagogical Unit, Dept. of Medicine (1998-2014)
President, Swiss Physiological Society (3-year term: 2001-2003)
Member of the Research Committee of the University of Fribourg (2001-2007)
President of the Section / Dept. of Medicine, University of Fribourg (1997-1999, 2004-2006)
Member of the Executive Board of the Doctoral School "Cardiovascular and Metabolism" of the Universities of Fribourg, Geneva and Lausanne (2004-2009).
Head co-responsible Accreditation Steering Group (Bachelor in Medicine / UniFR, 2010-2011)
Member of the Board of Trustees for the Hospital Network of the State of Fribourg (network of 6 State Hospitals, 3'000 employees, more than 20'000 inpatients per year) (2006-2017)
Member of the Board of Trustees of the Marcel Benoist Foundation (awarding every year the Marcel Benoist Prize, the highest scientific prize within Switzerland) (2008-2020)
Member, "Institutsrat des Forschungsinstituts zur Geschichte des Alpenraums" (1997-2020)
Member, Scientific Council for the National Admission Test for Medical Studies (1997-2016)
Member of the Joint Commission of the Swiss Medical Schools (1996-2017)
General Secretary of the Medical Alumni Association of Fribourg (MedAlumni) (2004-2019)
Ombusdman of the Faculty of Biology and Medicine, University of Lausanne (2016-2018).

Publications of Jean-Pierre Montani

I. Peer reviewed Articles and Reviews in Journals with Editorial Board

1. Montani JP, Liard JF, Schoun J and J Möhring. Hemodynamic effects of exogenous and endogenous vasopressin at low plasma concentrations in conscious dogs. ***Circulation Research***, 47: 346-355, 1980

2. Möhring J, Kintz J, Schoun J, Arbogast R, Liard JF, Montani JP, Maciel JA Jr, Glanzer K and R Düsing. The antidiuretic hormone and arterial hypertension: recent observation in rats. ***Advances in Nephrology from the Necker Hospital***, 10:75-87, 1981

3. Bounameaux HM, Schifferli J, Montani JP, Jung A and F Chatelanat. Renal failure associated with intravenous diphosphonates. ***Lancet***, 1(8322): 471, 1983 (letter)

4. Stamenkovic I, Kurt AM, Montani JP and Y Kapanci. Legionella dumoffii pneumonia with adult respiratory distress syndrome. ***Schweizerische medizinische Wochenschrift***, 113: 608-612, 1983

5. Olsen ME, Hall JE, Montani JP and AC Guyton. Angiotensin II natriuresis and antinatriuresis: role of renal artery pressure, renal hemodynamics, and tubular reabsorption. ***Acta Med. Scandinavica***, S693: 81-88, 1984

6. Adair TH, Montani JP and AC Guyton. Modification of lymph by sheep caudal mediastinal node: effect of intranodal endotoxin. ***Journal of Applied Physiology***, 57(5): 1597-1601, 1984

7. Olsen ME, Hall JE, Montani JP and AC Guyton. Angiotensin II Natriuresis and Anti-Natriuresis: Role of Renal Artery Pressure in Anaesthetized Dogs. ***Journal of Hypertension*** 2(suppl 3): 347-350, 1984

8. Olsen ME, Hall JE, Montani JP and JE Cornell. Protection of preglomerular vessels from Angiotensin II vasoconstriction by renal prostaglandins. ***Journal of Hypertension***, 3 (suppl 3): S255-S258, 1985

9. Olsen ME, Hall JE, Montani JP, Guyton AC, Langford HG and JE Cornell. Mechanisms of Angiotensin II natriuresis and antinatriuresis. ***American Journal of Physiology***, 249: F299-F307, 1985

10. Hall JE, Montani JP, Woods LL, Mizelle HL. Renal escape from vasopressin: role of pressure diuresis. ***American Journal of Physiology***, 250: F907-F916, 1986

11. Woods LL, Mizelle HL, Montani JP, Hall JE. Mechanisms controlling renal hemodynamics and electrolyte excretion during amino acids. ***American Journal of Physiology***, 251: F303-F312, 1986

12. Guyton AC, Manning RD, Norman RA Jr, Montani JP, Lohmeier TE and JE Hall. Current concepts and perspectives of renal volume regulation in relationship to hypertension. ***Journal of Hypertension***, 4 (suppl 4): S49-S56, 1986

