

Scientific Program

**Fourth U.S. Symposium
on
Ocular Epidemiology**

***15 Years of Progress: What Have We Learned?
What Are Future Needs and Challenges?***

**Monday – Wednesday
January 29-31, 2007
Sarasota, Florida**

Monday, January 29, 2007

OPENING SESSION

Chair: *Ronald Klein, MD, MPH*

- 8:30 am **Welcome and Announcements** — *Barbara S. Hawkins, PhD*
- 8:45 am **Keynote Address** — *Harvey M. Fineberg, MD, PhD, President, Institute of Medicine*
- 9:15 am **Discussion**— *Frederick L. Ferris, III, MD, National Eye Institute*

SESSION II: — Glaucoma

Chair: *M. Cristina Leske, MD, MPH*

- 9:25 am **Invited Paper:** Overview of Current Knowledge — *M. Cristina Leske, MD, MPH*

Contributed Papers

- 9:35 am *Wong TY, Wong WL, Shen S, Aung T, Sandar M, Saw SM.* Intraocular pressure in an urban Malay population: The Singapore Malay Eye Study (SiMES).
- 9:50 am *Musch DC, Gillespie BW, Cashwell LF, Lichter PR, Niziol LM for the CIGTS Group.* Factors associated with intraocular pressure (IOP) prior to and during nine years of treatment in the Collaborative Initial Glaucoma Treatment Study.

- 10:05 am *Feuer WJ, Budenz DL, Anderson DR, Beiser JA, Schiffman J, Parrish RK, Piltz-Seymour JR, Gordon MO, Kass MA, Ocular Hypertension Treatment Study Group.* Detection and prognostic significance of optic disc hemorrhages observed during the Ocular Hypertension Treatment Study.
- 10:20 am *Kodjebacheva G,* Coleman AL, Stone KL, Hochberg MC, Pedula KL, Ensrud KE, Cauley JA, Hochberg MC, Badali F, Mangione CM.* Glaucoma risk and the intake of antioxidants among older women. The Study of Osteoporotic Fractures.
- 10:35 am *Leske MC, Heijl A, Hyman L, Bengtsson B, Dong LM, Yang Z, EMGT Group.* Glaucoma progression factors after extended follow-up of patients in the Early Manifest Glaucoma Trial.

10:50 am **REFRESHMENT BREAK**

SESSION III: —Cataract

Chair: *Sheila K. West, PhD*

11:20 am **Invited Paper:** Overview of Current Knowledge —
Sheila K. West, PhD

Contributed Papers

11:30 am *Glynn RJ, Rosner B.* Comparison of methods to evaluate risk factors for alternative cataract types.

* **Self-identified new or young investigator**

- 11:45 am *Salomao SR, Cinoto RW, Berezovsky A, Araujo-Filho A, Mitsuhiro MH, Mendieta L, Morales PHA, Belfort R, Ellwein LB.* A population-based eye survey of older adults from a low-income urban area of São Paulo, Brazil: Prevalence of vision impairment and blindness.
- 12:00 nn *Kempen JH, Min Y-I, Lyon AT, Lewis RA, Jabs DA, Heinemann M-H, Dunn JP.* Cataract risk among patients with the acquired immune deficiency syndrome (AIDS).
- 12:15 pm *Muñoz B, Muñoz A, West SK.* The role of mortality in explaining differences in cataract surgery utilization between African-Americans and Caucasians. The Salisbury Eye Evaluation (SEE) Project.
- 12:30 pm **GROUP LUNCH**

SESSION IV: — *Vision Impairment and Impact on Affected Individuals*

Chair: *James M. Tielsch, PhD*

Invited Papers

- 1:30 pm Impact of Vision Impairment on Quality of Life and Functional Ability — *Cynthia Owsley, MSPH, PhD*
- 1:40 pm Overview of Current Knowledge — *James M. Tielsch, PhD*

* ***Self-identified new or young investigator***

Contributed Papers

- 1:50 pm *Janz N, Wren PA, Musch DC, Niziol LN, Gillespie BW, CIGTS Study Group.* Relationship between visual function and driving concerns in the Collaborative Initial Glaucoma Treatment Study (CIGTS).
- 2:05 pm *Zhang L,* Baldwin K, Muñoz B, Bandeen-Roche K, Turano K, Hassan S, Munro C, Lyketsos C, West SK.* Impact of vision and cognition on brake reaction speed, a measure of driving performance: Salisbury Eye Evaluation Driving Study (SEEDS).
- 2:20 pm *Friedman DS, Freeman E, Munoz B, Jampel HD, West SK.* Glaucoma and mobility performance: The Salisbury Eye Evaluation Project.
- 2:35 pm *Zheng DD,* Lam BL, Arheart KL, Christ SL, Caban AJ, Lee DJ.* Visual impairment and suicide mortality: National Health Interview Survey (NHIS) 1986-1996.

