Professor Liberato J. A. DiDio – a great anatomist of the 20th century and an advocate of medicine without borders

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Liberato John Alphonse DiDio (1920–2004) was one of the most prominent figures of anatomy belonging to the 20th century’s second half and an open-minded man. In 1984, during the era of communism in Yugoslavia, he opened the doors of the Medical College of Ohio (MCO) in Toledo, OH, USA, to a Serbian doctor. During the troubled times for people and anatomists in Serbia in 1994, he saved their association from being expelled from the International Federation of Anatomical Associations. In 1999, only a few months after the bombing of Yugoslavia, he helped them to get the organization of the XVIII International Symposium on Morphological Sciences in 2005, the meeting of the leaders in the field. Serbian anatomists and clinicians proved that he was right when considering them on a par with their peers in the international anatomical and medical community.

Professor DiDio first showed talent with Gold Medal – top graduate at his high school, and La Royale Award (Graduation Golden Ring) – top graduate MD. He was trained in Brazil, Italy, and the US. He was the Founding Chairman – Department of Topographical Anatomy, Faculdade de Ciências Medicas, Belo Horizonte, Minas Gerais, Brazil; Head of Gross and Surgical Anatomy, Northwestern University Medical, Dental, and Graduate Schools; Founding Chairman, Department of Anatomy, MCO; Professor Emeritus at the age of 70 (1990), Assistant to the President of the MCO, Consultant to the President and the Emeritus Dean (1992–2004). He was a member of editorial boards of 34 journals, academic adviser in 92 M.S. and Ph.D. theses.

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in anatomy (Summa cum laude). At the University Hospital of the same school, he accomplished his internship in tropical medicine, and residency in surgery. Finally, he got the chairmanship in Anatomy and Embryology, by competitive examinations (Summa cum laude) at the Faculty of Medicine, Federal University of Minas Gerais, Belo Horizonte, Brazil. The need to broaden his scientific horizons and improve his skills took him out of Brazil. Hence, in 1955, he pursued his postdoctoral training in caryometry and histophotometry at the Messina University, Italy, and postdoctoral training in lymphology at the Parma University, Italy, in 1958. The crown of his education was the two-year fellowship (1961–1962) in the US with postdoctoral training in electron microscopy, polarization microscopy, and study of medical education in the following institutions: Department of Anatomy at the School of Medicine of the University of Washington, Seattle, WA; Department of Cytology at the Rockefeller University, New York City, NY; and at the Department of Anatomy of the Harvard University Medical School, Boston, MA.

The long list of his appointments begins with the position of the Research Assistant in Physiology at the Faculty of Medicine of the University of Sao Paulo (1942–1944), followed by the Research Assistant and Instructor (monitor) in Anatomy I (1943–1946). He left the School in 1954, as Associate Professor of Anatomy, to become Professor and Founding Chairman at the Department of Topographical Anatomy of the Faculdade de Ciências Medicas in Belo Horizonte, Minas Gerais, Brazil, where he stayed as Professor and Chairman until 1963. While at the University of Minas Gerais in Belo Horizonte, he also worked...
as Professor and Chairman at the Department of Veterinary Anatomy (1955–1956) and Director of the Institute of Morphology (Anatomy, Histology, Embryology, Electron Microscopy, Neuroanatomy) (1962–1963).

At the age of 43, he definitely moved to the US, where he continued adding prestigious titles and positions to his academic career: Professor, Head of Gross Anatomy and Surgical Anatomy, Department of Anatomy, Northwestern University Medical, Dental, and Graduate Schools, Chicago, IL (1963–1966); Professor and Founding Chairman, Department of Anatomy, Medical College of Ohio (MCO) in Toledo, OH (first founding faculty member) (1966–1988); Founding Dean of the Graduate School (1972–1986). Although recognized as Professor Emeritus at the age of 70 (1990), this didn't stop him from working at the MCO as the Assistant to the President (1988–1991), Interim Director of the Mulford Library (1990–1991), Consultant to the President and the Emeritus Dean (1992–2004). He kept his international scientific activities as Visiting Professor at the Institute of Human Normal Anatomy of the La Sapienza University in Rome, Italy, as well as at the Department of Morphology of the Escola Paulista de Medicina, Federal University of Sao Paulo, Brazil, and as President of the Committee on Ethics in Scientific Research at the University of Santo Amaro, Sao Paulo, Brazil (Figure 2).

Dr. DiDio died in Sao Paolo (2004) as the Emeritus Dean of the MCO. At the time, he was performing several additional duties in Brazil: he was the Advisor for Graduate Studies at the Department of Surgery and Anatomy of Domestic Animals of the Faculty of Veterinary Medicine and Zootechnology, University of Sao Paulo, Vice-President of the Organizacao Santamarense de Educacao e Cultura, as well as Professor of Surgical Anatomy at the Department of Surgery, and of Scientific Methodology at the Department of Public Health (Faculty of Medicine), Professor of Veterinary Anatomy at the Faculty of Veterinary Medicine of the University of Santo Amaro, Sao Paulo, Brazil.

