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International Council of Ophthalmology (ICO) and ICOFoundation Activities

ICOFoundation and ICO
World Ophthalmology Congress®
Ophthalmic Education and Training
Ophthalmology Program Directors Courses
Resource Center for Ophthalmic Educators
ICO International Examinations
ICO Fellowships
Ophthalmology Training and Eye Care Centers
Correction of Refractive Error
Advocacy for Preservation and Restoration of Vision
Research in Ophthalmology and Eye Care
ICO Trustees
ICOFoundation Donor Honor Roll

Worldwide Eye Care: Needs and Opportunities

Worldwide needs and opportunities for eye care are more clearly defined than ever before. The prevalence of severe visual impairment and blindness is more precisely known and opportunities to preserve, restore and enhance vision are greater than at any time in the past. To realize these opportunities, global eye care must strive to provide access for all in need, evidence-based treatment and equity to serve patients regardless of ability to pay.

Worldwide Eye Care Needs. Throughout the globe, the World Health Organization estimates that 285 million people are severely visually impaired and of these, 39 million are blind. The burden of lost sight is uneven with nearly 87% of the world’s visually impaired living in developing countries. More than 1.4 million children are blind, but visual impairment and blindness are more prevalent among adults 50 years of age and older, and females are more at risk at every age, in every part of the world (Ref. 1. World Health Organization: www.who.int/mediacentre; www.who.int/blindness/en/index.html).

Adding to the tragic burden of visual impairment, the world’s population is projected to increase in number and, even more significantly, advance in age. Between 2000 and 2030 in the United States, for example, the number of people age 65 years and older will increase from 35 million to more than 71 million (Ref. 2. Lee P. Into the Looking Glass: Factors and Opportunities to Reshape Eye Care in the Next 25 Years. Ophthalmol 2007;14:1-2). With each decade of increased age over 40, the prevalence of vision loss and blindness increases threefold (Ref. 3. Taylor HR. Eye Care: Dollars and Sense. Am J. Ophthalmol 2007;143:1-8).

Opportunities to Preserve, Restore and Enhance Vision. At least 75% of disease-related vision loss and nearly 100% of visual impairment due to refractive error are avoidable — either preventable or treatable — with currently available knowledge and technology (Ref. 1 & Ref. 4. Global Initiative for the Elimination of Avoidable Blindness. World Health Organization/PBL/97.61). For example, cataract and glaucoma, the top two causes of disease-related blindness, can be overcome with ophthalmic surgery and ophthalmic care.

For conditions without effective treatment, genomics, proteomics, immuno-modulation, regenerative medicine, nanotechnology and biomedical science are forging new and improved treatments at an increasingly rapid pace.

To realize the opportunities for preservation, restoration and enhancement of vision, global eye care must strive to provide access for all in need, effective treatment using evidence-based and cost-efficient therapy, and equity to serve people regardless of socioeconomic circumstance or ability to pay.

Eye care deserves a high priority in the health care system of every country. Prevention of vision loss and blindness has a major beneficial impact on the productivity and quality of life for the affected individual, strengthens the productivity of the associated family and adds to the welfare and prosperity of the nation.

The world today presents unprecedented economic, environmental and geopolitical interdependency. More than at any time in the past, the well-being of each individual is linked to that of every other. The reality of extensive and avoidable visual impairment and blindness throughout the world compels global action to obtain the best possible vision for every person.

Bradley R. Straatsma, M.D., J.D.
President, ICOFoundation

The burden of lost sight is uneven with nearly 87% of the world’s visually impaired living in developing countries.
The International Council of Ophthalmology Foundation (ICOFoundation; www.icofoundation.org), established in 2002, acts to promote ophthalmic education, advocate quality eye care and advance scientific ophthalmology through support of International Council of Ophthalmology programs.

In 2010, the ICOFoundation combined substantial support for ongoing ICO programs with a steep trajectory of innovation. Activities inaugurated in the current report year are:

- Subspecialty Fellowships, one year in duration, commenced at the ICO/Alcon Ophthalmology Training Center, University Eye Hospital, Ljubljana, Slovenia.

- ICO Helmerich RRF International Fellowships, sponsored by the Retina Research Foundation, began with appointment of Fellows from Egypt and Iran.

- ICO Resource Center for Ophthalmic Educators. Evolving from the online ICO World Ophthalmology Residency Development (WORD) forum, the Resource Center for Ophthalmic Educators recognizes the epochal increase in online information and computer-interactive instruction by presenting principles, practices and tools for use in ophthalmic education online.

In 2010, the ICOFoundation also responded to the “black swan” natural disasters in Haiti and Pakistan. Following the 7.0 magnitude earthquake that devastated Haiti on January 12, 2010, the ICO and ICOFoundation contributed funds to the Pan-American Association of Ophthalmology Haiti Relief Project. In reaction to the destructive monsoon rains and ensuing floods in Pakistan, the ICO and ICOFoundation established the ICO Eye Care Relief Fund for Pakistan. With leadership by Dr. M. Babar Qureshi, ICO Trustee and CEO of Pakistan’s Comprehensive Health and Education Forum (CHEF) International, the Relief Fund provided medical and eye care, food distribution and safe water to those most in need.

In all actions, the ICOFoundation was led by the Board of Directors. With activities throughout the year, the Board, meeting on October 17, 2010, recognized with a Resolution of Appreciation, the contributions of Mr. Takakazu Morita, Chairman Emeritus of Santen Pharmaceutical Co., Ltd., at the conclusion of his term as a Director of the Foundation. In additional action, the Board elected two new members. Bringing experience and perspective to the Board, the new Directors are:

- Anne L. Coleman, M.D., Ph.D., Professor of Ophthalmology and Epidemiology at the University of California, Los Angeles (UCLA), and
- Mr. Akira Kurokawa, President and CEO of Santen Pharmaceutical Co., Ltd.

The Board of Directors also reaffirmed the planned succession of ICOFoundation leadership from Bradley R. Straatsma, M.D., J.D. as President to Stephen J. Ryan, M.D. as President in 2011.
The International Council of Ophthalmology (ICO; www.icoph.org) membership consists of more than 100 national ophthalmology societies and more than 30 multinational ophthalmology subspecialty organizations. Registered as a nonprofit organization in Switzerland, the ICO uniquely represents world ophthalmology. In 2010, the ICO Board of Trustees (please see page 25), Advisory Committee and Program Leadership concentrated on refocusing ophthalmic education, enhancing eye care worldwide, advancing ophthalmic leadership and planning for the future.

**Refocusing Ophthalmic Education.** Led by Dr. Bruce E. Spivey (United States), ICO President, and Dr. Mark O. M. Tso (United States and China), ICO Education Committee Chair, Refocusing Ophthalmic Education recognizes the change in medical education from emphasis on duration of training to assessment of competence in specific areas such as medical knowledge, patient communication and surgical skills. Refocusing Ophthalmic Education also incorporates the principles of adult learning, the increased availability of online educational materials and computer-interactive procedures to evaluate learning and retention.

