Prospectus for Fellowship Program In Pediatric Ophthalmology and Strabismus at Children’s Hospital of Pittsburgh, Division of Pediatric Ophthalmology University of Pittsburgh Medical Center, Department of Ophthalmology University of Pittsburgh School of Medicine

Richard W. Hertle, M.D., F.A.A.O., F.A.C.S., F.A.A.P.
1. INTRODUCTION:

It is important that most eye problems presenting in infants and children be corrected as early as feasible during childhood. Failure to correct these problems at an appropriate time early in life may result in permanent visual deficits, eye muscle disorders, and possibly even legal blindness. This early attention to a child’s ocular problems should eventually permit him or her to have optimal vision and binocularity (use of both eyes together) in adulthood. It is in the public interest that ophthalmologists who deal exclusively or principally with children be optimally trained to diagnose and treat disorders of the child’s eye. In an attempt to assure the highest quality of ophthalmic care for infants and children by ophthalmologists optimally trained in pediatric ophthalmology and strabismus we would like to initiate a Fellowship program within the Department of Ophthalmology here at Children’s Hospital of Pittsburgh.

The following is a list of American Association for Pediatric Ophthalmology and Strabismus (AAPOS) Approved Fellowship Programs. There are currently 55 positions at 40 Institutions in the United States and Canada. Most training positions are 12 months in length. There is no “Board” approval/testing for any subspecialty training within the field of Ophthalmology although Board Certification by The American Board of Ophthalmology is a requirement of AAPOS.

