



**Alfred Ayala, Ph.D., M.S., M.A.**

Alfred Ayala (born in New Bedford, MA, USA; however, raised in the Cleveland, OH area) earned his *B.S.* at Bowling Green State University, Bowling Green, OH (1976), an *M.S.* in Biology (1979) and *Ph.D.* in Regulatory Cell Biology at Cleveland State University, Cleveland, OH (1985). Following which he was a *NIH Post-doctoral fellow* in the Department of Microbiology & Public Health at Michigan State University (MSU), East Lansing, MI (85-88), then *Research Associate* in the MSU Department of Surgery (1988-89) and, subsequently, obtained his 1<sup>st</sup> faculty positions (Assistant [1989] and Associate Professor [1993]) in the Department of Surgery at MSU prior to being recruited to RI Hospital/ Brown University, Providence, RI (1996). There he rose from Associate to Professor of Surgery (Research) (2000) and the Director (2023) of the Division of Surgical Research (DSR) at RI Hospital/ the Warren Alpert School of Medicine at Brown University. Alfred's professional activities include service as both a standing member of the NIH SAT & LCMI-study sections, numerous ad hoc NIH study panels/site visit teams, VA-DoD Merit Review

Board and on the Shriners Hospitals'-Research Advisory Board for the last 12 yrs. He has been recognized by his peers through election as an *American Association for the Advancement of Science "Fellow"*; election to President, Treasurer & Scientific Program chair of the Shock Society; selected as a *SIS Fellow* and has served as Recorder/Executive council member of the Surgical Infection Society (SIS); section editor for the *J Immunology* of American Association of Immunologists, and the Society of Leukocyte Biology (SLB) council member, *J Leukocyte Biology* editorial board, as well as Scientific Program Co-chair for the SLB 2013 meeting. Dr. Ayala is a recipient of a *NIH-NIGMS MIRA-EI* (2015), the Shock Society *Scientific Achievement and Distinguished Service Awards*, was the recipient of the *2024 SLB Legacy Award* and served as a consultant for the '*NIH/NIGMS Working Group on Sepsis*' (2019). He has over 300 published manuscripts/ review articles to his credit and has been continuously funded by the NIH since 1991. He is also the Program Director for the DSR's post-doctoral T32 training program as well as a training faculty member of 3 Brown University-Graduate Programs, the IMSD program, 2 other T32 programs, the Leadership Alliance/T35-undergraduate program and is an adjunct Professor in the University of RI graduate program. This has culminated in the great privilege/pleasure of collaborating with many wonderful folks, ranging from undergraduates, medical students, graduate students, surgical residents, post-doctoral fellows to junior faculty, to advance the science we have done during his time at Brown and MSU<sup>1</sup>.

The work his laboratory has done centers on developing a better understanding of what the mechanisms of severe traumatic shock, injury and/or sepsis are and what their impact is on the critically ill individual's immune response that contribute to increasing their susceptibility to subsequent infection and multiple organ failure<sup>1</sup>. Excitingly, while working for years on defining numerous defects of components of innate/adaptive immune responsiveness caused by shock and/or sepsis (e.g., such as contributing to the identification of the critical roles cell death mechanisms play in these conditions and its role in injury/sepsis induced immune suppression), we have uncovered novel role(s) for a number of the cell-associated regulatory receptors (a.k.a., checkpoint proteins) of the B7-CD28 superfamily, e.g., PD-1, BTLA, VISTA, and their respective cell surface ligands, in this pathological process<sup>1</sup>.

1. [Ayala A. Mechanisms of immune suppression in sepsis/shock: One investigator's/lab group's experience \(SLB 2024 Legacy Award Presentation\). \*J Leuko Biol\* 117: qiaf108, 2025 \(PMID: 40702670\)](#)