With a continuum of curricula, courses, examinations, fellowships and programs of continuing professional development, the ICO encourages career-long learning and competence for ophthalmologists and allied health professionals.

**Enhancing Eye Care Worldwide.** The ICO, as the ophthalmology organization officially recognized by the World Health Organization, acts to enhance eye care worldwide by promoting the integration of eye care in

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national health plans and the increased allocation of resources for eye care in national health plans. Additional activities relate to promulgating Eye and Vision Care Guidelines for therapy worldwide and establishing global standards for “Vision Requirements for Driving Safety” and “Rehabilitation of Vision-Related Functioning.”

The ICO also works with the WHO and the International Agency for the Prevention of Blindness (IAPB) to support “VISION 2020: The Right to Sight”, an international initiative with the goal of eradicating preventable blindness worldwide by the year 2020. Through the WHO, support of VISION 2020, promulgation of guidelines and standards, and coordination with member societies, the ICO employs multiple channels to enhance eye care worldwide.

Planning for the Future. While looking forward, the ICO recognizes the past. In 2010, “International Ophthalmology: 1982 – 2007” was published by Gottfried O. H. Naumann, M.D., ICO Honorary Life President, in association with Balder P. Gloor, M.D. and Peter G. Watson, M.B., B.Chir. This 25 year history summarizes the contributions of many leaders to the cause of ophthalmic education and prevention of blindness worldwide and is available online at http://www.flippingpages.de/live/naumann_1_online/.

With particular respect for the contributions of Yasuo Tano, M.D., who died while Treasurer of the ICO in 2009, the ICO has established the ICO Yasuo Tano International Fellowship to be awarded each year to an ophthalmologist from a developing country selected to complete an ICO International Fellowship in Japan. In addition, the Japanese Ophthalmological Society has created the World Ophthalmology Congress Tano Travel Grants to send 80 young Japanese ophthalmologists to the World Ophthalmology Congress® in 2010 and in 2012.

With a range of programs and a rapidly changing worldwide environment for health care, the ICO embarked on a new chapter of Strategic Planning in 2010. Meetings in Berlin, Chicago and Beirut advanced the process and further steps are planned at ICO meetings and congresses in 2011. The strategic planning process focuses on activities in 2011 – 2015 to advance ophthalmic education, enhance eye care delivery, develop ophthalmology societies and strengthen the ICO.

Elected to lead the ICO in 2010 – 2014 are:
• Bruce E. Spivey, M.D., M.Ed. (United States), President
• Akef El-Maghraby, M.D. (Saudi Arabia), Vice President
• Jean-Jacques C. De Laey, M.D., Ph.D. (Belgium), Secretary – General
• Hugh R. Taylor, A.C., M.D. (Australia), Treasurer
Organized by the International Council of Ophthalmology, the 2010 World Ophthalmology Congress® in Berlin, Germany on June 5 – 9, 2010, combined the XXXII International Congress of Ophthalmology, the 208th Congress of the German Ophthalmological Society and the 2010 German Academy of Ophthalmology Meeting. Led by Dr. Gerhard K. Lang (Germany), Congress President, and Dr. Gabriele E. Lang (Germany), Congress Program Director, the 2010 World Ophthalmology Congress® attracted more than 13,000 registrants from 145 countries who shared the brilliant program of ophthalmology subspecialty days and dozens of ophthalmology symposia reporting advances in ophthalmology and eye care. Added to these features were the World Ophthalmology Education Colloquium, the World Forum on Prevention of Blindness, the First ICO Fellowship Reunion for Hosts and Fellows, and the rich cultural identity of the traditional German Oktoberfest.

Augmenting the educational benefits, the ICO and ICO Foundation presented 30 of the Congress scientific presentations for viewing (audio and slides) on the Internet. Content areas including cataract, glaucoma, cornea, retina, pediatric ophthalmology, and uveitis were made available for online viewing without charge at www.icoph.org/woc2010webcasts.

The 2012 World Ophthalmology Congress® will convene at Abu Dhabi, United Arab Emirates with Dr. Abdulaziz AlRajhi (Saudi Arabia) as Congress President. In 2014, the World Ophthalmology Congress® will be held at Tokyo, Japan with Dr. Tetsuro Oshika (Japan) as Congress President.
ICO programs of education and training advanced in 2010 through actions of the ICO Education Committee, chaired by Dr. Mark O. M. Tso (United States), and the World Ophthalmology Education Colloquium during the World Ophthalmology Congress® at Berlin in June 2010. ICO educational programs increasingly incorporated the concepts of Refocusing Ophthalmic Education initiated by Dr. Bruce E. Spivey (United States), and coordination to provide a continuum of education from Ophthalmology Medical Student Education, through Ophthalmology Resident-Specialist Education and Career-Long Ophthalmology Continuing Education.

Ophthalmology Curricula
Focused on the question of “What to teach?”, task forces reviewed the ICO curricula for Ophthalmology Medical Student Education, Ophthalmology Resident-Specialist Education, Ophthalmology Continuing Education, and Ophthalmology Allied Health Education.

Ophthalmology Medical Student Education. Cataract, glaucoma, age-related macular degeneration and diabetic retinopathy are increasingly prevalent and of growing importance in world health care. Accordingly, the ICO and ICOFoundation are committed to ophthalmology education for medical students through a universally applicable curriculum. With revision by the ICO Medical Student Education Task Force led by Dr. Susan Lightman (United Kingdom) and Dr. Peter McCluskey (Australia), this curriculum presents a core of essential knowledge, additional content appropriate for specific geographic regions and measures for objective assessment of the student’s knowledge and skill (www.icoph.org/pdf/icocurricmed.pdf).

The medical student curriculum is augmented by the ICO Handbook for Medical Students Learning Ophthalmology, illustrated lectures and teaching images that are available online (www.icoph.org/med/resources.html).

In 2010, resources for education were enriched by production of the ICO Handbook for Junior Residents and Medical Students Learning Emergency Ophthalmology, authored by Dr. Susan Lightman (United Kingdom), Dr. Do Nhu Hon (Vietnam) and Dr. Peter McCluskey (Australia). The Handbook encourages students to study and document personal exposure to each of 31 conditions commonly associated with emergency presentation of an eye or visual system condition. As an individual student handbook, it may be downloaded from the Internet.

Ophthalmology Resident-Specialist Education. The ICO multinational task force on Ophthalmology Resident-Specialist Education led by Dr. Andrew G. Lee (United States) acts to determine the “need to know” for ophthalmologists throughout the world. The task force has developed and is currently revising the multilevel “Principles and Guidelines of a Curriculum for Education of the Ophthalmic Specialist” that is presented on the Internet (www.icoph.org/pdf/icocurricres.pdf).

Reflecting greater utilization, the European Board of Ophthalmology, led by President Marko Hawlina (Slovenia), accepted the ICO Resident-Specialist Curriculum as a scaffold for training of ophthalmic specialists in 2009. This action by the European Board of Ophthalmology directs attention to the knowledge, skills and additional competencies to be mastered during ophthalmology resident-specialist education.

