Become a champion in advancing the exciting promise of regenerative ophthalmology. Learn how this growing field holds a powerful potential to improve the quality of lives for millions of people.

Join top researchers and clinicians in the fields of regenerative medicine and ophthalmology and learn about the latest developments and breakthroughs for restoring impaired vision.
Intent
Medical advances in the field of Regenerative Medicine are accelerating at an unprecedented rate. Technologies, such as cellular therapies, bioscaffolds and assistive technologies are now being used or tested in clinical trials throughout the country. Based on these developments, Regenerative Ophthalmology emerged, a new field that promises opportunities to develop more effective and safer therapies for vision impairment.

The Louis J. Fox Center for Vision Restoration will be hosting the 2nd annual international conference on regenerative ophthalmology. The conference will bring together scientists and clinicians working in ophthalmology and regenerative medicine to share ideas, present innovative research and clinical findings, and work towards creating sustainable collaborations between researchers, clinicians and industry.

Who Should Attend
• Clinicians with an interest in ophthalmology
• Scientists and engineers interested in tissue engineering, cellular therapies and assistive technologies
• Students, postdoctoral fellows, residents and research staff.

This Program Includes
• Distinguished guest speakers from Europe, Asia and the United States
• Poster session
• Industry exhibits

Accreditation and Designation Statement
The University of Pittsburgh School of Medicine is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

The University of Pittsburgh designates this live activity for a maximum of 7.75 AMA PRA Category 1 Credit(s)™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Other health care professionals are awarded 0.7 continuing education units (CEU’s) which are equal to 7.75 contact hours.

Objectives
During this conference, participants will:
• Discover the latest in Regenerative Ophthalmology
• Network and share ideas
• Present a poster
• Interact with industry

Agenda
7:00 am Registration Ballroom A7
8:00 am Welcome and Introductions:
Joel S. Schuman, MD, FACS
William R. Wagner, PhD
8:10 am Session A: Corneal Regeneration
8:10 am Plenary Address:
Tissue Engineering Human Cornea
David Kaplan, PhD
8:55 am Corneal Regenerative Medicine with Cell Sheet Engineering
Masayuki Yamato, PhD
9:15am Towards the Development of Biomimetic Cornea for Human Transplantation
Julie T. Daniels, PhD
9:35am Cutting Edge in Corneal Regenerative Medicine
Shigeru Kinoshita, MD, PhD, FARVO
9:55am Refreshment Break
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Speaker(s)</th>
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<tbody>
<tr>
<td>10:15am</td>
<td><strong>Session B: Retinal Regeneration</strong></td>
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<tr>
<td>10:15am</td>
<td>Plenary Address:</td>
<td>Stem Cells and Epigenetic Strategies for Retinal Repair</td>
<td>Igor O. Nasonkin, PhD</td>
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<tr>
<td>11:00am</td>
<td></td>
<td>Advancements in the Development of a Retinal Prosthesis for the Blind</td>
<td>Shawn K. Kelly, PhD</td>
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<td>11:20am</td>
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<td>Engineering Approaches for Protecting and Repairing the Retina and Optic Nerve</td>
<td>Erin Lavik, PhD</td>
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<tr>
<td>11:40am</td>
<td></td>
<td>Human Embryonic Stem Cells and Induced Pluripotent Stem Cells for Neural Repair</td>
<td>Maisam Mitalipova, PhD</td>
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<tr>
<td>12:00pm</td>
<td>Lunch, Poster Session, Industry Exhibits, Technology Demonstrations.</td>
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<tr>
<td>1:15pm</td>
<td>KEYNOTE ADDRESS</td>
<td>Strategies to Prolong Photoreceptor Survival</td>
<td>Constance Cepko, PhD</td>
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<td>2:00pm</td>
<td><strong>Session C: Regeneration of the Optic Nerve</strong></td>
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<tr>
<td>2:00pm</td>
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<td>Regeneration of the Optic Nerve in Adult Mice</td>
<td>Larry Benowitz, PhD</td>
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<td>2:20pm</td>
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<td>Nanoparticles and Neurotrophins: Engineering Regeneration</td>
<td>Jeffrey L. Goldberg, MD PhD</td>
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<td>2:40pm</td>
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<td>Neurodegeneration in Glaucoma: Defining and Exploiting the Intrinsic Stress Response of the Optic Projection</td>
<td>David J. Calkins, PhD</td>
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<td>3:00pm</td>
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<td>Circulating Immune Cells Orchestrate Neuroprotection and Cell Renewal in the Eye</td>
<td>Michal Schwartz, PhD</td>
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<td>3:30pm</td>
<td><strong>Session D: Innovations in Vision Restoration</strong></td>
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<tr>
<td>3:30pm</td>
<td>Plenary Address</td>
<td>Seeing With Subretinal Electronic Implants: The Tübingen Study with Wireless Implant Alpha-IMS</td>
<td>Eberhart Zrenner, MD</td>
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<td>4:15pm</td>
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<td>Restoring Vision through Electronic Implants: A View of the Road Ahead</td>
<td>Gislin Dagnelie, PhD</td>
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<tr>
<td>4:35pm</td>
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<td>Advanced Controlled Release Systems for Next Generation Ophthalmic Therapy</td>
<td>Steven R. Little, PhD</td>
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<tr>
<td>4:55pm</td>
<td></td>
<td>Translation of Artificial Vision out of the Lab and into the Clinic</td>
<td>Amy C. Nau, OD, FAAO</td>
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<tr>
<td>5:15pm – 5:30pm</td>
<td>Wrap Up and Final Comments</td>
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The schedule is subject to change.
Guest Faculty