<table>
<thead>
<tr>
<th>Program Name</th>
<th>Program Director</th>
<th>City</th>
<th>State</th>
<th>Country</th>
<th>Position/s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children's Hospital LA/Cedar's Sinai</td>
<td>Kenneth Wright, MD</td>
<td>Los Angeles</td>
<td>CA</td>
<td>USA</td>
<td>1</td>
</tr>
<tr>
<td>USC/LA Children's Hospital</td>
<td>A.Linn Murphree, MD</td>
<td>Los Angeles</td>
<td>CA</td>
<td>USA</td>
<td>1</td>
</tr>
<tr>
<td>UCLA/Jules Stein Eye Institute</td>
<td>Sherwin J. Isenberg, MD</td>
<td>Los Angeles</td>
<td>CA</td>
<td>USA</td>
<td>2</td>
</tr>
<tr>
<td>UCSD Shiley/Naval Medical Ctr.</td>
<td>David Granet, MD</td>
<td>LaJolla</td>
<td>CA</td>
<td>USA</td>
<td>1</td>
</tr>
<tr>
<td>University of Colorado</td>
<td>Arlene V. Drack, MD</td>
<td>Aurora</td>
<td>CO</td>
<td>USA</td>
<td>1</td>
</tr>
<tr>
<td>Children's National Medical Ctr.</td>
<td>Mohamad S. Jaafar, MD</td>
<td>Washington</td>
<td>DC</td>
<td>USA</td>
<td>3</td>
</tr>
<tr>
<td>Bascom Palmer Eye Institute</td>
<td>Hilda Capo, MD</td>
<td>Miami</td>
<td>FL</td>
<td>USA</td>
<td>1</td>
</tr>
<tr>
<td>James Hall</td>
<td>Zane F. Pollard, MD</td>
<td>Atlanta</td>
<td>GA</td>
<td>USA</td>
<td>2</td>
</tr>
<tr>
<td>Emory University</td>
<td>Amy Hutchinson, MD</td>
<td>Atlanta</td>
<td>GA</td>
<td>USA</td>
<td>1</td>
</tr>
<tr>
<td>Children's Memorial Hospital</td>
<td>Janice Lasky, MD</td>
<td>Chicago</td>
<td>IL</td>
<td>USA</td>
<td>1</td>
</tr>
<tr>
<td>University of Illinois Eye &amp; Ear</td>
<td>Jeffrey Bloom, MD</td>
<td>Chicago</td>
<td>IL</td>
<td>USA</td>
<td>2</td>
</tr>
<tr>
<td>Indiana University</td>
<td>David Plager, MD</td>
<td>Indianapolis</td>
<td>IN</td>
<td>USA</td>
<td>2</td>
</tr>
<tr>
<td>University of Iowa</td>
<td>Ronald Keech, MD</td>
<td>Iowa City</td>
<td>IA</td>
<td>USA</td>
<td>2</td>
</tr>
<tr>
<td>University of Kentucky</td>
<td>Robert S. Baker, MD</td>
<td>Lexington</td>
<td>KY</td>
<td>USA</td>
<td>1</td>
</tr>
<tr>
<td>Wilmer/John's Hopkins</td>
<td>David Guyton. MD</td>
<td>Baltimore</td>
<td>MD</td>
<td>USA</td>
<td>2</td>
</tr>
<tr>
<td>Hospital</td>
<td>Name</td>
<td>Location</td>
<td>State</td>
<td>Country</td>
<td>Count</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>--------------------</td>
<td>--------------</td>
<td>-------</td>
<td>---------</td>
<td>-------</td>
</tr>
<tr>
<td>Boston Children's Hospital</td>
<td>Deborah VanderVeen, MD</td>
<td>Boston</td>
<td>MA</td>
<td>USA</td>
<td>1</td>
</tr>
<tr>
<td>Children's Hospital of Michigan/Kresge</td>
<td>John D. Baker, MD</td>
<td>Detroit</td>
<td>MI</td>
<td>USA</td>
<td>1</td>
</tr>
<tr>
<td>University of Michigan</td>
<td>Monte DelMonte, MD</td>
<td>Ann Arbor</td>
<td>MI</td>
<td>USA</td>
<td>2</td>
</tr>
<tr>
<td>University of Minnesota</td>
<td>C. Gail Summers, MD</td>
<td>Minneapolis</td>
<td>MN</td>
<td>USA</td>
<td>1</td>
</tr>
<tr>
<td>St. Louis University</td>
<td>Oscar Cruz, MD</td>
<td>St. Louis</td>
<td>MO</td>
<td>USA</td>
<td>1</td>
</tr>
<tr>
<td>Washington University</td>
<td>Lawrence Tyschen, MD</td>
<td>St. Louis</td>
<td>MO</td>
<td>USA</td>
<td>2</td>
</tr>
<tr>
<td>Children's Mercy Hospital &amp; Clinic</td>
<td>Scott Olitsky, MD</td>
<td>Kansas City</td>
<td>MO</td>
<td>USA</td>
<td>1</td>
</tr>
<tr>
<td>Manhattan Eye, Ear, &amp; Throat</td>
<td>Norman Medow, MD</td>
<td>New York</td>
<td>NY</td>
<td>USA</td>
<td>1</td>
</tr>
<tr>
<td>SUNY Buffalo/Children's Hospital</td>
<td>Jim Reynolds, MD</td>
<td>Buffalo</td>
<td>NY</td>
<td>USA</td>
<td>1</td>
</tr>
<tr>
<td>Duke University</td>
<td>Edward G. Buckley, MD</td>
<td>Durham</td>
<td>NC</td>
<td>USA</td>
<td>2</td>
</tr>
<tr>
<td>Cincinnati Children's Hospital</td>
<td>Constance West, MD</td>
<td>Cincinnati</td>
<td>OH</td>
<td>USA</td>
<td>1</td>
</tr>
<tr>
<td>Cleveland Clinic Foundation</td>
<td>Elias Traboulsi, MD</td>
<td>Cleveland</td>
<td>OH</td>
<td>USA</td>
<td>1</td>
</tr>
<tr>
<td>Ohio State University Children's Hospital</td>
<td>Gary Rogers, MD</td>
<td>Columbus</td>
<td>OH</td>
<td>USA</td>
<td>1</td>
</tr>
<tr>
<td>Oregon Health &amp; Science</td>
<td>Earl Palmer, MD</td>
<td>Portland</td>
<td>OR</td>
<td>USA</td>
<td>1</td>
</tr>
<tr>
<td>Wills Eye Hospital</td>
<td>Joseph H. Calhoun, MD</td>
<td>Philadelphia</td>
<td>PA</td>
<td>USA</td>
<td>2</td>
</tr>
<tr>
<td>Children's Hospital of Philadelphia</td>
<td>Monte Mills, MD</td>
<td>Philadelphia</td>
<td>PA</td>
<td>USA</td>
<td>2</td>
</tr>
<tr>
<td>Medical University of South Carolina</td>
<td>Richard Saunders, MD</td>
<td>Charleston</td>
<td>SC</td>
<td>USA</td>
<td>2</td>
</tr>
<tr>
<td>Vanderbilt University</td>
<td>Sean Donahue, MD, PhD</td>
<td>Nashville</td>
<td>TN</td>
<td>USA</td>
<td>1</td>
</tr>
<tr>
<td>Texas Children's Hospital/Baylor</td>
<td>David K. Coats, MD</td>
<td>Houston</td>
<td>TX</td>
<td>USA</td>
<td>2</td>
</tr>
<tr>
<td>University of Texas/Southwestern</td>
<td>David Weakley, Jr, MD</td>
<td>Dallas</td>
<td>TX</td>
<td>USA</td>
<td>1</td>
</tr>
<tr>
<td>Children's Hospital Regional Medical Ctr</td>
<td>Mark Greenwald, MD</td>
<td>Seattle</td>
<td>WA</td>
<td>USA</td>
<td>1</td>
</tr>
<tr>
<td>University of Wisconsin</td>
<td>Burton Kushner, MD</td>
<td>Madison</td>
<td>WI</td>
<td>USA</td>
<td>1</td>
</tr>
<tr>
<td>Dalhousie/IWK</td>
<td>G. Robert LaRoche, MD</td>
<td>Halifax</td>
<td>NS</td>
<td>CAN</td>
<td>1</td>
</tr>
<tr>
<td>Hospital for Sick Children</td>
<td>Alex Levin, MD</td>
<td>Toronto</td>
<td>ON</td>
<td>CAN</td>
<td>2</td>
</tr>
<tr>
<td>McGill Children's Vision Center</td>
<td>Robert Koenekoop, MD</td>
<td>Montreal</td>
<td>QB</td>
<td>CAN</td>
<td>1</td>
</tr>
</tbody>
</table>
2. GOALS OF THE CHP FELLOWSHIP PROGRAM