Ophthalmology Subspecialist Education. The ICO Ophthalmology Subspecialist Education Task Force, formed in 2009 and led by Dr. Randall J. Olson (United States), is developing guidelines and standards for ophthalmology subspecialist education. For this work, the Task Force is assembling subcommittees representing subspecialty areas and training programs in nations throughout the world.

Activities of the Ophthalmology Subspecialist Education Task Force acknowledge the increasing role of fully trained subspecialists in the delivery of specialized services to preserve and restore vision.

Ophthalmology Continuing Education. A multinational Ophthalmology Continuing Education Task Force led by Dr. Juan Verdaguer (Chile) as Chair and Dr. Heather Mack (Australia) as Co-chair coordinates curriculum activity and program action concerning Ophthalmology Continuing
Education. This program identifies the need for continuing enhancement of knowledge, skills and ability to use advanced technology throughout a professional career. In basic form, the continuing education curriculum is listed on the Internet (www.icoph.org/pdf/icocurriccme.pdf).

In 2009, the ICO Continuing Education Task Force initiated a Visiting Professor Program that provides for a highly qualified ophthalmology specialist to devote one week or more to an ophthalmology training center in a developing country with emphasis on didactic training and skill enhancement.

The ICO Visiting Professor Program was initiated in 2009 with visits of Dr. Anthony Murray (South Africa) to Tanzania and Dr. Gabriel Coscas (France) to Algeria. In 2010, Dr. Francisco Contreras (Peru) traveled as Visiting Professor to Hospital San Felipe, Tegucigalpa, Honduras, and additional Visiting Professor travel was planned.

**Ophthalmology Allied Health Education.** Addressing allied health education, Dr. William F. Astle (Canada) and Dr. Lynn Anderson (United States) led a multinational ICO Task Force to consider the education of community-based allied health professionals, hospital-based allied health professionals and the range of associated professionals that perform orthoptic and technical services in the areas of ophthalmology and eye care delivery. The program developed by this Task Force is presented on the Internet (www.icoph.org/pdf/icocurricpara.pdf).

In 2010, Dr. Astle and Dr. Anderson recommended that the ICO coordinate allied health activities with the International Joint Commission on Allied Health Professionals in Ophthalmology to standardize the curriculum and performance standards for ophthalmology allied health professionals.

**Ophthalmology Education Resources**

To advance education, the ICO and American Academy of Ophthalmology (AAO) have collaborated since 2008, to provide ophthalmologists in developing nations free access to the AAO Ophthalmic News and Education (O.N.E.) Network. The ICO and AAO jointly established an International Advisory Panel to provide advice and work to make the O.N.E. Network increasingly useful to ophthalmologists in developing countries worldwide.

The ICO and AAO also collaborated in 2009 and 2010 to send, at no cost to the recipient programs, the AAO Basic and Clinical Science Course (BCSC) to nearly 200 additional ophthalmology residency training programs in economically disadvantaged developing countries each year. Distribution, supported by The Alcon Foundation, provides the 13 volume BCSC as a core educational component for resident training.
The ICO Task Force on Coordination and Education of Program Directors of Ophthalmology Residencies led by Dr. Karl Golnik (United States) conducted four Ophthalmology Program Directors Courses in 2010. These educational programs focus on methods of instruction, assessment of resident skills, changing resident behavior and measuring competence. In addition, these courses bring together the Program Directors of a nation or a large region and encourage ongoing interaction among ophthalmology resident educators. In a number of nations, the courses have led to annual meetings of Resident Program Directors.

**ICO Task Force on Coordination and Education of Program Directors of Ophthalmology Residencies**

Chair: Karl Golnik, M.D. (United States)
Members: Antony Arnold, M.D. (United States)
Pinar Aydin, M.D. (Turkey)
Enrique Graue-Wiechers, M.D. (Mexico)
Marko Hawlina, M.D. (Slovenia)
Andrew Lee, M.D. (United States)
Paulo Augusto Mello, M.D. (Brazil)
Tetsuro Oshika, M.D. (Japan)

### Ophthalmology Resident Program Directors Courses

**2004**
- **Mexico City, Mexico**  
  Chair: Dr. Enrique Graue-Wiechers (Mexico)  
  Participants: Program Directors of Mexico.

**2006**
- **Lima, Peru**  
  Chair: Dr. Jose Antonio Roca (Peru)  
  Participants: Program Directors of Peru, Bolivia and Ecuador.

- **Cairo, Egypt**  
  Chair: Dr. Fathi El Sahn (Egypt)  
  Participants: Program Directors of Egypt, Algeria, Bahrain, Iraq, Jordan, Kuwait, Lebanon, Libya, Pakistan, Qatar, Saudi Arabia, Sudan, Syria, Tunisia, Yemen and United Arab Emirates.

- **Buenos Aires, Argentina**  
  Chair: Dr. Ricardo Dodds (Argentina)  
  Participants: Program Directors of Argentina, Chile, Paraguay, Peru and Uruguay.

**2007**
- **Lahore, Pakistan**  
  Chair: Dr. M. Daud Kahn (Pakistan)  
  Participants: Program Directors of Pakistan, Afghanistan, Bangladesh, China, India and Maldives.

**2008**
- **Addis Ababa, Ethiopia**  
  Chair: Dr. Amir Bedi (Ethiopia)  
  Participants: Program Directors of Angola, Cameroon, Ethiopia, Ghana, Kenya, Malawi, Nigeria, Rwanda, South Africa, Sudan, Tanzania, Uganda, United Arab Emirates, Zambia and Zimbabwe.

- **Beijing, China**  
  Chair: Dr. Li Xiaoxin (China)  
  Participants: Program Directors of China

- **Bogota, Colombia**  
  Chair: Dr. Fernando Gomez (Colombia)  
  Participants: Program Directors of Colombia, Bolivia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Nicaragua, Panamá and Venezuela.

- **Bali, Indonesia**  
  Chair: Dr. Tjahjono Gondhowiardjo (Indonesia)  
  Participants: Program Directors of Indonesia, Laos, Maylasia, Nepal, Philippines, Thailand and Vietnam.

**2009**
- **Xi'an, China**  
  Chair: Dr. Li Xiaoxin (China)  
  Participants: Program Directors of China

- **Bogota, Columbia**  
  Chair: Dr. Fernando Gomez (Columbia)  
  Participants: Program Directors of Columbia and Haiti

- **Hyderabad, India**  
  Chair: Dr. Santosh Honaver (India)  
  Participants: Program Directors of India

**2010**
- **Ankara, Turkey**  
  Chair: Dr. Pinar Aydin  
  Participants: Program Directors of Turkey and Azerbaijan

- **Florianopolis, Brazil**  
  Chair: Dr. Karl Golnik (United States)  
  Participants: Resident Program Directors of Brazil

- **Portoroz, Slovenia**  
  Chair: Dr. Marko Hawlina (Slovenia)  
  Participants: Program Directors of Belgium, Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Rumania, Russia, Ukraine, United Kingdom and Slovenia.
Program Directors Courses

Program Directors and, in some instances, establishment of a curriculum or standards for resident training.