Larry Benowitz, PhD
Professor of Surgery and Ophthalmology
Laboratories for Neuroscience Research in Neurosurgery
Harvard Medical School
Boston, Ma.

David J. Calkins, PhD
Professor of Ophthalmology and Visual Sciences, Neuroscience and Psychology
Vanderbilt University Medical Center
Nashville, Tn.

Constance Cepko, PhD
Investigator, Howard Hughes Medical Institute
Professor of Genetics and Ophthalmology
Harvard Medical School
Boston, Ma.

Gislin Dagnelie, PhD
Associate Professor of Ophthalmology
Johns Hopkins University School of Medicine
Baltimore, Md.

Julie T. Daniels, PhD
Chair of Regenerative Medicine & Cellular Therapy
Department of Ocular Biology & Therapeutics
UCL Institute of Ophthalmology
London, United Kingdom

Jeffrey L. Goldberg, MD, PhD
Associate Professor of Ophthalmology
Bascom Palmer Eye Institute
Miami, Fl.

David Kaplan, PhD
Professor and Chair
Department of Biomedical Engineering
Tufts University
Medford, Ma.

Shawn K. Kelly, PhD
Research Health Scientist
VA Boston Healthcare System
Research Faculty
Carnegie Mellon University
Pittsburgh, Pa.

Shigeru Kinoshita MD, PhD, FARVO
Professor and Chairman of Ophthalmology
Department of Ophthalmology
Kyoto Prefectural University of Medicine
Kyoto, Japan

Erin Lavik, PhD
Elmer Lindseth Associate Professor of Biomedical Engineering
Case Western Reserve University
Cleveland, Oh.

Maisam Mitalipova, PhD
Scientist, Director of Human Stem Cell Laboratory
Whitehead Institute for Biomedical Research
Massachusetts Institute of Technology
Cambridge, Ma.

Igor O. Nasonkin, PhD
Senior Research Fellow
National Institutes of Health/NEI
Bethesda, Md.
Michal Schwartz, PhD  
Ilze and Maurice Professorial Chair of Neuroimmunology  
The Department of Neurobiology  
The Weizmann Institute of Science  
Rehovot, Israel

Masayuki Yamato, PhD  
Professor  
Institute of Advanced Biomedical Engineering and Science  
Tokyo Women's Medical University  
Tokyo, Japan

Eberhart Zrenner, MD  
Chair Professor of Ophthalmology  
Centre for Ophthalmology  
University of Tuebingen  
Tuebingen, Germany

Robert L. Hendricks, PhD  
Joseph F. Novak Professor of Ophthalmology, Immunology, Microbiology and Molecular Genetics  
Department of Ophthalmology  
University of Pittsburgh  
Pittsburgh, Pa.

Alan J. Russell, PhD  
Distinguished University Professor  
Founding Director of the McGowan Institute for Regenerative Medicine  
University of Pittsburgh  
Pittsburgh, Pa.

James L. Funderburgh, PhD  
Professor of Ophthalmology  
Department of Ophthalmology  
University of Pittsburgh School of Medicine  
Pittsburgh, Pa.