13. Hall JE, Granger JP, Hester RL, Montani JP. Mechanisms of sodium balance in hypertension: role of pressure natriuresis. ***Journal of Hypertension***, 4 (suppl 4): S57-S65, 1986

14. Mizelle HL, Hall JE, Woods LL, Montani JP, Dzielak DJ and Yi-Jen Pan. Role of renal nerves in compensatory adaptation to chronic reductions in sodium intake. ***American Journal of Physiology***, 252: F291-F298, 1987

15. Olsen ME, Hall JE, Montani JP, Cornell JE. Interaction between renal prostaglandins and angiotensin II in controlling glomerular filtration rate in dogs. ***Clinical Science***, 72: 429-436, 1987

16. Adair TH, Guyton AC, Montani JP, Lindsay HL and KA Stanek. Whole body structural vascular adaptation to prolonged hypoxia in chick embryos. ***American Journal of Physiology***, 252: H1228-H1234, 1987

17. Montani JP, Adair TH, Nuwayhid BS and AC Guyton. Hypotensive effect of chronic intrarenal infusion of acetylcholine during angiotensin hypertension. ***American Journal of Hypertension***, 1: 67-69, 1988

18. Guyton A.C., Montani J-P., Hall J.E. and R.D. Manning, Jr. Computer models for designing hypertension experiments and studying concepts. ***American Journal of the Medical Sciences***, 295(4): 320-326, 1988

19. Nuwayhid BS, Young DB, Tipayamontri U, Montani JP. Long-term hypotensive effect of beta-agonist in conscious dogs. ***American Journal of Physiology***, 255: H592-H600, 1988

20. Adair TH, Montani JP and AC Guyton. Effects of prolonged intermittent hypoxia on structural vascular adaptation in the chick embryo. ***American Journal of Physiology***, 254: H1194-H1199, 1988

21. Summers RL and JP Montani. Use of computer simulation studies in drug development: the example of Atrial Natriuretic Factor. ***Journal of Drug Development***, 1(2): 119-125, 1988

22. Guyton A.C., Hall J.E. and J-P. Montani. Kidney function and hypertension. ***Acta Physiologica Scandinavica***, 133 (suppl 571): 163-173, 1988

23. Hall JE, Mizelle HL, Woods LL, Montani JP. Pressure natriuresis and control of arterial pressure during chronic norepinephrine infusion. ***Journal of Hypertension***, 6: 723-731, 1988

24. Montani JP, Adair TH, Summers RL, Coleman TG and AC Guyton. A simulation support system for solving large physiological models on microcomputers. ***International Journal of Biomedical Computing***, 24: 41-54, 1989

25. Summers RL and JP Montani. Mathematical model of glucose homeostasis for the study of metabolic states. ***Journal of Mississippi Academy of Sciences***, 34: 25-32, 1989

26. Adair TH, Strick DM, Montani JP, Guyton AC. Vascular development in chick embryos: a possible role for adenosine. ***American Journal of Physiology***, 256: H240-246, 1989

27. Lohmeier TE, Montani JP, Smith MJ Jr, Rushing EL. Chronic hypotensive effects of verapamil in angiotensin hypertension are steroid independent. ***Hypertension***, 13: 273-282, 1989

28. Montani JP, Mizelle HL, Adair TH, Guyton AC. Regulation of cardiac output during aldosterone-induced hypertension. ***Journal of Hypertension***, 7 (Suppl 6):S206-S207, 1989

29. Mizelle HL, Hall JE, Montani JP. Role of renal nerves in the control of sodium excretion during chronic congestive heart failure. ***American Journal of Physiology***, 256: F1084-F1093, 1989

30. Montani JP, Adair TH, Summers RL, Coleman TG and AC Guyton. Physiological modeling and simulation methodology: from the mainframe to the microcomputer. ***Journal of Mississippi Academy of Sciences***, 34: 15-24, 1989

31. Mizelle HL, Hildebrandt DA, Gaillard CA, Brands MW, Montani JP, Smith MJ J. and JE Hall. Atrial natriuretic peptide induces sustained natriuresis in conscious dogs. ***American Journal of Physiology***, 258: R1445-R1452, 1990

