

Jacob Cohen, Ph.D.

Dr. Jacob Cohen is currently a Program Executive at NASA Headquarters, Exploration Systems Mission Directorate (ESMD) Advanced Capabilities Division (ACD). In this position Dr. Cohen is the lead for fundamental biology and free flyers (unmanned spacecrafts). His responsibilities include providing leadership, insight and oversight, advocacy, budgetary and technical guidance, and expert advice to ACD, ESMD and NASA regarding free flyers, technologies, payloads, science, instruments, infrastructure, and mechanisms which can enable and facilitate ACD, Exploration, Science, Space Operations, and other NASA and related Space Missions.

Pursuing interests in evolutionary biology, Dr. Cohen first completed a Doctoral Dissertation at New York University on the evolution of Hawaiian *Drosophila* (1989 to 1996). His research involved evolution, biogeography and protein polymorphism studies on the *Drosophila hawaiiensis* subgroup using molecular and morphological techniques on *Drosophila* collected from the Hawaiian Islands, grown in the laboratory or obtained from museums.

Continuing and refining his interest in evolutionary biology, Dr. Cohen completed a Postdoctoral Fellowship at Cedars-Sinai Medical Center's Ophthalmology Research Laboratories (1997 to 2000). During this fellowship he studied viral host relationships using the rabbit ocular model of Herpes Simplex Virus - 1 (HSV-1). While the main focus of his research involved the understanding of the role the LAT gene plays in HSV-1 latency, he also worked on signal transduction and HSV-1 reactivation, HIV and HSV-1 interactions, HSV-1 gene therapy vectors and evolution of CMV.

Pursuing an understanding of evolutionary changes due to extreme environments, Dr. Cohen first started to work at NASA Ames Research Center in 2001 as a Senior Scientist and Site Manager (Science and Technology Corp. (STC); 2001 to 2005). During his tenure at NASA Ames Research Center his responsibilities included being a Site Manager for STC, the Small Payloads Project Scientist and Testing Coordinator/Lead, the Space Station Biological Research Project Incubator Developer Science Lead, and a research scientist.

Expanding his management experience portfolio, Dr. Cohen held the positions of Special Assistant to the Director of Advanced Capabilities at NASA Headquarters (Universities Space Research Association (USRA); 2005 to 2007) and Chief Operating Officer (COO) and Senior Scientist at National Stem Cell, Inc. (2006 to 2007). In his position at NASA Headquarters, Dr. Cohen was responsible for life science management activities related to the Human Research Program and Non-Exploration research portfolio in the Advanced Capabilities Division. In his position at National Stem Cell, Inc., Dr. Cohen was an integral part of developing the company's mission to advance the science of regenerative medicine using innovative approaches to stem cell therapeutics.

Mentoring, teaching and inspiring the next generation of scientists is a continuous role Dr. Cohen pursues. He has taught a variety of courses, given seminars and judged science fairs.