A. To train fellows to provide high quality medical and surgical eye care for all children and adults with strabismus and disorders of ocular motility.
B. To prepare those fellows interested in an academic career for competitive positions by special education skills transfer regarding research activity, funding applications, teaching and program development in pediatric ophthalmology.
C. To prepare those fellows interested in community pediatric ophthalmology for competitive positions with emphasis on pediatric eye care consultation and service as well as private office economics and general infrastructure.
D. To add too, and provide more, resources for the highly qualified house staff that is present in the Departments of Ophthalmology and Pediatrics here at CHP and UPMC.

3. MEASURABLE OBJECTIVES CONSIDERED MARKERS FOR SUCCESS

A. Graduates of the fellowship will acquire specialty eye care skills for the pediatric population and those adults with strabismus.

The clinical, didactic and research curriculum, the Children’s Hospital environment, a fully functional in-house Department of Pediatrics, the association with multiple faculty, and a premiere ophthalmology residency program ensure that the Fellow will complete the program with the multiple and diverse skills needed to provide subspecialty care. (See requirements below).

B. Graduates of the fellowship will provide subspecialty pediatric eye care services for community and/or academic practices after graduation.

Although there are no “Board” examinations in the subspecialty of Pediatric Ophthalmology and Strabismus, in order to be a member of the American Association of Pediatric Ophthalmology and Strabismus (AAPOS) an Ophthalmologist must be a Board Certified Ophthalmologist (The American Board of Ophthalmology), have trained in an AAPOS approved fellowship program and have at least 75% of their practice dedicated to pediatric ophthalmology and strabismus. The commitment of the fellowship program is to train future members of AAPOS by fulfilling the requirements of an AAPOS fellowship.

C. Graduates of the fellowship will be able to compete for leadership positions in academics and research in pediatric ophthalmology.

The exposure of the Fellow to the academic environment (i.e., clinical laboratories, multicenter trials, grant and aid acquisition, and resident and student teaching) within the Division of Pediatric Ophthalmology along with the requirement to participate in a research project will allow the Fellow to acquire the skills and background to compete for, and succeed in, academic positions after graduation.

D. We will seek to recruit and fill our fellowship program with highly qualified resident applicants who meet or exceed the National standards for other pediatric ophthalmology fellowship programs. Fellowship applicants will be subject to the same criteria as their categorical counterparts.
- Dr. Hertle has a National and International reputation in the field of Pediatric Ophthalmology and has supervised the training of 14 Fellows at three institutions since 1990 (Children’s Hospital of Philadelphia, The National Eye Institute, The National Institutes of Health and Columbus Children’s Hospital). These Fellows are now practicing community and academic pediatric ophthalmology in the USA, Brazil, Turkey and Jordan. Dr.’s Cheng and Hoover are Fellowship trained pediatric ophthalmologists who have also been intimately involved with training Fellows with Dr. Al Biglan in Pittsburgh for many years. This experience and history will attract outstanding Fellow applicants.

