HONORARY MEMBER esicm HONORARY MEMBER

CAN INCE

Professor Can Ince is the godfather of the microcirculation, which he uncovered to us using self-invented hand-held spectroscopic imaging devices. With these cameras, he literally created one of the very few “windows” we have at the bedside to diagnose shock and monitor the treatment of shock. He also advanced the oxygen quenching phosphorescence lifetime technique to measure microvascular oxygen tension and oxygenation. In other words: the holy grail of shock resuscitation. Can was able to make these inventions by combining multiple skills: he holds both a degree in physics and in electronic engineering. This combination proved highly effective in thinking outside the box, which was fundamental in establishing the paradigm shift in understanding blood flow during shock. Before considering the microcirculation, the approach of critical care physicians in shock treatment was aimed at restoring macrohemodynamics, without an understanding of why patients failed to recover when blood pressure was restored. Now we know that organ perfusion is much more complex and that dissociation between macro- and microcirculation can occur.

Can has used his combined skills to shed light on the pathophysiology of many intensive care syndromes, including sepsis, acute kidney injury, and ischaemic reperfusion, always adopting a physiological and technical perspective, which is an indispensable complement to that of a clinician. His work is highly translational, aimed at improving resuscitation of shock and at discovering novel treatments of shock, ultimately to improve care for the critically ill.

The academic achievements of Can have been widely recognised. He has a PhD in Immunology/Physiology (University of Leiden, The Netherlands) and an MSc (Technical University of Delft, The Netherlands) and a BSc degree in electronic engineering (University of Birmingham, UK). He was a full professor at the Faculty of Medicine of the University of Amsterdam, where he headed the Department of Translational Physiology in Biomedical Engineering and Physics. In 2019, as a principal investigator, he established the Laboratory of Translational Intensive Care affiliated with the Department of Intensive Care of the Erasmus Medical Centre Rotterdam. Prof. Ince is past president of the Dutch Physiological Society and of the International Society for Oxygen Transport to Tissue.

As a strong international collaborator, Can is very well known in the research field. Can has allowed many PhD students and medical students to advance their careers. He crosses boundaries between the ICU and cardiovascular domains, integrating technology with physiology, applied to improve clinical practice. He has contributed to guidelines and consensus statements about shock, which reflect the insights generated about the microcirculation. Finally, Can is a gifted speaker. Through countless lectures at international ICU and cardiovascular congresses all over the world, Can continues to inspire engineers, physiologists and clinicians.

NICOLE JUFFERMANS
Editor-in-Chief of the ICMx journal