In 2010, the ICO and ICOFoundation conducted Program Directors Courses in China, Colombia, India and Turkey.

**China.** At Xian, China, on May 3 – 4, 2010, the Program Directors Course was led by Dr. Li Xiaoxin (China), Chair, and Dr. Karl Golnik (United States), Co-Chair. The program was cosponsored by the Chinese Ophthalmological Society and the ICOFoundation through an unrestricted grant from The Allergan Foundation. Faculty members also included Dr. Eduardo Mayorga (Argentina), and Dr. Gabriela Palis (Argentina) as well as ophthalmologists from China. Participation by more than 40 educators was enthusiastic. In follow-up correspondence, one participant wrote, “I was appointed to establish a new (ophthalmology) training center to improve knowledge in microsurgery skills for residents and fellows. I selected lectures and educational programs according to the curriculum supplied by the ICO. The training program is running successfully.”

Program Directors Course at Xian, China in May 2010. Attended by more than 40 educators, the Course was cosponsored by the Chinese Ophthalmological Society and The Allergan Foundation.

Program Directors Course in Bogota, Columbia in August 2010 led to formation of a Program Directors Council by the Columbian Society of Ophthalmology.
Columbia. At Bogota, Columbia, the Program Directors Course on August 9 – 10, 2010, was a follow-up of the initial Program Directors Course in Bogota on February 9 – 10, 2009. The 2010 program attracted 54 educators representing more than 90% of the ophthalmology resident programs in Columbia. With Dr. Fernando Gomez (Columbia), Chair, and Dr. Peter Quiroz (United States), Co-Chair, additional international faculty members were Dr. Eduardo Mayorga (Argentina) and Dr. Gabriela Palis (Argentina). More than 65% of the course was presented by Columbian ophthalmologists who had attended the initial meeting in 2009. A major topic was ophthalmology resident curriculum reform throughout Columbia in cooperation with the Columbian Society of Ophthalmology. Furthermore, announced at the Program Directors Course in 2010 was creation of a Program Directors Council to be composed of five Program Directors and the President of the Columbian Society. The Program Directors Council would meet quarterly and an annual meeting of Program Directors was planned in conjunction with the Columbian Society of Ophthalmology. By every measure, this course, sponsored by The Allergan Foundation, was instrumental in initiating a continuing process of improvement in ophthalmology resident training throughout Colombia.

India. At the L. V. Prasad Eye Institute, Hyderabad, India, the ICO Program Directors Course on October 4 – 5, 2010, was led by Dr. Santosh G. Honaver (India), Chair, and Dr. Karl Golnik (United States), Co-Chair. The faculty of ophthalmologists from India and the international faculty composed of Dr. Golnik, Dr. Andrew Lee (United States), Dr. Eduardo Mayorga (Argentina) and Dr. Gabriela Palis (Argentina) interacted with nearly 60 Ophthalmology Program Directors. As one attendee stated, “the atmosphere at the course was electric. I hope that the seeds that were sewn will help transform ophthalmic education in India.”

Turkey. At Ankara, Turkey, on March 31 – April 1, 2010, the Program Directors Course was Chaired by Dr. Pinar Aydin (Turkey) and Co-Chaired by Dr. Karl Golnik (United States). The international faculty consisted of Dr. Golnik, Dr. Anthony Arnold (United States), Dr. Marko Hawlina (Slovenia), Dr. Andrew Lee (United States) and Dr. Bruce Spivey (United States). The meeting agenda was determined, in part, by a needs assessment completed by the Turkish ophthalmologists prior to the meeting. Format included lecture, small group discussion and large group interaction. Participants were 38 representatives from ophthalmology training programs throughout Turkey and one program director from Azerbaijan.
In 2010, the Task Force on Emerging Technologies for Teaching and Learning Chaired by Dr. Eduardo Mayorga (Argentina) and actively advanced by Dr. Gabriela Palis (Argentina) and others continued to extend online options appropriate for global ophthalmic education. Online content included a steadily increasing array of blogs, articles and resources pertaining to adult learning, computer-interactive instruction and assessment procedures in the English language and Spanish language.

Updated monthly, the World Ophthalmology Residency Development (WORD) Forum developed a library of lectures with complete audiovisual content, videos of ophthalmic surgery and tools for assessment. These were planned for use by Ophthalmology Program Directors as means of advancing knowledge and skills related to the ICO Ophthalmology Resident – Specialist Curriculum.

During the 2010 report year, the Task Force responded to the epochal change in the methodology of teaching at undergraduate and graduate levels by evolving from the WORD Forum to a more universal Resource Center for Ophthalmic Educators. This Center is designed to provide resources for educators in the continuum of ophthalmology medical student instruction, resident – specialist training, fellowship and career-long continuing education. The Resource Center is a necessary evolution to provide access to the massive amount of available information, to utilize technology that has advanced beyond the printed word and to employ the technological skills and learning preferences of contemporary students.

Currently in an early phase of development, the Resource Center for Ophthalmic Educators meets a distinct need and provides major opportunities for the advance of ophthalmic education in future years.
The ICO International Examinations in Basic Science Related to Ophthalmology, Theoretical Optics and Refraction and Ophthalmology Clinical Sciences are formal written examinations that present questions prepared by a multinational committee of examiners. Examinations are set at the same standard as the highest board, college and qualifying examinations in the world.

Examination questions are prepared in English and translated into Chinese, French, Spanish and Portuguese. At the time of examination, the English version is presented along with the alternate language so that comparisons can be made by the candidate.

Successful passage of the Basic Science, Optics and Clinical Sciences Examinations is recognized by specific certificates. In Turkey and a number of other countries, the ICO Examinations are part of the national examination for certification as an ophthalmologist.

With increasing acceptance throughout the world, a differential fee structure was introduced for the ICO Examinations to keep the fees as low as possible for candidates from economically disadvantaged nations.

The ICO Examinations are directed by Dr. David Taylor, M.B., Ch.B., D.Sc. (Med) (United Kingdom) as Chair of the ICO Examinations Committee. Dr. Taylor is assisted by Ms. Nicola Quilter, Examinations Executive, and the Examinations Staff.

Since the Basic Science Examination was inaugurated in 1994 and the Clinical Sciences Examination was initiated in 1998, 19,297 candidates have voluntarily applied for and taken the examinations. On April 15, 2010, 1,990 candidates completed the Basic Science, Optics and Clinical Sciences Examinations at 103 sites in 63 countries.

In 2009, the ICO approved Dr. David Taylor’s proposal for an ICO International Advanced Examination. This examination is at a higher level than the ICO Basic Science, Optics and Clinical Sciences Examinations and includes epidemiological and ethical topics as well as questions emphasizing clinical experience. Successful candidates will be able to use the post-nominal acronym FICO (Fellow of the International Council of Ophthalmology). On October 21, 2010, 173 applicants took the ICO Advanced Examination.

Information regarding all of the ICO International Examinations may be obtained online at www.icoexams.org.
The ICO Fellowship Program serves to advance the education, technical expertise and professionalism of young ophthalmologists from developing countries who apply for fellowship training at the world’s leading ophthalmology centers and are committed to return to their home countries with new knowledge and skills.