- The Children’s Hospital of Pittsburgh environment rather than an “Eye Hospital” environment will attract outstanding Fellow applicants because it provides the Fellow maximum exposure to pediatric diseases, associated pediatric subspecialty service collaboration and up to date diagnostics and treatment modalities.

- The University of Pittsburgh and The University of Pittsburgh Medical Center and the supporting Department of Ophthalmology are Premiere Institutions/Departments and as such will assist in the recruitment of competitive candidates for the fellowship program.

4. QUALIFICATIONS OF THE APPLICANT:
   a. The applicant must have satisfactorily completed a residency program in ophthalmology and be eligible for a PA medical license.

5. QUALIFICATIONS OF THE PROGRAM:
   a. The training program must be based at an institution that is part of an approved ophthalmology residency program.
   b. The institution must be associated with a general pediatric training program.
   c. One position will be available.
   d. The program’s position will be offered through the “Match”.

6. QUALIFICATIONS OF THE FACULTY:
   a. The primary faculty of the program will include at least two voting members of AAPOS.
   b. The program director will have had at least five years of clinical experience following his/her fellowship training, and hold a current appointment in the ophthalmology department of the parent institution.
   c. At least one other faculty member will be an AAPOS member with at least 1 year of post-fellowship clinical experience.
   d. An existing program may replace this faculty member with an AAPO&S-eligible faculty for a period of time not to exceed two years.
   e. The program director will be engaged in ongoing research in the field of pediatric ophthalmology demonstrated by regular publications in refereed journals and/or presentation of research material at national meetings.
   f. The program director will be a voting member of AAPOS whose practice conforms to the minimum requirements for a Member as set forth in section 1.03 of the AAPO&S Bylaws (currently 75% pediatric ophthalmology or strabismus).
7. DURATION AND LOCATION OF FELLOWSHIP TRAINING PROGRAM
a. A minimum of 12 months training is required.
b. At least 50% (6 months) of the fellow’s time must be spent at the parent institution.
c. If some of the 12 months experience is to be spent away from the parent institution, verification and documentation of such training is the responsibility of the program director.

8. DUTIES OF THE PROGRAM DIRECTOR
a. Maintain an active clinical service in pediatric ophthalmology and/or strabismus at the parent institution.
b. Periodically assess the fellows by means of adequate documentation and make adjustments for areas of deficiency.
c. Personally supervise the administration and implementation of these fellowship guidelines.
d. Certify the satisfactory completion of the course of training by the fellow at the end of the training program.
e. Inform the CHP ACGME Committee within 30 days of any substantive change in the program (such as but not limited to: change in program director, loss of faculty, change in location).
f. Inform their accepted applicants of the deadlines for application to AAPO&S as members-in-training and regular (post-fellowship) membership.
g. Distribute to all applicants to the program an “information sheet” (to be supplied by the AAPOS Training & Accreditation Committee) that will include information about “approved” programs and their relationship to AAPO&S membership, a list of “approved” programs, a list of programs on probation, etc, and any other information deemed appropriate by the AAPOS Training & Accreditation Committee.

9. CHARACTERISTICS OF THE PROGRAM
a. Medical liability coverage will be provided to the fellow by the program during his/her training.
b. The medical and surgical care provided by the fellow during his/her training will be supervised.
c. A journal club specific to the pediatric ophthalmology/strabismus program will be held at least six times per annum.
d. The fellow will prepare and present teaching conferences and participate in the teaching of residents and/or medical students.
e. The fellow will be involved in the ongoing research activities of the department.
f. The teaching program will include:
   1. An ongoing program of study of the pertinent literature, guided by the faculty.
   2. Informal and formal didactic teaching.
   3. The provision of appropriate clinical material, i.e., patients for examination, evaluation, treatment, and discussion.
g. The program will include teaching in at least the following subject areas:
   1. Strabismus
      a. Anatomy, physiology, neuroanatomy
      b. Sensory adaptation and testing
      c. Amblyopia diagnosis and treatment
d. Refraction management
e. Esodeviations and Exodeviations
f. Vertical and incomitant strabismus
g. Ophthalmoplegic syndromes
h. Surgery; primary and complex
i. Oculinum
j. Interpretation of eye movement recordings

2. Pediatric Ophthalmology
   a. Vision development in infancy and childhood
   b. Embryological basis of conditions relative to pediatric ophthalmology
c. Neonatal ophthalmology including retinopathy of prematurity
d. Genetics, inborn error of metabolism, and syndromes involving the eye
e. Electrodiagnostic testing
f. Ocular manifestations of systemic disease in children
g. Vision and learning; dyslexia
h. Vision screening
   i. Treating the visually handicapped child; low vision management
j. Pediatric ocular trauma
k. Pediatric ocular tumors
l. Ultrasound, CT scan and MRI in pediatric ophthalmology

