

## CURRICULUM VITAE

### **SEYLAZ Jacques**

**Present position :** Emeritus Director of Research (exceptional class) CNRS  
(Centre National de la Recherche Scientifique)

**Date and place of Birth :** February 17, 1939, Neuchâtel (Switzerland)

**Nationality :** Swiss and French

**Degrees :** Master of Science (Physics), Neuchâtel, Switzerland, 1961  
Diploma in Physics, Neuchâtel, Switzerland, 1962  
Doctor of Sciences (Physiology), Paris, France, 1966.

### **PROFESSIONAL EXPERIENCE :**

1962-1964 Research fellow (first degree), Swiss National Scientific Research Foundation

1965-1966 Research fellow (second degree), Swiss National Scientific Research Foundation

1966-1967 Research fellow (first degree), INSERM (Institut National de la Santé et de la Recherche Médicale)

1968-1974 Research fellow (second degree), CNRS (Centre National de la Recherche Scientifique)

1974-1984 Master of Research, CNRS

1985- 1991 Director of Research, CNRS

since 1991 Director of research (exceptional class ), CNRS

### **APPOINTMENTS :**

1973-1978 Head of research coordination program 319 CNRS, (in collaboration with the Histology Department of University of Lund, Sweden : Professor OWMAN).

1977-1978 Head of the Laboratory of Human Physiology, ERA 361 CNRS (co-direction with Professor MAMO).

1977-1978 Head of research laboratory F.R.A. 17 INSERM

1978-1990	Head of the Laboratory of Cerebrovascular Physiology and Pathophysiology, U 182 INSERM, URA 641 CNRS.
1990-1997	Head of the Cerebrovascular Research Laboratory, URA 641 CNRS.
1997-2000	Head of the Cerebrovascular Research Laboratory, UPR 646 CNRS.
2000-2002	Head of the Cerebrovascular Research Laboratory, FRE 2363 CNRS
2004	Emeritus Director of Research (exceptional class) CNRS

#### **TEACHING (Medical and scientific undergraduate) :**

University Paris VI. Neurophysiology  
 University Paris V. Pharmacology  
 University Paris VI. Neurosciences

#### **ACTIVITIES IN SCIENTIFIC COMMITTEES :**

- Member, School of Medicine Lariboisière-Saint-Louis Council (1975-1981 and 1989-1993)
- Member, Section 29 (Physiology) of the National Scientific Committee CNRS (1972-1976)
- Member, Instrumental Biomedical Committee for Advanced Research (1982-1986)
- Member, Medical and Biological Engineering Club (CNRS) (1982-1984)
- Member, Section 27 ("Pharmacology and Experimental Therapy") of the National Scientific Committee, CNRS (1983-1986)
- President, Section 46 (Interdisciplinary Committee for Industrial Relations) of the National Scientific Committee, CNRS (1983-1991)
- President, Space Life Sciences Committee, CNES (Centre National d'Etudes Spatiales) (1985-2000)
- Director, International Society "Cerebral Blood Flow and Metabolism" (1983-1989 and 1991-1995)
- Member, Executive Committee, French Society for Cerebral Blood Flow and Metabolism (1984-1990)
- President, Executive Committee, French Society for Cerebral Blood Flow and Metabolism (1987-1989)
- Member, National Committee for UNESCO (1990-1996)
- Member, Commission on Gravitational Physiology : International Union of Physiological Sciences (since 1990). President since 1993.
- Member, National Consultation on Ethics Committee (CCNE) (1990-1998).
- Co-director of Department of Life Science, Headquarters CNRS (1995-2000).

**PUBLICATIONS :** Author of more than 200 publications in journals such as :

Neuroscience, Am. J. Physiol., J. Cereb. Blood Flow Metabol., Brain Res., J. Neurochem., Blood Vessels, Pflüg. Arch., Stroke, J. Appl. Physiol., E.E.G. Clin. Neurophysiol., Acta Neurol., Neurology, Acta Neurol. Scand., Med. Prog. Technol., Med. and Biol. Eng. and Comput., Acta Physiol. Scand., Europ. J. Pharmac., Brit. J. Pharmac., Brain Research Reviews, Med. Progr. Technol.

