

Victor A. Convertino, Ph.D.



Dr. Vic Convertino is the Senior Scientist (SES) for Combat Casualty Care, and Director of the Battlefield Health & Trauma Center for Human Integrated Physiology at the U.S. Army Institute of Surgical Research at Fort Sam Houston, Texas. He received baccalaureate degrees in Mathematics and Physical Education at the California State University at San Jose, a master's degree in Exercise Science and a Ph.D. in Physiology at the University of California at Davis. His professional career has taken him to positions at NASA's Ames Research Center, the Stanford University School of Medicine, the University of Arizona, NASA's Kennedy Space Center, and the U.S. Air Force Research Laboratory before assuming his present position. Dr. Convertino holds adjunct professor positions on the faculty of several universities, including the Department of Medicine at the Uniformed Services University, the US Air Force School of Aerospace Medicine, and the Department of Emergency Medicine at University of Texas Health Sciences Center.

Dr. Convertino is a contributor to many areas of research, including regulation of plasma volume during acute and chronic exercise; interrelationship of plasma volume and electrolytes with adaptation to microgravity and thermoregulation during heat and exercise exposures; effect of acute and chronic exercise on blood pressure regulation and orthostatic competence; development of exercise training and countermeasures for astronauts and crew members of high-performance aircraft; and physiological adaptation to varying gravity environments. Perhaps his most important work is his current research designed to develop decision-support and therapeutic technologies, as well as new Tactical Combat Casualty Care doctrine to advance the capabilities of combat medics to optimize care of battlefield casualties. The products generated from Dr. Convertino's research have advanced the understanding of human hemorrhage physiology and methods to predict and treat shock that will help prevent deaths on the battlefield as well as in civilian emergency medical settings. Dr. Convertino has successfully collaborated with nationally and internationally recognized scientists from more than 30 different laboratories. He has published over 370 peer-reviewed manuscripts, invited reviews, and book chapters in the scientific literature that have been cited more than 23,300 times with an h-Index of 75. Dr. Convertino has delivered more than 80 scientific papers at professional meetings and more than 230 invited presentations and lectures to medical, scientific, and lay groups in 35 states and 27 different countries.

Dr. Convertino serves on the editorial boards of four international journals and has reviewed more than 400 manuscripts for 30 scientific journals. He has served as an invited member on numerous NASA Working Groups for development of countermeasures for physiological maladaptation to spaceflight, including as a member of the National Space Biomedical Research Institute External Advisory Council, and as a consultant to the United States Department of the Navy Bureau of Medicine and Surgery during Operation Desert Storm. In 1992, he testified to the Presidential Commission on the Assignment of Women to the Military. He has served as a member of study sections for the National Academy of Sciences, National Institutes of Health, American Institute of Biological Sciences, Congressionally Directed Medical Research Program, and Defense Medical Research & Development Program.

Dr. Convertino is a Fellow of the American Physiological Society (FAPS), the Aerospace Medical Association (FASMA), the American College of Sports Medicine (FACSM) where he has served on the Board of Trustees and as Vice President, and the International Society for Gravitational Physiology (ISGP) where he served as 2007 President. Dr. Convertino has been recognized with the ACSM New Investigator Award, the AsMA Ellingson Literary Award, the ACSM Visiting Scholar Award, USAF Scientific Achievement Awards (1996-1998), the Research Citation Award from the Society of Critical Care Medicine, the AsMA Sidney D. Leverett, Jr. Award, ACSM Citation Award (second highest honor given by the College), the AsMA Arnold D. Tuttle Award, the Distinguished Alumnus Award from the Department of Kinesiology at San Jose State University, the US Army Combat Casualty Care Research Program Award for Excellence (highest honor given by the Army Medical Research & Materiel Command), the ISGP Nello Pace Career Award (highest honor given by the Society), the Outstanding Distinguished Alumnus Award from the College of Biological Sciences at the University of California at Davis, the EMS Today Top Ten Innovator Award, the Texas Regional ACSM Career Award, Order of Military Medical Merit selectee, and was inducted into the Space Foundation Technology Hall of Fame in 2008.

Dr. Convertino has been especially dedicated to the academic training and development of graduate students and junior scientists. He has mentored 12 master theses, 14 doctoral dissertations and 6 postdoctoral fellows as well as 20 undergraduate interns that resulted in authorship of more than 120 peer-reviewed publications. An additional 32 peer-reviewed publications have been authored by 20 graduate and undergraduate-level junior scientists who worked in his laboratory. In testimony to his commitment to support student research, Dr. Convertino worked with the Director of NASA Life Sciences and the ACSM Foundation to establish the ACSM NASA Space Physiology Student Research Grant that has funded the research of more than 75 graduate students from 1992 through 2021.