3. Areas of the following as related to pediatric ophthalmology and vision development
   a. External ocular disease
   b. Lacrimal disorders
c. Lid disorders
d. Corneal disorders
e. Uveal disorders
f. Lens disorders
g. Pediatric glaucoma; primary and secondary
h. Retina and vitreous
   i. Neuro-ophthalmology

   h. Surgery
      1. Surgical training is required in this surgical sub-specialty.
      2. The fellow must perform and/or assist the primary surgeon in a minimum of 75 major surgical cases. Fifty of these cases must be strabismus and must be done under the direct supervision of an AAPOS member or attending with equivalent qualifications.

10. DOCUMENTATION AND VERIFICATION
   a. Documentation and verification of the program’s activities will be required annually and include the following:
      1. A surgical log will be kept by the fellow and reviewed by the program director. The director will keep a summary of the year’s surgical experience. The log will include diagnosis, surgery performed, and whether the fellow is first assistant or primary surgeon.
      2. Provide a list of conferences/lectures given by the fellow.
3. Provide a list of journal club subjects.
4. A list of submitted/published papers and papers/research projects presented at national meetings by members of the department including fellows.
5. Representative weekly schedule (multiple schedules, if changes in schedule occur significantly during the year). This shall include descriptions of each activity center, how the fellow functions within that activity, and the staffing or mechanism of supervision.
6. Documentation and verification material will be collected and evaluated by the CHP ACGME committee.

11. SETTING

Children's Hospital of Pittsburgh houses the Department of Pediatric Ophthalmology at The University of Pittsburgh Medical Center, which includes full-time and part time clinical and research faculty representing all ophthalmic specialties. Children's Hospital is the only pediatric tertiary health care provider in western Pennsylvania. The hospital is one of the largest pediatric facilities in the United States. It is certified as a Level I trauma center and serves as the major pediatric referral center for western PA, with a catchment area that extends into West Virginia and Ohio. The hospital serves many children with eye and visual system diseases. Fellows will be able to interact with professionals and patients from urban, suburban, and rural settings.

12. RRC/ACGME REQUIREMENTS

Fellowships in Pediatric Ophthalmology and Strabismus do not require formal RRC/ACGME accreditation. The Fellowship at CHP will meet the standards set by both the CHP and AAPOS guidelines for approved fellowship positions. These principals are parallel those that are used to define ACGME resident and fellow approved programs. This includes regular program, fellow, department and self evaluations.

13. PREVIOUS TRAINEES AND POSITIONS

See above, Dr. Hertle has directed fellowships and trained 14 Fellows since 1990 at three institutions. All Fellowship training programs were AAPOS approved. The Fellowship would be a new program here at CHP.

14. MATCHING PROGRAM

The Fellowship will be part a National Matching program administrated by the San Francisco Matching Program (http://www.sfmatch.org/).

15. NATIONAL NEED

There are about 650 Fellowship trained physicians practicing full time Pediatric Ophthalmology and Strabismus in North America. Most pediatric eye care in this Country and Canada is provided by primary eye care professionals, i.e., Comprehensive Ophthalmologists and Optometrists. There a great need for formally trained pediatric eye care physicians in almost every US rural area. There is also a paucity of academic pediatric ophthalmologists as evidenced by the presence of multiple open academic positions.
16. CHP FACULTY AND SERVICE
At present there is only one full time Pediatric Ophthalmologist at CHP. This is the first full time Pediatric Ophthalmologist at CHP and the University of Pittsburgh. There is a rich history (decades) of community pediatric ophthalmology support of clinical care, education and research at CHP. There are presently six other community pediatric ophthalmologists who assist with clinical care, education and research at CHP and the University Department of Ophthalmology. They are all AAPOS members with clinical appointments at the University of Pittsburgh Department of Ophthalmology and are willing to participate in the education of the future CHP Fellows. We anticipate that within the next 2-3 years an additional full-time staff Ophthalmologist will be needed at CHP and would like the Fellowship program to be a candidate source for this position.