Stephen F. Badylak, DVM, PhD, MD  
Professor in the Department of Surgery  
Deputy Director of the McGowan Institute for Regenerative Medicine  
University of Pittsburgh  
Pittsburgh, Pa.

In accordance with Accreditation Council for Continuing Medical Education requirements on disclosure, information about relationships of presenters with commercial interests (if any) will be included in materials distributed at the time of the conference.
CALL FOR POSTERS
All conference participants are welcome to present a poster. A poster is an opportunity for participants to present their own research and exchange views with the other attendees.

The posters will be on view throughout the event. A special time is allocated for poster presentation during lunch. The texts of the posters presented at the conference will be published on the Fox Center website.

By presenting a poster, participants will:
• Encourage communication
• Explore future collaborations
• Increase the variety of points of view presented at the conference
• Receive valuable feedback from peers
• Gauge the impact of the presented research project

Technical specifications
The poster stands are 6’ wide and 4’ tall. They are on legs which hold them about 30” from the floor.

The conference will supply the following:
• Bulletin-board style display boards
• Push pins, for mounting plain paper posters
• Blank flip-chart pages and markers, for ad hoc posters

Please submit your poster abstract for review before May 1, 2012 to Larisa Munsch at munschl@upmc.edu.

Poster presenters must print their own posters and bring the posters to the conference.

CORPORATE SUPPORT
Become an integral part of advancing the exciting promise of Regenerative Ophthalmology by providing corporate support to this program. Three distinct participation opportunities are available, each with many benefits for your company:
• Sponsorships
• Educational Grants
• Exhibits

Sponsorships
Sponsorships are being offered to provide you with a direction connection to the 125+ scientists and clinicians through many of the program’s activities. In addition, three general levels of sponsorship are available providing companies with multiple exposure opportunities. Sponsorships can also be geared toward your specific interests.

General Levels of Sponsorship
Level 1 - $7,500 (Limit of 2 corporate sponsors)
• Use of a meeting room on evening prior to the start of the event for vendor sponsored event
• Additional signs in conference areas (must be hung by Conference Staff, approved by the University of Pittsburgh and UPMC)
• Premium or one-page flyer in the conference bag (if supplied by vendor by deadline set by conference coordinator)
• Listing on the program sponsorship page
• Three (maximum) conference registrations
• Name/logo on the Conference web site with a link to company page
• The equivalent of two vendor booth spaces

Level 2 - $5,000
• Premium or one-page flyer in the conference bag (if supplied by vendor by deadline set by conference coordinator)
• Listing on the program sponsorship page
• Two (maximum) conference registrations
• Name/logo on the Conference web site with a link to company page
• The equivalent of one vendor booth space

Level 3 - $2,500
• Listing on the program sponsorship page
• One (maximum) conference registration
• Name/logo on the Conference web site with a link to company page

Conference Activities Sponsorships
Sponsorships are available to support specific activities during the conference. Activities include:
• Speakers Dinner
• Breakfasts
• Refreshment Breaks
• Lunches
• Poster Session

Each of these sponsorships will include placing your company’s name as “activity” sponsor with credit printed on signs for that activity.
• Sponsors credit printed on signs for the specific activity
• Company name printed on the program sponsorship page
• Name/logo on the Conference website with a link to company page
• The equivalent of one vendor booth space

Educational Grants
The University is continuously striving to improve its medical education opportunities with the goal of ensuring regulatory compliance while providing pertinent programs that accelerate the translation of clinical science into quality patient care. The University seeks to offer opportunities for companies to provide a contribution in support of the continuing professional development of clinicians in regenerative ophthalmology. Decisions made related to the receipt of an educational grant will be bound by the guidelines and standards of the ACCME Standards for Commercial Support.

Exhibits
Tabletop exhibits are available to display your company's products, materials or literature for all conference attendees to view. The displays will be available during dedicated hours of the conference including in the morning, during breakfast, and at lunch. Displays will be located in the same room as the poster session to optimize exposure. Tabletops are being offered at a cost of $750.00 each.

Display Details:
• 6' draped (white) table
• 2 chairs

Corporate Support Contact Information
In addition to the listing above, we are open to customize a support opportunity to meet your company's objectives. Please contact Larisa Munsch to discuss these opportunities or to secure your corporate participation in this valuable program.
Larisa Munsch
munsch@upmc.edu
412-624-5247

REGISTRATION INFORMATION
You may register online or by using the paper format.