**THESES :** Responsible for 31 theses.

**REFEREE FOR PUBLICATIONS :**

Journal of Cerebral Blood Flow and Metabolism ; Brain Research ; Blood Vessels ; Neurology ; Cephalgia ; European Journal of Physiology ; Experimental Brain Research ; E.E.G. and Clinical Neurophysiology ; Neuroscience Letters ; Neuropsychologia ; Circulation Research ; Vascular Research ; Journal de Circulation et Métabolisme du Cerveau

**INTERNATIONAL MEETINGS (invited speaker or chairman)**

Pharmakologie der localen Gehirndurchblutung, Bonn, R.F.A., 1969.

Seventh Symposium Neuroradiologum, Paris, France, 1970.

Fourth International Symposium on the Regulation of Rerebral Blood Flow. London, U.K., 1970.

Fifth International Symposium on the Regulation of Cerebral Blood Flow. Roma, Italie, 1971.

Rencontre Franco-Québecoise - Physiopathologie Pulmonaire en Anesthésiologie. Montpellier, France, 1972.

Journées Internationales de Circulation Cérébrale. Toulouse, France, 1972.

Congrès de la Société Neurologique et Psychiatrique Hongroise. Budapest, Hongrie, 1972.

Sixth International Cerebral Blood Flow Symposium. Philadelphia, U.S.A., 1973.

Symposium International de Neuro-radiologie. Capri, Italie, 1973.

Alfred Benzon Symposium: the Working Brain. Copenhaguen, Danemark, 1974.

Sixth Salzburg Conference on Cerebral Vascular Disease. Salzburg, R.F.A., 1974.

Seventh International Cerebral Blood Flow Symposium. Aviemore, U.K., 1975.

Eighth International Symposium on Cerebral Blood Flow and Metabolism. Copenhaguen, Danemark, 1977.

International Symposium on Neurogenic Control of the Brain Circulation. Stockholm, Suède, 1977.

27ème Congrès International des Sciences Physiologiques. Paris, France, 1977.

Colloque International sur les Signaux et les Images en Médecine et en Biologie. Paris, France, 1978.

28ème Congrès de Neuro-chirurgie de langue française. Athènes, Grèce, 1978.

Second International Symposium on Quantitative Mass Spectrometry in Life Sciences. Gent, Belgique, 1978.

Congrès International de Circulation Cérébrale. Toulouse, France, 1979.

Symposium International Beta-bloquant. Paris, France, 1979.

Congrès International "Deoxyglucose Uptake and Oxygen Consumption". Paris, France, 1980.

Tenth International Symposium on Cerebral Blood Flow and Metabolism. Saint Louis, Missouri, U.S.A., 1981.

Symposium on Cerebral Blood Flow - Effect of Nerves and Neurotransmitters. Iowa, U.S.A., 1981.

XXth European Conference on Microcirculation. Jérusalem, Israel, 1982.

European Society for Neurochemistry and World Federation of Neurology. Rome, Italie, 1982.

Eleventh International Symposium on Cerebral Blood Flow and Metabolism. Paris, France, 1983.

Neurotransmitters and the Cerebral Circulation. Paris, France, 1983.

International Symposium on Cerebral Blood Flow, Metabolism and Epilepsy. Montpellier, France, 1983.

Effects of Ageing on Regulation of Cerebral Blood Flow and Metabolism. San Remo, Italie, 1983.

Réunion Franco-Allemande de Pharmacologie. Freiburg, R.F.A., 1983.

Symposium on Measurement of Cerebral Blood Flow and Cerebral Metabolism in Man. Heidelberg, R.F.A., 1983.