To meet specific needs, the ICO Fellowship Program offers the ICO International Fellowships, three months in duration with the special option for an additional three months in a sandwich fellowship; the ICO Alcon Ophthalmology Subspecialty Fellowships at University Eye Hospital, Ljubljana, Slovenia, one year in duration; and the ICO Helmerich RRF International Fellowships that provide one year of training in an ophthalmology subspecialty.

ICO International Fellowships. Inaugurated in 2001, the ICO International Fellowships under leadership of Dr. Veit-Peter Gabel (Germany) provide three months of advanced training at leading ophthalmology departments. Fellowships are awarded to young ophthalmologists from developing countries who are preferably in a teaching position, preferably hold the ICO International Examination Certificates in Basic Science, Optics and Clinical Sciences, and are committed to return to their country of origin after the fellowship.

Fellowships are offered in Comprehensive Ophthalmology and in specialized areas such as Medical Retina, Vitreoretinal Surgery, Cornea, Pediatric Ophthalmology and Strabismus, Glaucoma and Oculoplastic Surgery. Fellows are taught the latest methods of diagnosis and therapy, and are given the opportunity to improve practical skills and broaden their ophthalmological knowledge.

ICO International Fellowships are offered at more than 120 institutions that have agreed to accept ICO Fellows and identified the characteristics of their programs on the Internet. Candidates apply to a host institution via the Internet, goals of the fellowship are established and language issues affecting communication are considered. Following acceptance by the host institution and evaluation of all relevant information, ICO International Fellowships are awarded. To control costs, all parts of the ICO International Fellowship application, review, award process and follow-up report are conducted online (www.icoph.org/fellow).

In 2010, 80 ICO International Fellowships were awarded to applicants from 27 countries, including for the first time a fellowship applicant from Mali. Fellows were scheduled to obtain training at advanced institutions in 16 countries and plan to return to home nations with increased professional abilities and professionalism.

With support from the ICO, ICOFoundation, International Ophthalmological Foundation (Germany), Chinese Lifeline Express Foundation, Fred Hollows Foundation of Pakistan and other sources, fellowship awards in 2010 were greater than in any other year.

Reports filed at the conclusion of each fellowship attest to the cordiality of international relationships, the friendships that were formed and the extraordinary value of the knowledge and skills acquired during the fellowship.

To sustain relationships established during fellowships, the First ICO Fellowship Reunion for Hosts and Fellows took place during the 2010 World Ophthalmology Congress® in Berlin.

ICO Sandwich International Fellowships. To extend the training for the most active ICO International Fellows, Dr. Gabel and the ICO Fellowship Committee established the ICO Sandwich Fellowship. This program is designed to strengthen the training of the Fellow and to maximize the training opportunities at the fellow’s home institution. For stage 1, near the end of the standard three month ICO International Fellowship, the Preceptor and Fellow plan a Sandwich Fellowship and apply for support from the ICO International Fellowship Program (www.icoph.org/fellow). Stage 2 provides for the Fellow to return to the country of origin and plan for a one – two week visit by the Preceptor to the Fellow’s home institution. This visit is expected to include didactic sessions, patient examinations, diagnostic procedures and surgery. Stage 3 enables the Fellow to return to the Preceptor’s institution for three months of additional training and experience.

<table>
<thead>
<tr>
<th>Year</th>
<th>Fellowship Awards</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>9</td>
</tr>
<tr>
<td>2002</td>
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<tr>
<td>2003</td>
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<td>2008</td>
<td>54</td>
</tr>
<tr>
<td>2009</td>
<td>58</td>
</tr>
<tr>
<td>2010</td>
<td>80</td>
</tr>
<tr>
<td>Total</td>
<td>485</td>
</tr>
</tbody>
</table>
On a limited basis for outstanding fellows, this sandwich program commenced in 2010. For stage 1, Dr. Sola Olawoye (Nigeria) trained as an ICO International Fellow under supervision of Dr. Sandra Fernando at the New York Eye and Ear Infirmary, New York, United States. For stage 2, Dr. Fernando traveled to University Eye Hospital, Ibadan, Nigeria for a week of didactic presentations, patient examinations and surgical encounters. To complete the third stage, Dr. Olawoye is returning to New York Eye and Ear Infirmary for an additional three months of Glaucoma fellowship.

**ICO/Alcon Ophthalmology Subspecialty Fellowships.** The ICO/Alcon Subspecialty Fellowships at University Eye Hospital, Ljubljana, Slovenia commenced in 2010 under leadership of Dr. Marko Hawlina (Slovenia) and Dr. Brigita Drnovšek-Olup (Slovenia) with the appointment of two fellows for one year of subspecialty medical – surgical training. Dr. Izabella Karska Basta (Poland) is receiving subspecialty training in Vitreoretinal Surgery. Dr. Burim Zhuri (Kosova) is receiving subspecialty training in Vitreoretinal Surgery. At the conclusion of fellowship, Dr. Karska Basta and Dr. Zhuri will return to teaching in public service institutions in their respective countries of origin.

**ICO Helmerich RRF International Fellowships.** The ICO Helmerich RRF International Fellowships began in 2010 with long-term sponsorship by the Retina Research Foundation. The ICO Helmerich RRF Fellowships provide 12 months of support for young ophthalmologists from developing countries who are recommended by the head of a teaching or public service institution and have a commitment to return to a position at a teaching institution or public service hospital in their home country following the fellowship.

To inaugurate this fellowship in 2010, Dr. Mohammed El-Hanan (Egypt) is obtaining fellowship training in Corneal Disease and Surgery at L.V. Prasad Eye Institute, Hyderabad, India and Dr. Siamak Zarei-Ghanavati (Iran) is obtaining training in Corneal Disease and Surgery at the Jules Stein Eye Institute, University of California, Los Angeles, United States.

For 2011, two ICO Helmerich RRF International Fellows have been accepted. The ICO is accepting applications up to September 1, 2011 for the 2012 ICO Helmerich RRF International Subspecialty Fellowships. The requirements and online application process are described at www.icoph.org/helmerich.
ICO Fellowships

From Iran to the Jules Stein Eye Institute at the University of California, Los Angeles, United States.

From Kosovo to University Eye Hospital, Ljubljana, Slovenia.

Under supervision of Dr. Marko Hawlina (left), Department Head, and Dr. Xhevat Lumi (right), faculty mentor in vitreoretinal surgery, Dr. Burim Zhuri (center) is receiving one year of training as an ICO/Alcon Ophthalmology Subspecialty Fellow in Vitreoretinal Surgery.

From Nigeria to Dar Es Salaam, Tanzania.

Under supervision of Dr. Richard Bowman, Dr. Kareem Olatunbonsun Musa received hands-on surgical training in Pediatric Ophthalmology and Strabismus.

From Russia to Helsinki University Eye Department, Helsinki, Finland.

Under supervision of Dr. Anthony Aldave (top left) Dr. Siamak Zarei-Ghanavati (top right) trained for one year in Cornea and Corneal Surgery (bottom) as an ICO Helmerich RRF International Fellow.