17. RESEARCH AND GRANT MONEY
We have a long history of successful participation in, and support of, research activity. Dr. Hertle is currently a Professor in the Department of Ophthalmology and has published over 100 papers, 25 chapters and a textbook. Dr. Hertle is actively part of almost 10 million dollars of NEI/NIH support (P.I., steering committee, writing committee on NEI/NIH U10 Multicenter Grant, DSMC Committee Member of second NEI/NIH U10 Multicenter Grant, Vice-Chair on Executive Committee of a third U10 Multicenter Grant, Co-Investigator of an RO3 NEI/NIH awarded to Scientist in the Department of Pediatric Ophthalmology at CHP) and the Director of the Laboratory of Visual and Ocular Motor Physiology, in the Department of Pediatric Ophthalmology at CHP. We are active in obtaining grant support locally, and, from private organizations such as Fight for Sight.

18. PRIMARY FACULTY (See Attached Brief C.V.’s)

Richard W. Hertle MD
Kenneth P. Cheng, MD
Darren L. Hoover, MD

19. CONCLUSIONS
Our vision for this Fellowship Program is to create an environment that will provide the fellow with expert professional skills, career development and leadership mentoring in preparation for full time pediatric ophthalmology practice in either an academic or community setting.
ATTACHMENT A
FACULTY PUBLICATIONS (Recent)

Richard W. Hertle, M.D.


29. Hertle RW, Dell’Osso LF, FitzGibbon, EJ, Thompson DJS, Yang D, Mellow S. Horizontal Rectus Tenotomy In Patients with Congenital Nystagmus: Results In Ten Adults (Ophthalmology 2003;11;2097-2115)

32. Depalo C, Hertle RW, Yang, D. Eight Muscle Surgical Treatment In A Patient With Acquired Nystagmus And Strabismus. (Binocular Vision Quarterly, 2003:18;151-158)
42. Hertle RW, Supranuclear eye movement disorders, acquired and neurological nystagmus Chapter in: Pediatric Ophthalmology and Strabismus, 3e David Taylor and Craig Hoyt, eds.(In-Press)
Darren L. Hoover, MD


Kenneth P. Cheng, MD

ATTACHMENT B
FACULTY PRESENTAIONS (Recent)

Richard W. Hertle, MD

1. Lecture and Grand Rounds Presentation: Clinical Trial of Extraocular Muscle Tenotomy on Patients with Congenital Nystagmus (CN): A Gift from “Man’s Best Friend.” Hertle RW, Dell’Osso, LF, FitzGibbon, EJ, Miles, FA, Thompson D, Yang, Mellow SD, Departments of Ophthalmology, Walter Reed Army Medical Center and The National Naval Medical Center, Bethesda, MD. 01/12/01

2. Hertle RW, Dell’Osso, LF, FitzGibbon EJ, Miles FA, Thompson, D, Yang, D. Horizontal Rectus Tenotomy in the Treatment of Congenital Nystagmus (CN) Results of a Study in Ten Adult Patients (Phase I) (Poster) The Annual Meeting of The American Association for Pediatric Ophthalmology and Strabismus, March 22, 2001 Orlando, FLA


13. Paper Presentation: Hertle RW, Dell’Osso LF, FitzGibbon EJ, Miles FA, Thompson, D, Yang, D. Preliminary Results of Performing the Tenotomy Procedure on Adults with Congenital Nystagmus (CN), Paper Presentation, The 9th International Strabismological Association Meeting, 4/19/02, Sydney, Australia.
14. Seminar Lecture: Hertle RW, Nystagmus In Infancy and Childhood: Diagnosis and Treatment, 4/19/02, Sydney Children’s Hospital, Sydney, Australia.
19. Faculty: American Academy of Optometry and American Optometric Association Sponsored Summer Research Institute, Southern California College of Optometry, Fullerton, CA 8/7/02 through 8/11/02.
20. Lecture: Nystagmus In Infancy and Childhood, Southern California College of Optometry, Fullerton CA 8/6/02.
24. Paper Presentation: Clinical Trial Results of the Tenotomy Procedure on Patients with Congenital Nystagmus, The 22nd Annual Ophthalmological Conference, Grant Medical Center, Continuing Medical Education, 9/13/02, Columbus, Ohio.
25. Paper Presentation: Clinical Trial Results of the Tenotomy Procedure on Patients with Congenital Nystagmus, 10/23/02, American Academy of Ophthalmology Annual Meeting, Orlando, FLA.
27. Faculty, Joint Commission on Allied Health Personnel in Ophthalmology, Orlando, FLA: 10/21/98 course #10MO1, "Assessment of Vision in Preliterate Children". Granet D and Hertle RW.
28. Clinical/Basic Science Lectures, Pediatric Eye Diseases, Ohio State University College of Optometry, 2001-2002 Academic Year to Present.