Online Registration
Registering online is the quickest and easiest way to reserve your space at CCEHS conferences. Visit our online registration site at https://ccehs.upmc.com/liveFormalCourses.jsf
Click the Registration button and enter all the requested information (including an email address) and follow the prompts to submit your registration after entering your payment information. Print the automatic electronic registration confirmation email sent to the email address you provided us when you registered. If you do not receive the registration confirmation, please contact us at 001-412-624-5247. You must bring the printed confirmation email with you to the conference.

Paper Registrations by Fax or Mail
If you are unable to register online, please contact us and we will send you a paper registration form that you can e-mail, fax or mail to us.

We will fax or mail you a confirmation letter if you submitted a paper registration form one week after receipt of your document.

Please note: Registration is complete only when you receive the confirmation letter. If you do not receive the confirmation letter within 5-7 days of registration, please contact us at 001-412-624-5247. You must bring this confirmation letter with you to the conference.

Registration Fees
$195 - Physicians and Faculty
$150 - Group discount
$125 - Students, Postdoctoral Fellows, Residents, Nurses and Research Staff

Registration fee includes
(for conference registrants only)
• Continuing medical education credits
• Registration and course materials
• Continental breakfast, lunch and refreshments
Group Registrations
Group registration discounts are available to University of Pittsburgh and UPMC departments registering 3 or more attendees for physicians and faculty status only. Please contact Larisa Munsch at munsch@upmc.edu to make arrangements for a group registration for your department.

Group registration discount must be requested and confirmed before the first registration; discounts will not be applied to any existing registrations.

Cancellation
All cancellations must be in writing and sent to us via U.S. mail, e-mail or fax. Tuition for cancellations postmarked or date stamped before April 11 will be completely refunded. After April 11 a $35 administrative fee will be assessed. No refunds will be made after May 1. Cancellation requests can be made to Larisa Munsch at munsch@upmc.edu.

The UPMC Center for Continuing Education in the Health Sciences reserves the right to cancel this program if sufficient registrations are not received. In the case of cancellation, the department will fully refund registration fees.

LOCATION
The conference will be held at the University Club at the University of Pittsburgh, 123 University Place, Pittsburgh, PA, 15260.

OVERNIGHT ACCOMMODATIONS
The conference has contracted a limited number of hotel rooms at the Holiday Inn for guest speakers and conference attendees.

You may book a room by calling the hotel at 1-877-834-3613 and asking for the Vision Restoration block in order to receive our reduced rates. The special rate is $129/night plus applicable tax.

These accommodations are not included in the registration fee. If you experience any problems booking your room, please call 412-624-5247.

Room availability cannot be guaranteed beyond the contracted block end date of April 19, 2012.

SPECIAL NEEDS
Participation by all individuals is encouraged. Advance notification of any special need will help us provide better service. Please notify us at least two weeks in advance of the program by calling 412-624-5247.

VISIT THE CENTER FOR CONTINUING EDUCATION IN THE HEALTH SCIENCES WEBSITE
Our Internet address is: https://ccehs.upmc.com. The UPMC Center for Continuing Education in the Health Sciences invites you to visit our web location. Receive information on CME programs, earn CME credits on the Internet, and access information about our formal courses and much more. Discover who we are and how you can contact us. Please visit our web location often to get updated information on upcoming programs.

The University of Pittsburgh, as an educational institution and as an employer, values equality of opportunity, human dignity, and racial/ethnic and cultural diversity. Accordingly, the University prohibits and will not engage in discrimination or harassment on the basis of race, color, religion, national origin, ancestry, sex, age, marital status, familial status, sexual orientation, disability, or status as a disabled veteran or a veteran of the Vietnam era. Further, the University will continue to take affirmative steps to support and advance these values consistent with the University’s mission. This policy applies to admissions, employment, access to and treatment in University programs and activities. This is a commitment made by the University and is in accordance with federal, state, and/or local laws and regulations. For information on University equal opportunity and affirmative action programs and complaint/grievance procedures, please contact: William A. Savage, Assistant to the Chancellor and Director of Affirmative Action (and Title IX and 504 Coordinator), Office of Affirmative Action, 901 William Pitt Union, University of Pittsburgh, Pittsburgh, PA 15260, (412) 648-7860.