Neuroscience Meeting. Anaheim, U.S.A., 1984.

- XIIth International Symposium on Cerebral Blood Flow and Metabolism. Lund/Rönneby, Suède, 1985.
- Neural Regulation of Brain Circulation. Lund/Orenas, Suède, 1985.
- Acute Brain Ischemia. Sienne, Italie, 1985.
- Neuroscience Meeting. Dallas, U.S.A., 1985.
- 10th Annual Meeting of the European Neuroscience Association. Marseille, France, 1986.
- XIIIth International Symposium on Cerebral Blood Flow and Metabolism. Montréal, Canada, 1987.
- 2nd International Symposium on Pharmacology of Cerebral Ischemia. Marburg, R.F.A., 1988.
- 8th European Winter Conference on Brain Research. Tignes, France, 1988.
- V<sup>o</sup> Congrès International de Circulation Cérébrale. Toulouse, France, 1989.
- XIVth International Symposium on Cerebral Blood Flow and Metabolism. Bologne, Italie, 1989.
- Neurotransmission and Cerebrovascular Function. La Napoule, France, 1989.
- 3rd International Symposium on Pharmacology of Cerebral Ischemia. Marburg, R.F.A., 1990.
- Congrès "Ischémie Cérébrale", Istambul, Turquie, 1990.
- XVth International Symposium on Cerebral Blood Flow and Metabolism, Miami, USA, 1991.
- The Role of Neurotransmitters in Brain Injury, Key West, USA, 1991.
- 1er Colloque de la Société des Neurosciences, Strasbourg, 1992.
- International Symposium on Pharmacology of Cerebral Ischemia, Marburg, Allemagne, 1992.
- 14th Annual Meeting, IUPS Commision of Gravitational Physiology, 1992.
- XVIth International Symposium on Cerebral Blood Flow and Metabolism, Sendai, Japon, 1993.
- International Symposium on Cerebral Blood Vessel, Mount Zao, Japon, 1993.
- 5e Symposium Européen sur les Sciences de la Vie dans l'Espace. Arcachon, 1993.
- International Symposium on Heavy Ions, Sophia-Antipolis, 1993.
- 5th International Symposium on Pharmacology of Cerebral Ischemia, Marburg, Allemagne, 1994.
- 16th Annual International Gravitational Physiology Meeting, Reno, USA, 1995.
- 11th Man in Space Symposium, Toulouse, 1995.
- 2e Colloque de la Société des Neurosciences, Lyon, 1995.
- XVIIth International Symposium on Cerebral Blood Flow and Metabolism, Köln, Allemagne, 1995.

17th Annual Gravitational Physiology Meeting, Warsaw, Pologne, 1996. 12th Man in Space Symposium, Washington, USA, 1997.

Brain 97 : 18th International Symposium on Cerebral Blood Flow and Metabolism, Baltimore, USA, 1997.

Mechanisms of Cerebrovascular Functions and Regulation, Williamsburg, USA, 1997.

XXXIIIth International Congress of Physiological Sciences (Symposium Space Physiology), Saint-Pétersbourg, Russie, 1997.

XIXth Annual Meeting of the International Society for Gravitational Physiology, Rome, Italy, 1998.

Brain 99. XIXth International Symposium of Cerebral Blood Flow, Metabolism and Function. Copenhague, Danemark, 1999.

Ischemic Blood Flow in the Brain, Tokyo, Japan, 1999.

Brain Activation and Cerebral Blood Flow Control. Tokyo, Japan, 2001.

XXth International Symposium on Cerebral Blood Flow and Metabolism. Taipei, Taiwan, 2001

## PRINCIPAL PUBLICATIONS

GRUEBLER W., SEYLAZ J. et ROSSEL J. Mesure du 1er niveau excité du Na<sup>21</sup> à l'aide d'une coïncidence neutron-gamma. *Helv. Physico. Acta*, 1962, 35, 284-287.

