***CURRICULUM VITAE***

Eliete Bouskela is Full Professor of Cardiovascular Physiology, Biomedical Centre, State University of Rio de Janeiro, since November 1999 and Director of the Clinical Research Unit, a four store building (3200 m2) dedicated to detection of early markers of atherosclerosis (endothelium/microvascular dysfunction) in cardiometabolic diseases, namely obesity, diabetes and hypertension. She is also full member of the National Academy of Medicine, Brazilian Academy of Sciences and European Academy of Sciences and Arts; Associate Member of the Académie Nationale de Médecine (3ème division: Sciences Biologiques et Pharmaceutiques) of France; researcher of the National Council of Technological and Scientific Development, Scientist of the State of Rio de Janeiro, Director of Technology and Innovation of the Rio de Janeiro State Research Foundation; part of Editorial Board of Microvascular Research, Elsevier, San Diego, CA, USA, Microcirculation, Wiley-Blackwell, Hoboken, NJ, USA and Clinical Hemorheology and Microcirculation, IOS Press, Austria and reviewer for over 60 scientific journals. Her scientific interests include (1) Regulation and control of the microcirculation in obesity, insulin resistance, metabolic syndrome, type 2 diabetes mellitus, haemorrhagic and septic shocks in experimental animals and patients; (2) Early detection of cardiovascular risk factors using non-invasive methods; (3) Development of experimental models of cardiometabolic diseases and (4) Translational research. She belongs to 25 Scientific Societies, has published 4 original theses, 2 books, 25 book chapters, 9 review articles, 178 original research papers, 322 abstracts presented in National and International Congresses and served as advisor of 20 post-Doctors, 35 Ph.Ds., 22 Masters and 65 undergraduate students. She has received grants from the main governmental agencies of Brazil, like National Counsel of Technological and Scientific Development of Brazil (CNPq); Rio de Janeiro State Research Foundation (FAPERJ) and FINEP - Studies and Projects Funding (Federal Government Agency of Brazil). She has also proposed and received grants for monocentric clinical and preclinical projects funded by several pharmaceutical companies, like for instance, Servier, Pierre Fabre, Lafon, Lipha, Merck, Novartis, Astra Zeneca, etc.

Professor Bouskela has introduced quantitative *in vivo* investigation of the microcirculation in humans and experimental animals in Brazil. Using the bat wing, she demonstrated, for the first time, the existence of a longitudinal distensibility gradient in mammalian capillaries and in 1980 started working in clinical research evaluating, also quantitatively, the microangiopathy of type 2 diabetic patients using the nailfold videocapillaroscopy. Her working hypothesis is that microvascular dysfunction, evaluated functional and morphologically by measuring diameter, blood flow and functional capillary density precedes the macrovascular dysfunction. Non-invasive evaluation of the microcirculation in patients using the nailfold videocapillaroscopy (morphological and hemodynamic evaluation at rest and after 1 min ischemia at the finger base) allows the diagnostic of microvascular dysfunction, its temporal evolution and follow-up of interventions.

Professor Bouskela went to U.S.A. in November 1974 and returned to Brazil in March 1977, leaving the University of Washington where she had a Research Associate position for 3 more years, to join the State University of Rio de Janeiro and stayed during 10 years. During this period, she started scientific research in the Department of Physiological Sciences, built a solid group and was recipient of several grants from governmental agencies. When research money was very difficult to obtain in Brazil, Professor Bouskela went to Sweden (University of Lund), in March 1987, initially as Post-doctoral Fellow, Visiting Professor and finally received a position as Associate Professor. She stayed in Sweden until October 1994 when she returned once again to Brazil, to the State University of Rio de Janeiro, again leaving a position in a developed country to return to her own country.

Eliete Bouskela was born on February 15, 1950, in Uberlândia, state of Minas Gerais, Brazil. She graduated in Medicine (MD degree) at the Federal University of Rio de Janeiro, Brazil in December 1973. She started her scientific career in 1969 in the Institute of Biophysics Carlos Chagas Filho testing perfusion solutions, at constant flow, to maintain isolated mammal hearts (Langendorff’s preparation). In these preparations, she observed rhythmic oscillations in pressure that could be originated in the microcirculation. Her Master dissertation, about the use of phase plane to calculate cardiac output from dye dilution curves, was presented at the Federal University of Rio de Janeiro, in August 1975. In order to further explore the microcirculation *in vivo* she went, in November 1974, to U.S.A. first to the Department of Physiology, Mayo Foundation, Rochester, MN and after to the Department of Physiology and Biophysics, University of Washington, Seattle, WA. In U.S.A. she studied mechanisms of transport/exchange on capillary-tissue of hydrophilic substances and the effect of changes in transmural pressure on the microcirculation of the wing of unanesthetized bats (*Tadarida mexican braziliensis*). The results, showing that the vascular wall tension was kept constant, indicated the myogenic reaction as the mechanism responsible for the maintenance of microvessel tonus in this preparation, were part of her Ph.D. thesis presented in November 1978, at the Institute of Biophysics Carlos Chagas Filho, also at the Federal University of Rio de Janeiro.

In March1977, after 3 years in U.S.A., Eliete Bouskela returned to Brazil, initially as Assistant Professor and later as Associate Professor and became Chairperson of the Department of Physiological Sciences of the State University of Rio de Janeiro. At this time, she stayed during 10 years and during this period started scientific research in the Department, built a solid group and was recipient of several grants from governmental agencies. She introduced quantitative *in vivo* investigation of the microcirculation in humans and experimental animals in Brazil. Using the bat wing, she demonstrated, for the first time, the existence of a longitudinal distensibility gradient in mammalian capillaries and in 1980 started working in clinical research evaluating, also quantitatively, the microangiopathy of type 2 diabetic patients using the nailfold videocapillaroscopy.

When research money was very difficult to obtain in Brazil, Professor Bouskela went to the Department of Physiology and Biophysics, University of Lund, Sweden, in March 1987, initially as a Post-doctoral Fellow, after as Visiting Professor and later, after her Docent examination in May 1992, as Associate Professor. During her period in Sweden, she continued the investigation about mechanisms regulating the microcirculation, using as experimental preparations the hamster (Mesocricetus auratus) cheek pouch and rat cerebral microcirculation and looked at importance of temperature, K+ channels, pH and endothelium-derived relaxing factors for microcirculatory control. She stayed in Sweden until October 1994 when she returned once again to Brazil, to the State University of Rio de Janeiro, Department of Physiological Sciences.

In December 1995, the Laboratory for Research on Microcirculation was officially inaugurated to evaluate the microcirculation and endothelial function in patients and in experimental models of disease, starting a translational medicine approach. In November 1999, she was appointed Full Professor in Cardiovascular Physiology. Her working hypothesis is that microvascular dysfunction, evaluated functional and morphologically measuring diameter, blood flow and functional capillary density precedes the macrovascular dysfunction. Non-invasive evaluation of the microcirculation in patients using the nailfold videocapillaroscopy (morphological and hemodynamic evaluation at rest and after 1 min ischemia at the finger base) allows the diagnostic of microvascular dysfunction, its temporal evolution and follow-up of interventions. In 2006, the Laboratory for Research on Microcirculation became Laboratory for Clinical and Experimental Research on Vascular Biology and Professor Bouskela is the Director since. The Laboratory has grown and today has an area of 500 m2 and 65 persons working: Associate Professors, Post-Doctors, Ph.D, Master and undergraduate students, and technicians. Now she is leading the construction of a four-store building for Multidisciplinary Research on Obesity with the main goal of early non-invasive detection of cardiovascular risk factors in these patients, from early childhood to old age.