SESSION V. Genetic Epidemiology and Gene-Environment Interactions

Chair: *Sudha Iyengar, PhD*

Contributed Papers

- 2:50 pm *Wojciechowski R,* Ibay G, Ciner E, Bailey-Wilson J, Stambolian D.* Quantitative trait linkage analysis of ocular refraction in African-American and Caucasian-American populations.

* **Self-identified new or young investigator**

- 3:05 pm *Seitzman RL, * Cummings SR, Mahajan VB, Mangione CM, Cauley JA, Ensrud KE, Stone KL, Hochberg MC, Hillier TA, Sinsheimer JS, Yu F, Coleman AL, Study of Osteoporotic Fractures Research Group.* Estrogen receptor alpha and matrix metalloproteinase 2 polymorphisms and age-related macular degeneration (AMD) in older women. The Study of Osteoporotic Fractures.
- 3:20 pm *Wang JJ, Ross R, Tuo J, Burlutsky G, Tan A, Chan C-C, Mitchell P.* Joint effects of LOC387715 polymorphism with smoking, inflammatory markers, or hemostatic factors on the risk of age-related maculopathy.

3:35 pm **REFRESHMENT BREAK**

SESSION VI: — Genetic Epidemiology of Complex Diseases

Panel Organizer and Moderator: *Sudha Iyengar, PhD*

Invited Panelists: *Joan E. Bailey-Wilson, PhD*
Jerome Rotter, PhD

4:10 pm Presentations and Discussion by Panelists

5:10 pm General Discussion

5:30 pm **Adjournment of Scientific Sessions for the Day**

7:00 pm **Reception and Dinner for All Registrants and Guests** (*Speakers: Stanley P. Azen, PhD, and Friends*)

* **Self-identified new or young investigator**

Tuesday, January 30, 2007

8:25 am **Announcements**

SESSION VII: — Statistical and Methodologic Issues

Chair: *Maureen G. Maguire, PhD*

Contributed Papers

8:30 am *Massof RW, Ahmadian L.* What do different visual function questionnaires measure?

8:45 am *Miskala PH* for the Submacular Surgery Trials Research Group.* Evaluation of a minimum clinically meaningful change in NEI-VFQ scores.

9:00 am *Christ SL, * Lee DJ, Lam BL, Zheng D, Arheart KL, Caban AJ.* New advances in mortality analysis: Direct and indirect effects of visual impairment and ocular disease on mortality estimated in structural equation models.

9:15 am *Gilson MM, * Diener-West M, Hawkins BS for the COMS Group.* Comparison of mortality in patients enrolled versus eligible patients not enrolled in the Collaborative Ocular Melanoma Study (COMS) randomized trial of pre-enucleation radiation of large choroidal melanoma.

9:30 am *Rosner B, Glynn RJ, Lee MLT.* Extension of the rank sum test for observational clustered data: Two-group comparisons with group membership defined at the subunit level.

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9:45 am *Broman AT,* Katz J, Muñoz B, Bandeen-Roche K, Tielsch J, Friedman DS, West SK, Quigley HA.*

Estimating the individual rate of progressive visual field loss among those with open angle glaucoma using population-based prevalence data.

10:00 am *Foot BG,* Stanford MR.* The British Ophthalmological Surveillance Unit for the study of rare eye disease. Nine years of nation-wide surveillance across the United Kingdom.

10:15 am **REFRESHMENT BREAK**

SESSION VIII: —Retinopathy

Chair: *Barbara E. K. Klein, MD*

10:45 am **Invited Paper:** Overview of Current Knowledge of Diabetic Retinopathy — *Barbara E. K. Klein, MD*

Contributed Papers

10:55 am *Sun C,* Tikellis G, Liew G, Klein R, Larsen EK, Wong TY.* Apolipoprotein E gene and retinal microvascular signs in older people. The Cardiovascular Health Study.

11:10 am *Liew G,* Wong TY, Mitchell P, Wang JJ.* Re-examining the relationship of retinopathy to fasting plasma glucose. The Blue Mountains Eye Study.

* **Self-identified new or young investigator**

**SESSION IX: — Refractive Errors; Ocular Conditions of
Infants and Children**

Chair: Susan A. Cotter, OD, MS

Invited Papers

- 11:25 am Overview of Refractive Errors in Adults— *Leslie Hyman, PhD*
- 11:35 am Overview of Refractive Errors and Other Ocular Conditions of Infants and Children —*Rohit Varma, MD, MPH*

Contributed Papers

- 11:45 am *Roch-Levecq A-C, Brody BL, Klonoff-Cohen HS, Brown SI.* Prevalence of refractive errors in a population of low-income preschoolers.
- 12:00 nn *Jones LA,* Sinnott L, Mutti DO, Mitchell GL, Moeschberger ML, Zadnik K.* Parental history of myopia, sports and outdoor activities, and future myopia.
- 12:15 pm *Gwiazda J, Hyman L, Dong L, Everett D, Norton T, Kurtz D, Manny R, Marsh-Tootle W, Scheiman M, COMET Group.* Seven-year results from the Correction of Myopia Evaluation Trial (COMET) cohort.
- 12:30 pm *Vitale S, Sperduto R, Ellwein L, Ferris FL, Cotch MF.* Ethnic disparities in visual impairment due to uncorrected refractive error in the U.S.