Under supervision of Prof. Tero Kivelä, Dr. Elvira Kaleeva trained in Medical Retinal.
From Egypt to L. V. Prasad Eye Institute, Hyderabad, India.

Under supervision of Dr. Prashant Garg (top right), Dr. Mohamed Elhanan (top left) received Cornea – Anterior Ocular Segment training and performed corneal surgery, including penetrating keratoplasty surgery (bottom), for one year as an ICO Helmerich RRF International Fellow.

From Azerbaijan to Mahatme Eye Hospital, Nagpur, India.

Under supervision of Dr. Vikas Mahatme, Dr. Fidan Guliyeva met with patients on Independence Day (top) and trained in Cataract Surgery (bottom).

ICO Fellows at Ludwig-Maximilians University Eye Clinic, Munich, Germany.

With Prof. Anselm Kampik as host, ICO Fellows who met in December 2010 were Dr. Fredrick Kagoudou (Kenya, Oculoplastics Surgery), Dr. Sadia Sethi (Pakistan, 2002 Pediatric Ophthalmology), Dr. Angshuman Das (India, Comprehensive Ophthalmology) and Dr. Moustafa Momen (Egypt, Strabismus).
In 2010, the ICO and ICOFoundation continued to work with philanthropic donors, foundations, public service organizations, corporations and governments to build ophthalmology training and eye care centers in Nigeria, China, Slovenia and Cameroon.

**Nigeria.** With a population of 146 million, Nigeria is Africa’s most populous nation. Nigeria also has one of the highest prevalence rates of blindness in the world, an estimated 2 million blind and 5 million with disease-related visual impairment or uncorrected refractive error.

**Broadband Internet Education.** Following a 2006 survey of training and eye care in Nigeria, the ICO and ICOFoundation funded equipment for broadband Internet access at six regional Resident-Specialist Training Centers in Nigeria; one center in each of Nigeria’s six administrative zones.

**University College Hospital, Ibadan.** Since 2006, University College Hospital, Ibadan, has undergone progressive development as a regional center for training of ophthalmologists and for population-based eye care. With support from VISION 2020, the Carl Zeiss Project, Alcon Foundation, ICOFoundation and other sources, ophthalmologists have received specialized training in Corneal - Anterior Segment Disease, Cataract Surgery and Retinal Surgery.

**Network of Catholic Eye Hospitals, Ibadan District.** In 2008, Dr. B.G.K. Ajayi (Nigeria), Medical Director of Catholic Eye Hospitals and Federal Ministry of Health South West Zonal Coordinator for the Prevention of Blindness, organized a Network of four Catholic Eye Hospitals and Federal Ministry of Health Clinics in the Ibadan District to provide sustainable population-based eye care to 4 million people in the suburbs and rural areas of the Ibadan District, regardless of ability to pay. Supported by the Catholic Church, a three year grant from the Lavelle Foundation for the Blind to the ICOFoundation, and donations from international and Nigerian sources, the Network is a model public — private partnership for eye and vision care.

Documented in the October 2010 Report by Dr. Ajayi, the Network of Catholic Eye Hospitals achieved substantial progress through (1) increase in the volume of ophthalmic surgery and eye care services at Network Hospitals; (2) extension of training for University College Hospital ophthalmologists at the Network of Catholic Eye Hospitals; (3) coordination of management through computerization of records and joint purchase of supplies; (4) regular quarterly reports and oversight by a Management Board established by His Grace, Archbishop Felix A. Job. Although challenges remain, the Network of Catholic Eye Hospitals has made significant progress in the quality and volume of eye care services, and toward achieving financial self-sustainability from charges for professional care.
China. With a massive population of 1.2 billion, China is home to more diabetics than any other nation in the world and the location of millions of people with diabetic retinopathy. In 2007, the ICO and ICOFoundation combined with the Eli Lilly & Company Foundation to obtain formal recognition of the Peking University Eli Lilly Diabetic Eye Disease Center. Direction by Dr. Zhi-Zhong Ma (China), Executive Vice President of Peking University Eye Center, and leadership of Dr. Mark Tso (United States and China), Honorary Director of Peking University Eye Center, and ongoing consultation by Lions Aravind Institute of Community Ophthalmology, India, the Diabetic Eye Disease Center is implementing a strategic plan that encompasses:

- Distribution of diabetes and eye health educational materials
- Creating awareness of the diabetic eye disease program
- Community eye care outreach in urban and rural areas
- Tertiary eye care services at Peking University Eye Center

Peking University Eye Center and Network of Provincial Eye Hospitals. Implementing the strategic plan, Peking University Eye Center directed urban outreach in Beijing and established a broad network of provincial eye hospitals in Northern China reaching Henan in the South, Inner Mongolia in the North, Shandong in the East and Yunan in the West. The urban and rural program endeavored to provide sustainable and population-based diabetic eye care to an overall population of approximately 20,000,000 people.

Slovenia. Recognizing the need for fully qualified ophthalmology subspecialists in glaucoma, retinal disease and surgery, pediatric ophthalmology and other subspecialties, The Alcon Foundation awarded a grant to the ICOFoundation for an initial ICO/Alcon Ophthalmology Training Center.
University Eye Hospital, Ljubljana, Slovenia. Following a competitive review of applications, the ICO/Alcon Ophthalmology Training Center was established under leadership of Dr. Marko Hawlina (Slovenia) and Dr. Brigita Drnovšek-Olup (Slovenia) at University Eye Hospital in Ljubljana, Slovenia.

Dr. Hawlina, Professor of Ophthalmology at Ljubljana University and the elected President of the European Board of Ophthalmology, stated that “we would like to host young specialists from teaching hospitals in Eastern Europe who plan to practice in a public teaching hospital.” Following selection procedures, Dr. Izabella Karska Basta (Poland) and Dr. Burim Zhuri (Kosovo) were appointed for Vitreoretinal Fellowship Training one year in duration.

Concurrently, the surgical training laboratory at University Eye Hospital, Ljubljana, was completed and advanced surgical training courses for regional ophthalmologists were conducted. With a combination of full subspecialty training fellowships in a range of ophthalmic subspecialties and courses for ophthalmologists-in-practice in the Eastern European region, the ICO/Alcon Ophthalmology Training Center will enhance subspecialty and surgical services for patients throughout a broad region.

Cameroon. The world's highest regional burden of visual impairment and blindness is in Sub-Saharan Africa. Within this vast region, Francophone Central Africa represents an area in particular need of eye care services. Cameroon, at the heart of Francophone Central Africa, has a maritime border on the Atlantic Ocean, a population of nearly 20,000,000 and an elected democratic government. Although French and English are the official languages, Cameroon is primarily French-speaking. As a developing nation, the United Nations Human Development Index, which ranks nations by combining life expectancy, educational attainment and income, places Cameroon 153 among 182 nations worldwide (Ref 5. http://hdr.undplorg/en/statistics).