SEYLAZ J. Essais d'analyse de l'électroencéphalogramme par traduction auditive. *C.R. Acad. Sc. Paris*, 1963, 257, 966-968.

SEYLAZ J. Mesure instantanée des petites variations de flux sanguin parcourant un tissu "in vivo". *J. Physiol.*, 1964, 56, 441-442.

MOLNAR L. et SEYLAZ J. Clinical experiences in brain disorders. *Acta Convent. Neuropsy. and E.E.G. Hungaria*, 1965, 25, 77-80.

MOLNAR L. et SEYLAZ J. Mise en évidence et interprétation des effets de la décérébration et des sinus carotidiens sur la circulation cérébrale. *C.R. Acad. Sc.*, 1965, 260, 3164-3167.

SEYLAZ J. Développement d'une méthode de mesure instantanée, localisée et semi-quantitative du débit sanguin "in vivo". Applications diverses. *Biophysik*, 1965, 2, 330-339.

SEYLAZ J. et MOLNAR L. Nouvelle technique pour l'enregistrement synchrone du débit sanguin et de l'activité électrique du cerveau chez les animaux vigiles. *C.R. Soc. Biol.*, 1965, 160, 268-262.

SEYLAZ J. et MOLNAR L. Observations récentes sur les corrélations entre le débit cérébral et la dépression envahissante. *C.R. Soc. Biol.*, 1965, 160, 294-298.

SEYLAZ J. et MOLNAR L. A study of the control of cerebral blood flow in the freely moving rabbit. *Arch. Ital. Biol.*, 1968, 106, 157-164.

SEYLAZ J., MOLNAR L. et NEVERLEE H. Quelques corrélations entre le potentiel stable (steady potential) cortical et la circulation sanguine cérébrale. *J. Physiol.*, 1968, 57, 701.

GOAS J.Y., SEYLAZ J., MAMO H., MAC LEOD P., CARON J.P. et HOUDART R. Variations du débit sanguin du cortex de l'homme au cours du sommeil. *Rev. Neurol.*, 1969, 120, 159-176.

MAMO H., FRANCHI P., MARTIN A., SEYLAZ J. et HOUDART R. Tomographies acoustiques des processus expansifs intracrâniens. Résultats préliminaires obtenus chez l'adulte par un appareillage expérimental. *J. Neurol. Sci.*, 1969, 9, 63-76.

SEYLAZ J., MAMO H., CARON J.P., MAC LEOD P. et HOUDART R. Contribution à l'étude des sténoses carotidiennes dans l'insuffisance circulatoire cérébrale. *J. Neuro-Chir.*, 1969, 15, S.2, 83-102.

MAMO H., SEYLAZ J., REY A. et HOUDART R. Etude pharmacodynamique du débit sanguin du cortex de l'homme par une méthode de mesure continue et focale. *Rev. Neurol.*, 1970, 123, 101-115.

MAMO H. et SEYLAZ J. Conception générale sur la physio-pathologie des accidents ischémiques du cerveau d'origine athéromateuse. *Rev. Prat.*, 1970, 8, 419-425.

SEYLAZ J., MAMO H., GOAS J.Y., MAC LEOD P., CARON J.P. et HOUDART R. Local cortical blood flow during paradoxical sleep in man. *Arch. Ital. Biol.*, 1971, 109, 1-14.

MAMO H. et SEYLAZ J. Contribution à l'étude de la physiologie et de la physiopathologie de la circulation cérébrale de l'homme. *Act. Neurophysiol.*, 1971, 9, 191-216.

MAMO H., SEYLAZ J., REY A. et HOUDART R. A pathophysiological approach to the altered CO<sub>2</sub> effect on cerebral blood flow in post acute ischaemia in man. *Europ. Neurol.*, 1972, 6, 306-312.

