The International Society on Oxygen Transport to Tissue (ISOTT) is an interdisciplinary society comprising about 250 members worldwide. Its purpose is to further the understanding of all aspects of the processes involved in the transport of oxygen from the air to its ultimate consumption in the cells of the various organs of the body. Oxygen has played a substantial role in the evolution process of biological systems, including human, as the key molecule for energy production and genetic adaptation to the environment. Considering that the physiological function of oxygen is an extremely diverse and multidisciplinary research area, increased involvement of basic medical scientists, clinicians, and biomedical engineers in ISOTT was encouraged.

The annual meeting brings together scientists, engineers, clinicians and mathematicians in a unique international forum for the exchange of information and knowledge, the updating of participants on latest developments and techniques, and the discussion of controversial issues within the field of oxygen transport to tissue.

Founded in 1973, the society has been the leading platform for the presentation and discussion of many of the technological and conceptual developments within the field, both at the meetings themselves and in the proceedings of the society.

Examples of some of the areas in which members have made highly significant contributions to the field include Near Infrared Spectroscopy (NIRS) and other spectrophotometric and magnetic resonance methods, electrode techniques, mathematical modeling of oxygen transport, and the understanding of local regulation of oxygen supply to tissue and fluorocarbons-blood substitutes.

The 37th Annual ISOTT conference was held in Cleveland, Ohio, USA from July 5–9, 2009. The meeting consisted of one featured presentation by Jay Dean, Ph.D., from the Department of Molecular Pharmacology and Physiology, Hyperbaric Biomedical Research Laboratory at the University of South Florida. His topic was “Oxygen and the World War II Aviator.” In addition, there were 21 featured lectures, 12 organized sessions, 56 general oral presentations, and 19 poster presentations. We welcomed 134 total participants comprised of 71 full, 13 social, 34 student, 10 daily, and 6 outside exhibitor registrations.

Our venue was the campus of Case Western Reserve University (CWRU), including the recently built Village at 115 dormitory-style housing facility where most
participants stayed. Participants were provided with many opportunities to interact, both scientifically and socially, during the conference and after hours in an informal atmosphere. Evening activities were structured to take advantage of Cleveland as well as CWRU’s proximity to the University Circle cultural institutions. The highlight of the 2009 ISOTT meeting was the Closing Banquet held at the Rock and Roll Hall of Fame and Museum where several of our participants entertained us with their musical talents! Visit the website of http://www.case.edu/isott09/ to view information on the Annual Meeting in Cleveland, Ohio.

Joseph C. LaManna, Ph.D.
President, ISOTT 2009
Oxygen Transport to Tissue XXXII
LaManna, J.; Puchowicz, M.A.; Xu, K.; Harrison, D.K.; Bruley, D.F. (Eds.)
2011, XXX, 374 p., Hardcover
ISBN: 978-1-4419-7755-7