To assess need and opportunity for developing an advanced ophthalmology subspecialty training and eye care center in Cameroon, Dr. Bruce Spivey (United States), ICO President; Dr. Akef El-Maghraby (Egypt), ICO Vice President; Dr. Jean-Jacques De Laey (Belgium), ICO Secretary-General; Dr. Soliman Aref (Egypt), Al Noor – Magrabi Foundation Executive Director; Dr. Daniel Etya’ale (Cameroon and Switzerland), ICO Trustee; and Dr. Bradley Straatsma (United States), ICOFoundation President, traveled to Yaoundé, Cameroon in December 2009. Through a succession of meetings with Cameroon’s government leaders and officers of Yaoundé University, the need and opportunity for an advanced ophthalmology training and eye care center at Yaoundé, Cameroon were strongly evident.

Throughout 2010, ICO and ICOFoundation leaders worked to further evaluate the circumstances for developing a comprehensive and subspecialty oriented ophthalmology training and eye care center to serve the needs of Cameroon and adjacent nations.
Correction of Refractive Error

The 2010 World Congress on Refractive Error on September 20 – 22 in Durban, South Africa, reaffirmed the Durban Declaration of 2007. The Durban Declaration, which followed the first Congress on Uncorrected Refractive Error in March 2007, recognized that 153 million people worldwide have severe visual impairment, not including presbyopia, due to uncorrected refractive error. Recognized by the World Health Association and endorsed by the ICO, the Durban Declaration emphasized the need to (1) prioritize countries with greatest need for correction of refractive error and (2) place particular priority on the needs of school age children.

School Eye Health Programme. Dr. Muhammad Babar Qureshi (Pakistan), Chair of the ICO Task Force on Uncorrected Refractive Error and CEO of Comprehensive Health and Education Forum (CHEF) International, and associates developed the School Eye Health Programme (SEHP) to meet the eye health and refractive needs of school age children (age 5–15 years) in regions of Pakistan and Nigeria. The SEHP is carrying out school screening for children, teachers of the children, and the siblings of children with significant refractive error. Children and teachers with refractive error will receive spectacles that are dispensed at the location of screening, treatment for minor eye disease on site and referral for major eye disease to the nearest District/State eye care facility. Additional SEHP components are education concerning eye health and general health, research to assess the program’s benefits and advocacy to encourage long-term sustainability of SEHP activities by schools and governments.

At the SEHP Steering Committee Meeting in Berlin on June 6, 2010, SEHP plans were reviewed. Activity from May 2010 to April 2013 projects eye health screening and refractive services for 1,000,000 school children, 10,000 teachers and 10,000 family persons in addition to dispensing of 100,000 spectacles. This humanitarian program is the result of cooperation among private – public agencies and support by Light For The World (Austria), Dark and Light Blind Care (The Netherlands), Lions Aravind Institute of Community Ophthalmology (India), CHEF International (Pakistan) Ophthalmological Society of Pakistan, Ophthalmological Society of Nigeria, ICO, ICOFoundation and government agencies in Pakistan and Nigeria.

School Eye Health Programme Offices at CHEF International, Peshawar, Pakistan

School Eye Health Programme Steering Committee Meeting at Berlin on June 6, 2010. Signing of a Memorandum of Understanding for the project by Light For The World, ICO and ICOFoundation. Left to right, seated: Bradley R. Straatsma, M.D., J.D. (ICOFoundation); Johannes Trimel (Light For The World); Bruce E. Spivey, M.D. (ICO); standing: William Felch (ICO); Dr. M. Babar Qureshi (SEHP Chair, ICO & CHEF International); Wolfgang Gindorfer (SEHP); Dr. M. Daud Khan (ICO and CHEF International); R.D. Thulsiraj (Lions Aravind Institute of Community Ophthalmology).

School Eye Health Programme Targets for Eye Health Screening and Refractive Service: 2010

<table>
<thead>
<tr>
<th>Pakistan</th>
<th>Nigeria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location: Khyger Pakthunkhwa Province</td>
<td>Location: Plateau State</td>
</tr>
<tr>
<td>Children Screened: 166,667</td>
<td>Children Screened: 100,000</td>
</tr>
<tr>
<td>Teachers Tested: 1,667</td>
<td>Teachers Tested: 5,000</td>
</tr>
<tr>
<td>Families Tested: 1,667</td>
<td>Families Tested: 1,000</td>
</tr>
<tr>
<td>Glasses Provided: 16,667</td>
<td>Glasses Provided: 2,000</td>
</tr>
<tr>
<td>Patients Referred: 1,667</td>
<td>Patients Referred: 250</td>
</tr>
</tbody>
</table>
The ICO Eye and Vision Care Guidelines are revised periodically to accommodate advances in knowledge, technology, and evidence-based medical practice. The Guidelines serve to define what constitutes appropriate eye care and act to promote a universal high standard of quality.

Dr. Richard Abbott (United States) is Chair of a multinational committee of internationally recognized experts responsible for development of clinical guidelines. The committee and panels of experts in specific areas of ophthalmic practice adapt for worldwide use the American Academy of Ophthalmology Preferred Practice Patterns®, Royal Australian and New Zealand College of Ophthalmologists Clinical Practice Guidelines for Specialists and similar practice recommendations by other professional organizations.

Using a sequence of formulation, broad review by professionals on the Internet and refinement, the ICO has formed eye and vision care guidelines for management of 20 major ophthalmic entities. As a substantial advance, the ICO International Clinical Guideline for Ocular HIV/AIDS is now online. Along with other guidelines, these documents are available by open access on the Internet (www.icoph.org/pdf/icoclinicalguidelines.pdf).

Eye Care Guidelines in China. As an outcome of meetings with leaders of the Chinese Ophthalmological Society in 2005 – 2008, the AAO Preferred Practice Patterns® and ICO Eye and Vision Care Guidelines were adapted by the Chinese Ophthalmological Society and distributed to the nearly 20,000 ophthalmologists in China. In an important step, China’s Ministry of Health has endorsed these Preferred Clinical Practice Guidelines as the national standard for ophthalmic practice and training.

For use throughout the world, Eye and Vision Care Clinical Practice Guidelines require regular review, online distribution in multiple languages and presentation in educational programs. These activities are designed to increase awareness and daily use in clinical practice. The ICO Clinical Guidelines Committee is broadly engaged in development, review, distribution and promulgation of eye and vision care guidelines.
Advocacy for preservation, restoration and enhancement of vision is a vital, multifaceted and continuous priority of the ICO and ICO Foundation. Led by Dr. Serge Resnikoff (France and Switzerland), advocacy by the ICO complements the World Health Organization actions by drawing public awareness to the extent and causes of visual impairment. Worldwide, 285 million people are severely visually impaired due to eye disease and uncorrected refractive error. Of these, 39 million are blind. Causes of disease-related blindness as a percentage of total blindness vary by region and country; cataract, however, continues to be the leading cause of worldwide visual impairment and blindness.