32. Gaillard CA, Mizelle HL, Montani JP, Brands MW, Hildebrandt DA and JE Hall. Atrial natriuretic factor and blood pressure control: role of sodium and aldosterone. ***American Journal of Physiology***, 259: R973-R980, 1990

33. Summers RL, Montani JP. Hypothesis testing in Physiology: a proposed methodology using computer simulation studies. ***Journal of Mississippi Academy of Sciences***, 35: 49-54, 1990

34. Adair TH, Gay WJ and JP Montani. Growth regulation of the vascular system: evidence for a metabolic hypothesis. ***American Journal of Physiology***, 259: R393-R404, 1990

35. Strick DM, Waycaster RL, Montani JP, Gay WJ and TH Adair. Morphometric measurements of chorioallantoic membrane vascularity: effects of hypoxia and hyperoxia. ***American Journal of Physiology***, 260: H1385-H1389, 1991

36. Adair TH, Vance GA, Montani JP and AC Guyton. Effect of skin concavity on subcutaneous tissue fluid pressure. ***American Journal of Physiology***, 261: H349-H353, 1991

37. Brands MW, Alonso-Galacia M, Mizelle HL, Montani JP, Hildebrandt DA and JE Hall. Chronic angiotensin converting enzyme inhibition improves cardiac output and fluid balance during heart failure. ***American Journal of Physiology***, 264: R414-422, 1993

38. Mizelle HL, Montani JP, Hester RL, Didlake RH and JE Hall. Role of pressure natriuresis in long-term control of renal electrolyte excretion. ***Hypertension***, 22:102-110, 1993

39. Manning RD Jr, Hu L, Mizelle HL, Montani JP and MW Norton. Cardiovascular responses to long-term blockade of nitric oxide synthesis. ***Hypertension*** 22:40-48, 1993

40. Mizelle HL, Edwards TC and JP Montani. Abnormal cardiovascular responses to exercise during the development of obesity. ***American Journal of Hypertension***, 7:374-378, 1994

41. Summers RL and JP Montani. Dealing with the uncertainties of medicine: the power of fuzzy set theories. ***Journal of Mississippi Academy of Sciences***, 39(2):9-15, 1994

42. Adair TH, Wells ML, Hang J, Montani JP. A stereological method for estimating length density of the arterial vascular system. ***American Journal of Physiology***, 266: H1434-H1438, 1994

43. Summers RL and JP Montani. Interface for the documentation and compilation of a library of computer models in physiology. ***Proc Annu Symp Comput Appl Med Care*** :86-89, 1994

44. Montani JP, Mizelle HL, Van Vliet BN and TH Adair. Advantage of continuous measurement of cardiac output 24 hours a day. ***American Journal of Physiology***, 269 (Heart Circ. Physiology 38):H696-H703, 1995

45. Adair TH, Hang J, Wells ML, Magee FD and JP Montani. Long-term electrical stimulation of rabbit skeletal muscle increases growth of arteries and veins. ***American Journal of Physiology***, 269 (Heart Circ. Physiology 38):H717-H724, 1995

46. Van Vliet BN, Hall JE, Mizelle HL, Montani JP and MJ Smith Jr. Reduced parasympathetic control of heart rate in obese dogs. ***American Journal of Physiology***, 269 (Heart Circ. Physiology 38):H629-H637, 1995

47. Lohmeier TE, Reinhart GA, Mizelle HL, Montani JP, Hester RL, Hord CE and DA Hildebrandt. Influence of the renal nerves on sodium excretion during progressive reductions in cardiac output. ***American Journal of Physiology***, 269 (Regulatory Integrative Comp. Physiol. 38):R678-R690, 1995

48. Carroll JF, Dwyer TM, Grady AW, Reinhart GA, Montani JP, Cockrell K, Meydrech EF, Mizelle HL. Hypertension, cardiac hypertrophy, and neurohumoral activity in a new animal model of obesity. ***American Journal of Physiology***, 271 (Heart Circ. Physiology):H373-H378, 1996

49. Lohmeier TE, Mizelle HL, Reinhart GA, Montani JP, Hord CE Jr and RH Didlake. Atrial natriuretic peptide and sodium homeostasis in compensated heart failure. ***American Journal of Physiology***, 271 (Regulatory Integrative Comp. Physiol. 40):R1353-R1363, 1996