32. Course Presentation, 3/25/03, Amblyopia Treatment Studies, Repka, MX, Holmes J, Hertle RW. The Annual Meeting of The American Association for Pediatric Ophthalmology and Strabismus, Waikoloa, HA

33. Poster Presentation, Hertle RW, Stevens, D. The Visual Acuity Relationship to Anomalous Head Position (AHP) in Patients with Infantile Nystagmus Syndrome,” The Annual Meeting of The American Association for Pediatric Ophthalmology and Strabismus, Waikoloa, HA


35. Hertle RW, Dell’Osso, LF, FitzGibbon EJ, Miles FA, Thompson, D, Yang, D. Horizontal Rectus Tenotomy in the Treatment of Congenital Nystagmus Results of a Phase I Study in Ten Adult Patients (Paper)ARVO Annual Meeting, May 8, 2003, Fort Lauderdale, FLA.


37. Yang, D, Hertle RW, Gaze Dependent optotype recognition in Infantile Nystagmus (INS) Patients, (Poster)ARVO Annual Meeting, May 6, 2003, Fort Lauderdale, FLA.


39. Hertle RW, Moderator for Platform Session; Clinical Trials at ARVO Annual Meeting, May 8, 2003, Fort Lauderdale, FLA

40. Hertle RW, Course 2061, Visual Rehabilitation of Pediatric Cataracts, East-West Eye Conference 2003, 10/24/03, Cleveland, Ohio.

41. Hertle RW, Course 2063, Diagnosis and Management of Pediatric Glaucoma, East-West Eye Conference 2003, 10/24/03, Cleveland, Ohio

42. Hertle RW, Course 2056, Nystagmus and Eye Movement Disorders In Infancy and Childhood, East-West Eye Conference 2003, 10/24/03, Cleveland, Ohio

43. Hertle RW, Nystagmus in Infancy and Childhood, Association for Education and Rehabilitation of the Blind and Visually Impaired, Regional Meeting, Deer Creek State Park, November 7, 2003

47. Faculty, Joint Commission on Allied Health Personnel in Ophthalmology, Orlando, FLA: 11/16/03 course #83084, "Assessment of Vision in Preliterate Children", Granet D and Hertle RW.
51. Paper Presentation, Hertle RW, Yang, D, Hill VM. Clinical and Electrophysiological Effects of Extraocular Muscle Surgery on 75 Patients with Infantile Nystagmus Syndrome (INS), ARVO Annual Meeting, April 27, 2004, Fort Lauderdale, FLA.
52. Paper Presentation, Yang D, Hertle RW, Hill VM. Vertical Optokinetic Nystagmus (OKN) and Binocular Motion Rivalry: Role of OKN Internal Gain, ARVO Annual Meeting, April 27, 2004, Fort Lauderdale, FLA.
53. Poster Presentation, Hill VM, Yang, D Hertle RW. Gaze-Dependent, Time Restricted Visual Acuity In Patients with Infantile Nystagmus Syndrome, ARVO Annual Meeting, April 27, 2004, Fort Lauderdale, FLA.
62. September 19, 2001 – Visiting Professor Series, Children’s Hospital of Columbus and The Central Ohio Pediatric Society Meeting, COPS Dinner Meeting, “Ocular Torticollis or Anomalous Head Postures Due To Visual System Disease”, Columbus, Ohio.


64. September 20, 2001 – Visiting Professor Series, Children’s Hospital of Columbus and The Central Ohio Pediatric Society Meeting, Visiting Professor Luncheon, “The Emergency Eye Exam in a Crying Baby”, Columbus, Ohio.


71. January 13, 2004 – Visiting Professor of Ophthalmology, Wills Eye Hospital, Philadelphia PA.

72. May 5, 2004 – Arthur W. Stickle, M.D., Pediatric Ophthalmology Lecture and Visiting Professor, Department of Ophthalmology and Children’s Hospital, Washington University Medical Center, St. Louis, MO
Darren L. Hoover, MD