He left behind a legacy of 11 books as either the only or the first author, another 20 with chapters written by him, 379 scientific papers, and over 177 papers reported at morphological meetings worldwide. He reviewed 15 international books and translated another 11, which was possible due to his knowledge of English, Italian, Portuguese, French, and Spanish. He was an academic adviser in 92 M.S. and Ph.D. theses.

It is hard to find a system of the human body to whose anatomy data Professor DiDio has not contributed [1–24]. In his huge scientific body of work, he dealt with coronary circulation describing cardiac segments and subsegments.
in humans and their importance for cardiac surgery, electron microscopic investigations on the myocardium under normal, experimental, and pathologic conditions, as well as cardiac valve bioprostheses in humans [3, 5–10]. The research comprises the anatomical and experimental investigations on anatomicosurgical segmentectomy in dogs and its application in human cardiac surgery. Furthermore, he conducted the research on anatomicosurgical segments of organs other than the heart, in both humans and other mammals [11, 12, 13]. His most recent research was related to several projects, such as aging, subcellular structure of the normal and neoplastic prostate, placenta of mammals, pineal gland, subcellular alterations induced by amiodarone, and innervations of muscles of the arm and their relationship with rehabilitation chronology [14–24].

Dr. DiDio was a member of editorial boards of 34 prestigious scientific journals in the field at the time, such as Acta Anatomica (Switzerland), Anatomia Clinica – now Surgical and Radiological Anatomy (France and Germany), Anatomischer Anzeiger – now Annals of Anatomy (Germany), Archivio Italiano di Anatomia ed Embriologia (Italy), Bulletin de l'Association des Anatomistes (France), Excerpta Medica (Anatomy, Histology, Embryology, Anthropology) (the Netherlands), Morphology Journal (Russia), Ohio Journal of Science (USA), Brazilian Journal of Morphological Sciences (Brazil), Revista Chilena de Anatomia (Chile), etc.

Throughout the world, scientific and professional associations were eager to have Dr. DiDio as a member and 55 succeeded in that effort. He was a prominent member of the American Association of Anatomists, American Association of University Professors, American Association of Veterinary Anatomists, American Cancer Society, American College of Legal Medicine, American Heart Association, International College of Surgeons (Fellow), Anatomical Society of Great Britain and Ireland, Anatomische Gesellschaft, Associação Brasileira de Editores Científicos, Associaçao Medica do Parana, Portuguese Anatomical Society, Societe d'Anthropologie de Paris, etc. He was a founder of the American Association for Cell Biology, Ibero-American Society of Anatomy, Italian Society of Histochemistry, and Pan American Association of Anatomy. In the International Federation of Associations of Anatomists, Dr. DiDio served as the President (1986–1989), and afterwards as the Honorary President. He died as the President of the International Committee on Symposia on Morphological Sciences, generously helping in organizing the XVIII ISMS, to be held in Belgrade, Serbia, on June 5–8, 2005.

Dr. DiDio will be remembered as a man with immense knowledge that made him define the importance of the concept of “dynamic morphology” as an integration of structure and function. He will be remembered as a medical doctor and a scientist of great moral integrity, a demanding advisor, but nonetheless a supportive professor and a devoted friend – all at the same time (Figure 2). The 21st century anatomy – without him – will never be the same, for, among other things, Serbian anatomists and the Serbian Medical Society lost a selfless supporter and a faithful friend in the international medical science community. However, by successfully organizing the XVIII ISMS held in Belgrade, Serbia, on June 5–8, 2005, Serbian anatomists and clinicians side by side – strongly supported by the Faculty of Medicine of the University of Belgrade, the Board for Cardiovascular Pathology of the Serbian Academy of Sciences and Arts (SASA) and its president Academician Vladimir Kanjuh, and the authorities of the Republic of Serbia – all united, lived up to Professor DiDio’s expectations, proving he was right when considering them on a par with their international peers in the world of anatomical and medical society [25]. That meeting, after 10 years of sanctions, brought to the SASA for the first time over 100 foreign scientist, among whom Professor David Brynmor Thomas (Figure 3) and Professor Pierre Sprumont, presidents of the IFAA and the European Federation For Experimental Morphology (EFEM), respectively. They both held their associations’ council meetings in Belgrade during the XVIII ISMS. Even nowadays, you will find “Belgrade 2005” in the EFEM Statute [26]. Our leading clinicians at the Faculty of Medicine of the University of Belgrade and affiliated hospitals adopted the concept of dynamic morphology and helped anatomists in creating an exceptional program. Today, many of them are members of the SASA, like professors Nebojša Radunović, Miodrag Ostojić, Đorđe Radak, Nebojša Lalić, Petar Seferović, Marko Bumbasirević, and other equally prominent ones, like professors Biljana Obrenović-Kirčanski, Nadežda Ćovčiković-Sternić, Miodrag Rakić, Mirko Teofilovski, and Mladen Kočica. The Serbian Medical Society showed its best, and our international colleagues have been fascinated.

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