2012 Neurological Infections Lectureship
Carol Glaser

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The ISNV is honored to have Dr. Carol Glaser present the 2012 Neurological Infections Lecture at the 11th International Symposium on NeuroVirology. Dr. Glaser received her undergraduate degree, followed by a Doctor of Veterinary Medicine and a Master’s degree in Preventive Veterinary Medicine from the University of California Davis. She went on to obtain an M.D. from Tulane University School of Medicine, and completed a residency in pediatrics and a fellowship in pediatric infectious disease at the University of California San Francisco (UCSF). During residency at UCSF, she trained in epidemiology through the Center for AIDS Prevention Studies. Dr. Glaser was appointed as the Chief of Sexually Transmitted Disease Control Branch at the California Department of Public Health. She later accepted an appointment as the Medical Officer, and then, Chief of the Viral and Rickettsial Disease Laboratory Branch in the California Department of Public Health. She is currently Chief of the Encephalitis and Special Investigations Section for the California Department of Public Health, where she works with county health departments and physicians throughout California to identify illnesses of unknown etiology.

Dr. Glaser offers a unique prospective on neurovirology, having both a veterinary and medical background and she brings this expertise to the California Encephalitis Project (CEP), where she has served as director since its inception in 2012.
1998. The CEP was initiated to investigate and characterize etiologic agents and the epidemiologic features of encephalitis. The CEP examines infectious viral groups including herpesviruses, enteroviruses, and arboviruses. Non-viral etiologies such as amoeba, rickettsia and mycoplasma also fall within the CEP’s scope of investigation. Testing for infectious agents was coordinated by the Centers for Disease Control and incorporated many other laboratories throughout the world to identify and characterize pathogens. Under the direction of Dr. Glaser, over 6000 cases have been referred to the CEP, and although the etiology of many cases remain unexplained, several important findings regarding encephalitis have emerged. Limitations of molecular testing for encephalitis, and the relative importance of enteroviruses, varicella and Balamuthia mandrillis have been identified, as well. Dr. Glaser and the CEP have worked closely with pathogen discovery experts to identify potential novel infectious agents with the relative importance of non-infectious etiologies being realized, as well. For example, a recent publication identified autoimmune NMDAR encephalitis as the leading cause of encephalitis in individuals younger than 30 years of age within the CEP cohort (Clinical Infectious Diseases, 54:899-904, 2012), adding it to the viral etiologies including enterovirus, herpes simplex virus type 1 (HSV-1), varicella-zoster virus (VZV), and West Nile virus (WNV). Dr. Glaser works closely with Dr. Josep Dalmau to identify other novel auto-antibodies, particularly those that mimic an infectious etiology. Finally, the CEP has characterized this heterogeneity disorder into ‘clinical profiles’, which helps to identify potential risk factors as well as clues to etiologies. In addition, about two years ago, Dr. Glaser with several other interested parties, initiated the International Encephalitis Consortium with collaborators throughout the country as well as several international collaborators. The purpose of the consortium is to advance knowledge of causes, diagnostic strategies, treatment and outcome of encephalitis, and implement actionable clinical and public health interventions based upon this knowledge.

Dr. Glaser is an Associate Clinical Professor of Pediatrics Infectious Diseases at the UCSF, where she received the UCSF House Staff Teaching Award for excellent training of physicians. Dr. Glaser is the recipient of multiple Superior Accomplishment Awards from the California Department of Public health and numerous awards for excellence in the study of Infectious Diseases. The ISNV congratulates Dr. Glaser on her contributions in identifying and combating pathogenic agents that impact significantly on numerous aspects of public health.