Tuesday 31 May 2016, Stephen Burns 2pm (venue TBA) (Indiana)

Special colloquium:

Design of an Adaptive Optics Scanning Laser

Ophthalmoscope for Clinical Research: Measuring structural and functional properties of the human retina

Stephen Burns received a B.S. in Engineering from Lehigh University and a Ph.D. in Biophysics from the Ohio State University. He is currently a Professor of Optometry at Indiana University. Dr Burns is a fellow three societies, the Optical Society of America, The Association for Research in Vision and Ophthalmology, and the American Academy of Optometry and is the 2010 awardee of OSA's Tillyer Award for contributions to vision science. He was the Chairman of OSA's Medical Optics Division in 1991, is the past Editor in Chief of the Journal of the Optical Society of America A. Dr. Burns has served on numerous panels including the NIH BDPE Study Section and the FDA's Panel on Ophthalmic as well as on the Board of Directors of OSA.

Dr. Burns's research involves the effects of aging and disease on the human retina. To pursue these research interests Dr. Burns also develops state of the art retinal imaging technology using adaptive optics. This technology, derived from astronomy, allows the optical imperfections of the eye (optical aberrations) to be bypassed using modern optical techniques, and this his lab is able to image individual cells in the living human retina in real-time.