* **Self-identified new or young investigator**

12:45 pm *Saw S-M, Wong WL, Sandar M, Wong TY.*
Prevalence of myopia in an urban Malay
population. The Singapore Malay Eye Study
(SiMES).

1:00 pm **GROUP LUNCH**

SESSION X: —Health Services and Economics

Chair: *Paul P. Lee, MD, JD*

Contributed Papers

2:00 pm *Rein DB.** A methodological estimation of quality
adjusted life year losses associated with visual
field decrements.

2:15 pm *Lee P, Rafferty W, Lobach D, Hunt M, Macri J.* Pilot
study of provider attitudes towards
complementary and alternative medicines in eye
care.

2:30 pm *Frick KD,* Akpala CU, Vision in Preschoolers Study
Research Group.* Relative economic value of
alternative methods of screening for visual
impairment in preschoolers.

2:45 pm *Gower EW,* Cassard SD, Bass EB, Schein OD,
Bressler NM.* Cost effectiveness of treatments for
age-related macular degeneration.

3:00 pm **REFRESHMENT BREAK**

* **Self-identified new or young investigator**

**SESSION XI: —Population-Based Studies: Where Do We
Go from Here?**

Moderators: *Rohit Varma, MD, MPH*
Tien Y. Wong, MBBS, MPH

Invited Panelists: *Anne L. Coleman, MD, PhD*
Malcolm Pike, PhD
A. Richey Sharrett, MD, DrPH

3:30 pm Introductions

3:35 pm Presentations and Discussion by Panelists

4:35 pm General Discussion

5:00 pm ***Adjournment of Scientific Sessions for the Day***

Wednesday, January 31, 2007

8:00 am **Announcements**

SESSION XII: – Age-Related Macular Degeneration

Chair: *Ronald Klein, MD, MPH*

8:05 am **Invited Paper:** Overview of Current Knowledge –
Ronald Klein, MD, MPH

Contributed Papers

8:15 am *Ying G-S,* Liu C, Maguire MG, CAPT Research Group.* Night vision and risk of vision loss, choroidal neovascularization (CNV), and geographic atrophy (GA) in the Complications of Age-related Macular Degeneration Prevention Trial (CAPT).

8:30 am *Coleman AL, Seitzman RL, Yu F, Cauley JA, Ensrud KE, Stone KL, Cummings SR, Hochberg MC, Pedula K, Mangione CM, Study of Osteoporotic Fractures Research Group.* Incidence of and risk factors for age-related macular degeneration (AMD) in older women. The Study of Osteoporotic Fractures.

8:45 am *Liu C,* Ying G-S, Maguire MG, McCannel C, CAPT Research Group.* Statin use and the incidence of choroidal neovascularization (CNV) in the Complications of Age-related Macular Degeneration Prevention Trial (CAPT)

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Fourth U.S. Symposium on Ocular Epidemiology Wednesday, January 31

- 9:00 am *SanGiovanni JP, Chew EY, Reed GF, Agron E, Sperduto RD, Clemons TE, Ferris FL for the AREDS Research Group.* The relationship of omega-3 long-chain polyunsaturated fatty acid (LCPUFA) intake and regular aspirin use with prevalent neovascular age-related macular degeneration.
- 9:15 am *Chew EY, SanGiovanni SP, Clemons T, Ferris FL, Milton RC for the AREDS Research Group.* The association of dietary lutein/zeaxanthin and omega-3 long-chain polyunsaturated fatty acids and advanced age-related macular degeneration in the Age-Related Eye Disease Study (AREDS).

SESSION XIV: — Ocular Epidemiology: What Next?

Moderator: *Leslie Hyman, PhD*

Invited Panelists: *Ronald Klein, MD, MPH*
Barbara E. K. Klein, MD
M. Cristina Leske, MD, MPH
Paul Mitchell, MD, PhD
James M. Tielsch, PhD
Sheila K. West, PhD
Richard P. Wormald, MBBCh, MSc

- 9:30 am Presentations and Discussion by Panelists
- 10:30 am General Discussion
- 11:00 am **REFRESHMENT BREAK**

Fourth U.S. Symposium on Ocular Epidemiology *Wednesday, January 31*

CLOSING SESSION

Chair: *Natalie Kurinij, PhD*

11:30 am ***Award for Best Paper by a Young or New Investigator*** — *Leslie Hyman, PhD*

11:35 am Comments from the Director of the National Eye Institute — *Paul A. Sieving, MD, PhD*

11:55 am Summing Up — *Ronald Klein, MD, MPH*

12.10 pm Final Announcements — *Barbara S. Hawkins, PhD*

12:15 pm **Adjournment of Fourth Symposium**