CARLOS ROSALES, Ph. D.

EDUCATION

BS (biochemistry & microbiology), MS (pharmaceutical chemistry), Universidad Nacional Autónoma de México (UNAM); PhD (immunology), Washington University is St. Louis, Missouri at School of Medicine; Postdoctoral Fellowship (pharmacology), University of North Carolina at Chapel Hill.

PROFESSIONAL EXPERIENCE

2009 – Present, Professor at Immunology department, Instituto de Investigaciones Biomédicas, UNAM; 2023 - Present, Member of the Membership Committee of Society for Leukocyte Biology; 2022 - Present, Editorial board member for Journal of Leukocyte Biology; 2022, Organizer/Chair of the "Neutrophil 2022" International Symposium, Palacio de Medicina - UNAM, Mexico City; 2019 - 2022, Head of Immunology department, Instituto de Investigaciones Biomédicas, UNAM; 2001 - 2009, Associate Professor at Instituto de Investigaciones Biomédicas, UNAM; 2004 - 2005, Visiting professor (sabbatical year) at Pharmacology Department, University of North Carolina at Chapel Hill, NC; 2004, Organizer of the XVI Mexican Immunology Congress, Sociedad Mexicana de Inmunología (Mexican Immunology Society); 2002 - 2004, Secretary – Treasurer for Sociedad Mexicana de Inmunología (Mexican Immunology Society); 1995 - 2001, Assistant Professor at Instituto de Investigaciones Biomédicas, UNAM; 1993 - 1995, Post-Doctor at Pharmacology Department, University of North Carolina at Chapel Hill, NC; 1987 - 1993, Immunology graduate student at Washington University, School of Medicine, St. Louis, MO; 1984 - 1987, Research Assistant at the Wistar Institute, Philadelphia, Pennsylvania.

RESEARCH INTERESTS

UNDERSTANDING INNATE IMMUNE CELL FUNCTION IN INFLAMMATION AND INFECTIONS

1) Characterizing signal transduction events from Fc receptors in phagocytic cells. Antibody signals are delivered to phagocytic cells via Fc receptors. The distinct cellular response depends on the particular Fc receptor involved. Using cellular and molecular approaches, we explore the individual cellular function (phagocytosis, production of reactive oxygen species, NETosis) that is triggered by antigen-antibody immune complexes.

2) Characterizing neutrophil functions in chronic inflammation, particularly obesity and cancer. Neutrophils are now recognized as important cells with functions well beyond microbial control. In obesity and cancer, neutrophils display opposite functions both promoting and inhibiting the disease. This dual role on neutrophils is not well understood, but it has the potential become a novel therapeutic tool in diseases associated with systemic inflammation.

STATEMENT OF INTEREST

Having conducted research on leukocyte biology for over 30 years, I appreciate the tremendous value of networking among scientist to drive science forward. The Society of Leukocyte Biology

(SLB) has offered me this opportunity throughout the years. In each SLB scientific meeting participants can learn not only about recent discoveries in the field, but also meet first-hand other members and as a consequence establish new collaborations and even life-long friendships. Following this example, I organized the XVI Mexican Immunology Congress (2004), and "The Neutrophil 2022" international symposium. In these meetings an important effort was made to include besides members from academia, early-career scientists, clinicians, and members from industry interested in leukocytes. The goal was to introduce participants to different aspects of research.

Following this principle, as a member of the SLB Council, I would concentrate on emphasizing the value of immunology without borders as outlined in the following points:

1) It is important to spread the activities of the SLB to scientists in other countries to provide novel networking opportunities among members by organizing workshops, courses, and webinars.

2). These activities also should promote the enrollment of new members by revealing to young scientists, fresh career opportunities not only in academia, but also in industry and government.

3) Disseminate the SLB activities and SLB members' discoveries to the general public. Through educational programs for the general public, the SLB could gain further support for the academic activities of their members.

I believe these actions will strengthen the SLB community and offer novel opportunities for scientific development.