50. Van Vliet BN, Hu L, Scott T, Chafe L and JP Montani. Cardiac hypertrophy and telemetered blood pressure 6 wk after baroreceptor denervation in normotensive rats. ***American Journal of Physiology***, 271 (Regulatory Integrative Comp. Physiol. 40):R1759-R1769, 1996

51. Summers RL, Montani JP, Woodward LH, Coleman TG and JE Hall. Theoretical analysis of the mechanisms of chronic hyperinsulinemia. ***Comput. Biol. Med*** 27(3):249-256, 1997

52. Carroll JF, Summers RL, Dzielak DJ, Cockrell K, Montani JP and HL Mizelle. Diastolic compliance is reduced in obese rabbits. ***Hypertension***, 33:811-815, 1999

53. Wang JL, Tempini A, Schnyder B, Montani JP. Regulation of blood pressure during long-term ouabain infusion in Long-Evans rats. ***American Journal of Hypertension***, 12:423-426, 1999

54. Van Vliet BN, Chafe LL and JP Montani. Contribution of baroreceptors and chemoreceptors to ventricular hypertrophy produced by sino-aortic denervation in rats. ***Journal of Physiology (London)***, 516(3):885-895, 1999

55. Antic V, Tempini A and JP Montani. Serial changes in cardiovascular and renal function of rabbits ingesting a high fat, high calorie diet. ***American Journal of Hypertension***, 12: 826-829, 1999

56. Van Vliet BN and JP Montani. Baroreflex regulation of the double product. ***American Journal of Physiology***, 277 (Heart Circ. Physiology):H1679-H1689, 1999

57. Lohmeier TE, Mizelle HL, Reinhart GA and JP Montani. Influence of angiotensin on the early progression of heart failure. ***American Journal of Physiology*** (Regulatory Integrative Comp. Physiol.) 278(1):R74-R86, 2000

58. Antic V, Kiener-Belforti F, Tempini A, Van Vliet BN and JP Montani. Role of the sympathetic nervous system during the development of obesity-induced hypertension in rabbits. ***American Journal of Hypertension***, 13:556-559, 2000

59. Van Vliet BN, Chafe LL, Antic V, Schnyder-Candrian S and JP Montani. Direct and indirect methods used to study arterial blood pressure. ***Journal of Pharmacological and Toxicological Methods***, 44(2):361-73, 2000.

60. Antic V, Van Vliet BN and JP Montani. . Loss of nocturnal dipping of blood pressure and heart rate in obesity-induced hypertension in rabbits. ***Autonomic Neurosciences: Basic and Clinical***, 90:152-157, 2001.

61. Dulloo AG, Stock MJ, Solinas G, Boss O, Montani JP, Seydoux J. Leptin directly stimulates thermogenesis in skeletal muscle. ***FEBS Letter***, 515(1-3):109-13,2002

62. Van Vliet BN, Belforti F and J-P Montani. Baroreflex stabilization of the double (pressure-rate) product at 0.05 Hz in conscious rabbits. ***American Journal of Physiology*** (Regulatory Integrative Comp. Physiol.), 282(6):R1746-R1753, 2002

63. Schumacher M., Dick B., Frey BM, Frey FJ, Montani J-P, Ferrari P. Salt-sensitivity of blood pressure after renal transplantation induced by down-regulation of 11β-hydroxysteroid dehydrogenase type 2. ***Transplantation***, 74(1):66-72, 2002

64. Montani JP, Antic V, Yang Z, Dulloo AG. Pathways from obesity to hypertension: from the perspective of a vicious triangle. ***International Journal of Obesity***, 26 (Suppl. 2): S28-S38, 2002

65. Dulloo AG, Jacquet J and JP Montani. Pathways from weight fluctuations to metabolic diseases: focus on maladaptive thermogenesis during catch-up fat. ***International Journal of Obesity***, 26 (Suppl. 2): S46-S57, 2002

66. Samec S, Seydoux J, Russel A, Montani JP, Dulloo AG. Skeletal muscle heterogeneity in fasting-induced upregulation of genes encoding UCP2, UCP3, PPARγ and key enzymes of lipid oxidation. ***Pfluegers Archives***, 445(1):80-86, 2002