SEYLAZ J., AUBINEAU P.F., CORREZE J.L. et MAMO H. Techniques for continuous measurement of local cerebral blood flow, PaO<sub>2</sub>, PaCO<sub>2</sub> and blood pressure in the non-anaesthetized animal. *Pflüg. Arch.*, 1973, 340, 175-180.

AUBINEAU P.F., SEYLAZ J., SERCOMBE R. et MAMO H. Evidence for regional differences in the effect of beta-adrenergic stimulation on cerebral blood flow. *Brain Research*, 1973, 61, 153-161.

SEYLAZ J., AUBINEAU P., EDVINSSON L., MAMO H., NIELSEN K.C., OWMAN Ch. et SERCOMBE R. Regional differences in beta-adrenergic effects on local cerebral blood flow and in sympathetic vascular innervation. *Stroke*, 1973, 4, 369-370.

SEYLAZ J., CORREZE J.L., PINARD E., LUFT A. et MAMO H. Mesure continue de la PaO<sub>2</sub> et de la PaCO<sub>2</sub> par spectrographie de masse. *Ann. Anesth. Franc.*, 1973, 14, 109-112.

AUBINEAU P.F., SEYLAZ J., MAMO H., SERCOMBE R., LUFT A., PINARD E., NIELSEN K.C., OWMAN Ch. et EDVINSSON L. Données expérimentales sur les mécanismes de la régulation du débit sanguin cérébral. *Rev. Neurol.*, 1973, 129, 349-358.

SEYLAZ J., PINARD E., CORREZE J.L., AUBINEAU P.F. et MAMO H. Quantitative continuous measurement of blood gas tensions by mass spectrometry. *J. Appl. Physiol.*, 1974, 37, 937-941.

MAMO H. et SEYLAZ J. La circulation cérébrale. Aspects méthodologiques et physiologiques. *Rev. E.E.G. Neurophysiol. Clin.*, 1974, 4, 194-200.

MAMO H., SEYLAZ J., CORREZE J.L., PINARD E. et REY A. Contrôle continu du débit sanguin cérébral et de ses variables. Applications à la chirurgie carotidienne. *Acta Neurol.*, 1974, 24, 108-116.

EDVINSSON L., AUBINEAU P.F., OWMAN Ch., SERCOMBE R. et SEYLAZ J. Sympathetic innervation of cerebral arteries: Prejunctional supersensitivity to Norepinephrine after sympathectomy or Cocaïne treatment. *Stroke*, 1975, 6, 525-530.

SERCOMBE R., AUBINEAU P., EDVINSSON L., MAMO H., OWMAN Ch., PINARD E. et SEYLAZ J. Neurogenic influence on local cerebral blood flow: Effect of catecholamines or sympathetic stimulation as correlated with the sympathetic innervation. *Neurology*, 1975, 25, 954-963.

LACOMBE P., REYNIER-REBUFFEL A-M., MAMO H. et SEYLAZ J. Quantitative multiregional blood flow measurements during cervical sympathetic stimulation. *Brain Research*, 1977, 129, 129-140.

LACOMBE P., SERCOMBE R., REYNIER-REBUFFEL A-M., LUSAMVUKU N., PINARD E. et SEYLAZ J. Time course of the effects of cervical sympathetic stimulation on local CBF: evidence for an escape phenomenon. *Acta Neurol. Scand.*, 1977, 56, 40-41.

MERIC Ph. et SEYLAZ J. Radiation scattering and the determination of regional cerebral blood flow by radioisotope clearance. *Med. Prog. Technol.*, 1977, 5, 41-46.

MERIC Ph., SEYLAZ J., LUFT A., CORREZE J.L. et MAMO H. Measurement of regional cerebral blood flow by intravenous injection of Xe 133. *Acta Neurol. Scand.*, 1977, 56, 462-463.

SEYLAZ J. et PINARD E. Continuous intracerebral PO<sub>2</sub> and PCO<sub>2</sub> measurements by mass spectrometry. Study of the influence of vasoactive drugs. *Acta Neurol. Scand.*, 1977, 56, 438-439.

