

**Professor Dennis Levi, O.D., Ph.D.**

Professor of Optometry and Vision Science, and Dean of the School of Optometry at UC Berkeley.

Professor Levi's research on amblyopia and spatial vision has been continuously funded by NEI for the last 37 years, and he has published over 260 scientific papers and two books. Levi served as Chair of the Vis B. (now CVP) study section, and was a member of the Strabismus, Amblyopia & Visual Processing Panel of the National Eye Institute. He also served on the National Research Council (NAS) Committee on Disability Determination for Visual Impairments. He is Editor-In-Chief and Chairman of the Board of *Journal of Vision* and has served on a number of other Editorial Boards (*Vision Research*, *Ophthalmic and Physiological Optics* and *Investigative Ophthalmology and Visual Science*). Levi was elected Fellow of the Optical Society of America for his research contributions in the areas of amblyopia and spatial vision, and has received numerous awards including the Glenn Fry Award, the Garland Clay Award and the Prentice Medal from the American Academy of Optometry.



In the last 10 years there has been a rekindling of interest in amblyopia; a new understanding of the underlying patho-physiology based in part on new brain imaging methods such as functional MRI, and a massive shift in our thinking about the treatment of amblyopia fueled in part by a number of important clinical trials. Experience- dependent plasticity is closely linked with the development of sensory function. However, there is also growing evidence for plasticity in the adult visual system. This plenary session re-examines the notions of critical period and sensitive period for a variety of visual functions. One critical issue is the extent to which alternative neural structures are recruited to restore these visual functions. Recent experimental and clinical evidence for the rehabilitation of amblyopia will be discussed.