67. Antic V, Dulloo AG and JP Montani. Short-term (5-day) changes in food intake alter daily hemodynamics in rabbits. ***American Journal of Hypertension***, 16(4): 302-306, 2003

68. Crescenzo R, Samec S, Antic V, Rohner-Jeanrenaud F, Seydoux J, Montani JP, Dulloo AG. A role for suppressed thermogenesis favouring catch-up fat in the pathophysiology of catch-up growth. ***Diabetes***, 52(5):1090-1097, 2003

69. Antic V, Dulloo AG and JP Montani. The multiple mechanisms involved in obesity-induced hypertension. ***Heart, Lung and Circulation***, 2003; 12: 84-93

70. Van Vliet BN, Chafe LL and JP Montani. Characteristics of 24 h telemetered blood pressure in eNOS-knockout and C57Bl/6J control mice. ***Journal of Physiology***, 549(Pt 1):313-25, 2003

71. Crescenzo R, Mainieri D, Solinas G, Montani JP, Seydoux J, Liverini G, Iossa S, Dulloo AG. Skeletal muscle mitochondrial oxidative capacity and uncoupling protein 3 are differently influenced by semistarvation and refeeding. ***FEBS Letter*** 544:138-142, 2003

72. Ming XF, Barandier C, Viswambharan H, Kwak BR, Mach F, Mazzolai L, Hayoz D, Ruffieux J, Rusconi S, Montani JP, Yang Z. Thrombin stimulates human endothelial arginase enzymatic activity via RhoA/ROCK pathway: implications for atherosclerotic endothelial dysfunction ***Circulation*** 110:3708-3714, 2004.

73. Solinas G, Summermatter S, Mainieri D, Gubler M, Pirola L, Wymann MP, Rusconi S, Montani JP, Seydoux J, Dulloo AG. The direct effect of leptin on skeletal muscle thermogenesis is mediated by substrate cycling between de novo lipogenesis and lipid oxidation. ***FEBS letter*** 577: 539-544, 2004

74. Dulloo AG, Antic V, Montani JP. Ectopic fat stores: housekeepers that can overspill into weapons of lean body mass destruction. ***International Journal of Obesity***, 28 (Suppl. 4): S1-2, 2004

75. Dulloo AG, Gubler M, Montani JP, Seydoux J, Solinas G. Substrate cycling between de novo lipogenesis and lipid oxidation: a thermogenic mechanism against skeletal muscle lipotoxicity and glucolipotoxicity. ***International Journal of Obesity***, 28 (Suppl. 4): S29-37, 2004

76. Montani JP, Carroll JF, Dwyer TM, Antic V, Yang Z, Dulloo AG. Ectopic fat storage in heart, blood vessels and kidneys in the pathogenesis of cardiovascular diseases. ***International Journal of Obesity***, 28 (Suppl. 4): S58-65, 2004

77. Dulloo AG, Montani JP. Obesity in Parkinson's disease patients on electrotherapy: collateral damage, adiposity rebound or secular trends? ***British Journal of Nutrition***, 93: 417-419, 2005

78. Cettour-Rose P, Rohner-Jeanrenaud F. Russel AP, Summermatter S, Mainieri D, Samec S, Montani JP, Seydoux J, Dulloo AG. Redistribution of glucose from skeletal muscle to adipose tissue during suppressed thermogenesis favouring catch-up fat: a link between catch-up growth and later metabolic diseases. ***Diabetes***, 54(3): 751-756, 2005

79. Adair TH, Cotten R, Gu JW, Pryor JS, McDonnell PB, Bennett KR, McMullan MR, Montani JP. Adenosine infusion increases plasma levels of VEGF in humans. ***BMC Physiology*** 5:10, 2005

80. Barandier C, Montani JP, Yang Z. Mature adipocytes and perivascular adipose tissue stimulate vascular smooth muscle cell proliferation: effects of aging and obesity. ***American Journal of Physiology*** (Heart), 289(5): H1807-13, 2005

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II. Symposia Articles, Editorials, Letters, Books and Chapters

II.1. Hemodynamic effects of exogenous and endogenous vasopressin at low plasma concentrations in conscious intact and baroreceptor-denervated dogs. ***Thesis No 3849***, presented at the Faculty of Medicine of the University of GENEVA / Switzerland, November 1980.

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