SERCOMBE R., AUBINEAU P., EDVINSSON L., MAMO H., OWMAN Ch. et SEYLAZ J. Pharmacological evidence "in vitro" and "in vivo" for functional  $\beta_1$  receptors of cerebral circulation. *Pflüg. Arch.*, 1977, 368, 241-244.

PINARD E., SEYLAZ J. et MAMO H. Quantitative continuous measurement of  $PO_2$  and  $PCO_2$  in artery and vein. *Med. and Biol. Eng. and Comput.*, 1978, 16, 59-64.

SEYLAZ J. et PINARD E. Continuous measurement of gas partial pressures in intracerebral tissue. *J. Appl. Physiol.*, 1978, 44, 528-533.

PINARD E. et SEYLAZ J. Intracerebral gas partial pressures changes under vasoactive drugs: a mass spectrometry study. *Pflüg. Arch.*, 1978, 375, 25-30.

PINARD E., SEYLAZ J. et MAMO H. Effects de drogues vaso-actives sur les gaz tissulaires cérébraux. Etude expérimentale par spectrométrie de masse. *Rev. Neurol.*, 1978, 134, 133-140.

SERCOMBE R., LACOMBE P., AUBINEAU P., MAMO H., PINARD E., REYNIER-REBUFFEL A-M. et SEYLAZ J. Is there an active mechanism limiting the influence of the sympathetic system on the cerebral vascular bed? Evidence for vasomotor escape from sympathetic stimulation in the rabbit. *Brain Research*, 1979, 164, 81-102.

SEYLAZ J., PINARD E., DITTMAR A. et BIRER A. Measurement of blood flow, tissue  $PO_2$  and tissue  $PCO_2$  continuously and simultaneously in the same structure of the brain. *Med. and Biol. Eng. and Comput.*, 1979, 17, 19-24.

PINARD E., PURVES M.J. SEYLAZ J. et VASQUEZ J. The dilator pathway to cerebral blood vessels. *Pflüg. Arch.*, 1979, 379, 165-182.

LACOMBE P., MERIC P., REYNIER-REBUFFEL A-M. et SEYLAZ J. Critical evaluation of cerebral blood flow measurements made with  $^{14}C$ -ethanol. *Med. and Biol. eng. and Comput.*, 1979, 17, 126-142.

MERIC P., SEYLAZ J., CORREZE J.L., LUFT A. et MAMO H. Measurement of regional cerebral blood flow by intravenous injection of Xe 133. *Med. Prog. Technol.*, 1979, 6, 53-63.

EDVINSSON L., LACOMBE P., OWMAN Ch., REYNIER-REBUFFEL A-M. et SEYLAZ J. Quantitative changes in regional Cerebral Blood Flow of rats induced by alpha and beta-Adrenergic stimulants. *Acta Physiol. Scand.*, 1979, 107, 289-296.

LUSAMVUKU N.A.T., SERCOMBE R., AUBINEAU P. et SEYLAZ J. Correlated electrical and mechanical responses of isolated rabbit pial arteries to some vasoactive drugs. *Stroke*, 1979, 10, 727-732.

REYNIER-REBUFFEL A-M., LACOMBE P., AUBINEAU P., SERCOMBE R. et SEYLAZ J. Multiregional cerebral blood flow changes induced by a cholinomimetic drug. *Europ. J. Pharmac.*, 1979, 60, 237-240.

SEYLAZ J., MERIC P., CORREZE J.L., LUFT A. et MAMO H. Analytical problems associated with the non invasive measurements of cerebral blood flow in cerebrovascular diseases. *Med. and Biol. Eng. and Comput.*, 1980, 18, 39-47.

AUBINEAU P., SERCOMBE R. et SEYLAZ J. Parasympathomimetic influence of carbachol on local cerebral blood flow in the rabbit by a direct vasodilator action and an inhibition of the sympathetic-mediated vasoconstriction. *Brit. J. Pharmac.*, 1980, 68, 449-459.

