

CELLULAR AND MOLECULAR BIOLOGY OF PHOTORECEPTORS
IN HEALTH AND DISEASE

January - March, 2006

Lectures: 9:00-10:30 a.m. Round Tables: 10:30-12 noon
Maumenee 501 Conference Room

January

- 17 Development and organization of the retina, with emphasis on the outer retina **(Ruben Adler)**
- 19 Cell biology of rods and cones **(Ruben Adler)**
- 24 RPE and Müller cells **(Peter Campochiaro)**
- 26 Genetic, metabolic and biochemical bases of photoreceptor susceptibility to injury **(Ruben Adler)**
- 26 Round Table
- 31 RPE and Müller cells II, retinal detachment **(Peter Campochiaro)**

February

- 2 Molecular mechanisms in *Drosophila* photoreceptor development **(Craig Montell)**
- 7 Phototransduction and photoreceptor degenerations in *Drosophila* **(Craig Montell)**
- 9 Electroretinography, rod and cone response dynamics **(Robert Massof)**
- 9 Round Table
- 14 Phototransduction and visual cycle **(King-Wai Yau)**

February

- 16 The integration of molecular biology to clinical concepts of age-related macular degeneration (**Jim Handa**)
- 21 Dark adaptation, spectral sensitivity and color mixture (**Robert Massof**)
- 23 Defects in visual pigments responsible for abnormalities of rod and cone vision (**Jeremy Nathans**)
- 23 Round Table
- 28 Retinitis pigmentosa and related conditions (clinical aspects) (**Daniel Finkelstein**)

March

- 2 Gyrate atrophy (**David Valle**)
- 7 Therapeutic approaches: Gene therapy (**Don Zack**)
- 9 Strategies for the identification of genetic abnormalities responsible for retinal degenerations (**Donald Zack**)
- 9 Round Table
- 14 Animal Models of RP and AMD (**Nick Marsh-Armstrong**)
- 16 Therapeutic approaches: Trophic factors, stem cells and retinal transplantation (**Ruben Adler**)