Advocacy advanced substantially through action by the World Health Assembly, governing body of the World Health Organization (WHO). In 2009, the World Health Assembly endorsed the WHO Action Plan for the Prevention of Avoidable Blindness and Visual Impairment (http://apps.who.int/gb/ebwha/pdf). The Action Plan aims to expand efforts by WHO member states to prevent blindness by development of comprehensive eye health programs at national and sub-national levels. Adoption of the Action Plan is a major accomplishment that will provide additional unprecedented support for efforts to improve eye health internationally.

World Forum of Prevention of Blindness At the World Forum on Prevention of Blindness during the 2010 World Ophthalmology Congress® in Berlin, ophthalmologists discussed overall goals of advocacy and placed particular emphasis on programs to advance eye care and training of ophthalmology and allied health care professionals for Sub-Saharan Africa.

A number of university ophthalmology programs in Europe have developed “twinning programs” with ophthalmology centers in Sub-Saharan Africa. These enhance training opportunities through fellowship appointments, visiting professor exchanges and related activities.

In the nations of Sub-Saharan Africa, ophthalmologists have increased regional initiative and cooperation in actions to improve access and services for individuals with visual impairment and blindness.

Africa Ophthalmology Forum. Encouraged by meetings of the ICO World Ophthalmology Roundtable on Leadership Development (WORLD) in 2008 and 2009, ophthalmology leaders in Africa organized the Africa Ophthalmology Forum (AOF) in 2010. With leadership by Dr. Adekunle O. Hassan (Nigeria), the AOF Meetings at the World Ophthalmology Congress® in June 2010 attracted ophthalmologists from 16 nations distributed throughout Africa. Formal presentations and informal discussions emphasized the regional needs for eye and vision care, training of ophthalmologists and allied health professionals, as well as mechanisms for cooperation and coordination of activities.

Global Estimate of Visual Impairment by WHO Region (Millions)6

<table>
<thead>
<tr>
<th>Population</th>
<th>African Region</th>
<th>Region of the Americas</th>
<th>Eastern Mediterranean Region</th>
<th>European Region</th>
<th>South-East Asia Region</th>
<th>Western Pacific Region</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td># of blind people</td>
<td>6.8</td>
<td>2.4</td>
<td>4</td>
<td>2.7</td>
<td>11.6</td>
<td>9.3</td>
<td>36.9</td>
</tr>
<tr>
<td>% of total blind</td>
<td>18%</td>
<td>6%</td>
<td>11%</td>
<td>7%</td>
<td>32%</td>
<td>25%</td>
<td>100%</td>
</tr>
<tr>
<td># with low vision</td>
<td>20</td>
<td>13.1</td>
<td>12.4</td>
<td>12.8</td>
<td>33.5</td>
<td>32.5</td>
<td>124.3</td>
</tr>
<tr>
<td># with visual impairment</td>
<td>26.8</td>
<td>15.5</td>
<td>16.5</td>
<td>15.5</td>
<td>45.1</td>
<td>41.8</td>
<td>161.2</td>
</tr>
</tbody>
</table>

The ICO Research Committee, led by Dr. Alfred Sommer (United States), continued implementation of the Research Committee report entitled “A Research Agenda for Global Blindness Prevention.” This report and plan for applied vision research has been endorsed by the World Health Organization and is presented on the Internet (www.icoph.org/research/agenda.html).

Clinical Research: A Primer for Ophthalmologists. In 2009, the Research Committee produced a new tool to assist beginning ophthalmic researchers. Written by Dr. Sommer, “Clinical Research: A Primer for Ophthalmologists” provides rudimentary guidance regarding the essential components of clinical research as a text available on the Internet at www.icoph.org/pdf/PrimerClinicalResearch.pdf.

Unoperated Cataract: The Leading Cause of Avoidable Blindness. In 2010, Dr. Sommer, the Research Committee and participants representing many countries focused on unoperated cataract as the leading cause of avoidable blindness in poor and emerging countries. Incorporating a broad forum of opinions and recommendations, the ICO produced a Position and Policy Statement entitled “Access to Cataract Surgical Services”.

This Statement recognized that circumstances for cataract surgery and eye care differ in nations and regions of the globe. However, there are at least two different situations in which large numbers of people are not receiving the cataract surgery that is needed. These two settings are:

1. Countries Already Training Significant Numbers of Ophthalmologists. In some nations such as India, programs to increase efficiency and incentive for cataract surgery have produced a dramatic increase in access and performance of cataract surgery for those in need. However, other nations that train a significant number of ophthalmologists have not yet begun to provide the cataract surgical services that populations need. In these nations, efficient, high volume, high quality, affordable and accessible cataract surgery programs are needed.

2. Countries Presently Training Few Ophthalmologists. Countries like many in Sub-Saharan Africa face a different set of obstacles when endeavoring to eliminate cataract blindness. These nations face a serious deficiency in the number of ophthalmologists who are well trained and experienced in cataract surgery.

Recognizing these variations, the ICO policy statement acknowledges that ophthalmology has a responsibility for cataract surgery and for recognizing the magnitude and extent of the problem as well as proposing effective practical approaches to solving the shortcomings. As the way forward, the policy statement states that ophthalmology has an obligation to advocate and develop locally appropriate systems that will enable those who need cataract surgery to receive it. Adequate facilities, equipment, supplies, a sustainable source of income for those performing surgery, and vigorous adherence to evidence-based cost-effective methodology are among the elements for resolving the problem of unoperated cataract. A particular goal should be the development of ophthalmologist-led teams of health care professionals in which each member functions at the highest level of ability and the ophthalmologist-led teams are supported with facilities, supplies, outreach programs and long-term incentives.
Bruce E. Spivey, M.D., M.Ed., President
San Francisco, United States

Akef El-Maghraby, M.D., Vice President
Jeddah, Saudi Arabia

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The ICOFoundation extends grateful thanks to the corporations, organizations, foundations and individuals for donations in the period from January 1, 2010 through December 31, 2010. These gifts, grants and pledges permitted the ICOFoundation to fund International Council of Ophthalmology programs that preserve, restore and enhance vision of people throughout the world.

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The International Council of Ophthalmology Foundation acts with the International Council of Ophthalmology to support programs for:

- Ophthalmic Education and Training
- Ophthalmic Knowledge Examinations
- Ophthalmology Fellowship Training
- Ophthalmology Training and Eye Care Centers
- Correction of Refractive Error
- Eye and Vision Care Guidelines
- Advocacy for Preservation of Vision
- Research in Ophthalmology and Vision

The generosity of these visionary entities and philanthropic individuals enabled the ICOFoundation to support new and continuing International Council of Ophthalmology programs since incorporation of the ICOFoundation in 2002. On a continuing basis, the ICO programs preserve, restore and enhance vision for people throughout the world.

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Mr. and Mrs. Andrew Yau

$50,000 – $99,999
Japanese Ophthalmological Society
Mr. and Mrs. Andrew Yau

$25,000 – $49,999
Dr. and Mrs. Hilel Lewis
Dr. and Mrs. Bradley R. Straatsma

$10,000 – $24,999
Ms. Nellie Fong
Dr. Alice R. McPherson
Mr. and Mrs. David E. I. Pyott
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Sear Family Foundation
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