LACOMBE P., MERIC P. et SEYLAZ J. Validity of cerebral blood flow measurements obtained with quantitative techniques. *Brain Research Reviews*, 1980, 2, 105-169.

MERIC P., BRONNER B., CORREZE J.L. et SEYLAZ J. Stability of gamma ray detectors and measurement of blood flow by isotope clearance. Med. Progr. Technol., 1980, 8, 57-64.

PINARD E. et SEYLAZ J. Continuous estimation of cerebral metabolic changes. Eur. Neurol., 1981, 20, 225-229.

OUDART N., SERCOMBE R., AUBINEAU P., BOULU R. et SEYLAZ J. Relaxation by dopaminergic agonists in cerebral and peripheral arteries "in vitro". Arch. Int. Pharmacodyn. Ther., 1981, 252, 196-209.

MERIC P., SEYLAZ J., LUFT A. et MAMO H. Validité des mesures atraumatiques de débit sanguin cérébral en pathologie cérébrovasculaire. Innov. Tech. Biol. Med. 1981, 2, 465-470.

MERIC P., LUFT A., SEYLAZ J. et MAMO H. Analysis of reproducibility and sensitivity of atraumatic measurements of regional cerebral blood flow in cerebrovascular disease. Stroke, 1982, 14, 82-47.

SEYLAZ J., PINARD E., MERIC P. et CORREZE J.L. Local cerebral PO<sub>2</sub>, PCO<sub>2</sub> and blood flow measurements by mass spectrometry. Am. J. Physiol., 1983, 245, 513-518.

REYNIER-REBUFFEL A-M., PINARD E., AUBINEAU P.F., MERIC P. et SEYLAZ J. Generalized cerebral vasoconstriction induced by intracarotid infusion of angiotensin II in the rabbit. Brain Research, 1983, 269, 91-101.

OUDART N., SERCOMBE R. et SEYLAZ J. Relaxation of rabbit cerebral arteries "in vitro" by clonidine. Evidence of H<sub>2</sub>-receptor mediation. Arch. Int. Pharmacodyn., 1983, 265, 259-273.

LASBENNES F., SERCOMBE R. et SEYLAZ J. The monoamine oxidase activity in brain microvessels determined using natural and artificial substrates. Relevance to the blood-brain barrier. J. Cereb. Blood Flow Metabol., 1983, 3, 521-528.

MAMO H., MERIC P., LUFT A. et SEYLAZ J. Evolution of the hyperfrontal distribution of rCBF in advancing age. Excerpta Medica, 1983, 4, 226-230.

MAMO H., MERIC P., LUFT A. et SEYLAZ J. Hyperfrontal pattern of cerebral circulation in man. Variations with age and atherosclerotic state. Arch. Neurol., 1983, 40, 626-632.

MERIC P., LUFT A., MAMO H. et SEYLAZ J. Evolution du débit sanguin cérébral en fonction de l'âge et des facteurs de risques vasculaires. Circulation et Métabolisme du Cerveau, 1983, 1, 37-43.

PINARD E., ROUGIER P. et SEYLAZ J. Système nerveux, prostaglandines et hypoxie. Circulation et Métabolisme du Cerveau, 1983, 1, 25-35.

PINARD E., TREMBLAY E., BEN-ARI Y. et SEYLAZ J. Blood flow compensates oxygen demand in the vulnerable CA<sub>3</sub> region of the hippocampus during kainate-induced seizures. Neurosci., 1984, 13, 1039-1049.

LACOMBE P. et SEYLAZ J. Significance of the cerebrovascular effects of immobilization stress in the rabbit. J. Cereb. Blood Flow Metabol., 1984, 4, 397-406.