Kenneth P. Cheng, MD

3. Common Pediatric Eye Disorders in Primary Care KP Cheng Management of the Childbearing-Age family in Health and Illness Duquesne University (Nurse Practitioner Program) Pittsburgh, PA April 12, 2001
4. Timely Trauma Topics: Ocular Trauma KP Cheng Children’s Hospital of Pittsburgh, PA October 5, 2001
8. Common Pediatric Eye Disorders in Primary Care KP Cheng Management of the Childbearing Age Family in Health and Illness Duquesne University – Graduate Nursing Course April 4, 2002
11. Common Pediatric Eye Disorders in Primary Care KP Cheng Management of the Childbearing Age Family in Health and Illness Duquesne University – Graduate Nursing Course April 24, 2003
15. If My ROP is Resolved, Why Can’t my Baby See Well? KP Cheng Conference – Low Vision and Blindness in Infants and Children with Special Emphasis on Cortical Vision Impairment Pittsburgh, PA June 3 – 6, 2004
17. Lectures in Pediatric Ophthalmology KP Cheng University of Pittsburgh Ophthalmology Resident Lecture Series, 2004
## ATTACHMENT C
### REPRESENTATIVE MONTHLY SCHEDULE FOR FELLOW

<table>
<thead>
<tr>
<th>MONDAY 1 &amp; 5</th>
<th>TUESDAY 1 &amp; 5</th>
<th>WEDNESDAY 1 &amp; 5</th>
<th>THURSDAY 1 &amp; 5</th>
<th>FRIDAY 1 &amp; 5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AM</strong></td>
<td><strong>PM</strong></td>
<td><strong>AM</strong></td>
<td><strong>PM</strong></td>
<td></td>
</tr>
<tr>
<td>SURGERY</td>
<td>OFFICE/ROP</td>
<td>SURGERY</td>
<td>SURGERY</td>
<td>ADULT SURGERY</td>
</tr>
<tr>
<td>OFFICE</td>
<td>SURGERY</td>
<td>OFFICE</td>
<td>RESEARCH</td>
<td>ADULT MOTILITY</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MONDAY 2</th>
<th>TUESDAY 2</th>
<th>WEDNESDAY 2</th>
<th>THURSDAY 2</th>
<th>FRIDAY 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AM</strong></td>
<td><strong>PM</strong></td>
<td><strong>AM</strong></td>
<td><strong>PM</strong></td>
<td></td>
</tr>
<tr>
<td>SURGERY</td>
<td>SURGERY</td>
<td>OFFICE</td>
<td>RESEARCH</td>
<td>OFFICE</td>
</tr>
<tr>
<td>OFFICE/ROP</td>
<td>OFFICE</td>
<td>SURGERY</td>
<td>ADULT MOTILITY</td>
<td>SURGERY</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MONDAY 3</th>
<th>TUESDAY 3</th>
<th>WEDNESDAY 3</th>
<th>THURSDAY 3</th>
<th>FRIDAY 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AM</strong></td>
<td><strong>PM</strong></td>
<td><strong>AM</strong></td>
<td><strong>PM</strong></td>
<td></td>
</tr>
<tr>
<td>SURGERY</td>
<td>SURGERY</td>
<td>OFFICE</td>
<td>RESEARCH</td>
<td>ADULT SURGERY</td>
</tr>
<tr>
<td>OFFICE/ROP</td>
<td>OFFICE</td>
<td>SURGERY</td>
<td>ADULT MOTILITY</td>
<td>ADULT SURGERY</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MONDAY 4</th>
<th>TUESDAY 4</th>
<th>WEDNESDAY 4</th>
<th>THURSDAY 4</th>
<th>FRIDAY 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AM</strong></td>
<td><strong>PM</strong></td>
<td><strong>AM</strong></td>
<td><strong>PM</strong></td>
<td></td>
</tr>
<tr>
<td>SURGERY</td>
<td>SURGERY</td>
<td>OFFICE</td>
<td>RESEARCH</td>
<td>OFFICE</td>
</tr>
<tr>
<td>OFFICE/ROP</td>
<td>OFFICE/JOURNL CLUB</td>
<td>SURGERY</td>
<td>ADULT MOTILITY</td>
<td>SURGERY</td>
</tr>
</tbody>
</table>

- **WEEK 1 AND 5**: 5 OUTPT SESSIONS, 4 SURGERY, 1 RESEARCH
- **WEEK 2**: 5 OUTPT SESSIONS, 4 SURGERY, 1 RESEARCH
- **WEEK 3**: 4 OUTPT SESSIONS, 5 SURGERY, 1 RESEARCH
- **WEEK 4**: 5 OUTPT SESSIONS, 4 SURGERY, 1 RESEARCH, JOURNAL CLUB
- **40 PER/MONTH**: 19 CLINIC SESSIONS, 17 SURGERY, 4 RESEARCH, 1 JOURNAL CLUB