SERCOMBE R., LASBENNES F., DROUET L., DOSNE A-M. et SEYLAZ J. Monoamine oxidase activity in the cerebral vasculature: comparison between fresh microvessels from different structures and cell cultures derived from microvessels. J. Cereb. Blood Flow Metabol., 1984, 4, 415-424.

LASBENNES F., SERCOMBE R. et SEYLAZ J. Activité enzymatique MAO dans les microvaisseaux isolés du cerveau de porc. Circulation et Métabolisme du Cerveau, 1984, 1, 243-250.

REYNIER-REBUFFEL A-M., AUBINEAU P.F., PINARD E., MERIC P. et SEYLAZ J. Modification de l'hémodynamique cérébrale induite par l'angiotensine II. Circulation et Métabolisme du Cerveau, 1984, 1, 151-158.

LUFT A., PONSIN J.C., MERIC Ph., MAMO H. et SEYLAZ J. La mesure du débit sanguin cérébral, technique de mesure et indications. Angiologie, 1984, 2, 10-12.

SEYLAZ J. Exploration de la circulation sanguine cérébrale et du métabolisme du cerveau. Le Courrier du CNRS, Avril-Juin, 1984, n°55-56, 71-74.

VERRECCHIA C., SERCOMBE R. et SEYLAZ J. Rôle inhibiteur de l'intima des artères cérébrales et périphériques dans la réponse aux monoamines cérébrales. Etudes "in vitro". Circulation et Métabolisme du Cerveau, 1984, 2, 93-103.

AUBINEAU P., REYNIER-REBUFFEL A-M., BOUCHAUD C., JOUSSEAUME O. et SEYLAZ J. Long term effects of superior cervical ganglionectomy on cortical blood flow of non anaesthetized rabbits in resting and hypertensive conditions. Brain Research, 1985, 338, 13-23.

CASH R., LASBENNES F., SERCOMBE R., AGID Y. et SEYLAZ J. Adrenergic receptors on cerebral microvessels in control and parkinsonian subjects. Life Sci., 1985, 37, 531-536.

LASBENNES F., SERCOMBE R., VERRECCHIA C. et SEYLAZ J. Vascular monoamine oxidase in the rat brain: variation with the substrate and the vascular segment. Life Sci., 1985, 36, 263-268.

VERRECCHIA C., SERCOMBE R. et SEYLAZ J. Influence of endothelium on vasoconstriction induced by noradrenaline. Clin. Exp. Physiol. Pharmacol., 1985, 12 (2), 169-179.

SERCOMBE R., VERRECCHIA C., OUDART N., DIMITRIADOU V. et SEYLAZ J. Pial artery responses to norepinephrine potentiated by endothelium removal. J. Cereb. Blood Flow Metabol., 1985, 5, 312-317.

PINARD E., LACOMBE P., REYNIER-REBUFFEL A-M. et SEYLAZ J. Intrinsic and extrinsic mechanisms involved in the cerebrovascular reaction elicited by immobilization stress in rabbits. Brain Research, 1985, 340, 305-314.

MENASCHE P., PINARD E., DESROCHES A-M., LAGET P., GEYER R.P., SEYLAZ J. et PIWNICA A. Fluorocarbons: a potential treatment of cerebral air embolism in open-heart surgery. Ann. Thoracic Surg., 1985, 40, 494-497.

LACOMBE P., MILLER M.C. et SEYLAZ J. Sympathetic regulation of the cerebral blood flow during a reflex hypertension. Am. J. Physiol., 1985, 249, 672-680.

SEYLAZ J. Rôle du système nerveux autonome dans la régulation de la circulation sanguine cérébrale. Circulation et Métabolisme du Cerveau, 1985, 2, 115-132.

SERCOMBE R., VERRECCHIA C., PHILIPSON V., OUDART N., DIMITRIADOU V., BOUCHAUD C. et SEYLAZ J. Histamine-induced constriction and dilatation of rabbit middle cerebral arteries "in vitro": role of the endothelium. Blood Vessels, 1986, 23, 137-153.

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