# 6th annual Bench-to-Bedside Research Symposium

**Saturday, March 9, 2019 | 7:30 a.m. – 6 p.m.**  
Arnold and Mabel Beckman Center | 100 Academy Way, Irvine

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<td>7:30-8:30 a.m.</td>
<td>Registration and continental breakfast</td>
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| 8:30-8:35 a.m. | Welcome — Anthony Nesburn, MD  
Gavin Herbert Eye Institute, UC Irvine                                           |

## ROLE OF ARTIFICIAL INTELLIGENCE IN MEDICINE

**Moderator:** Baruch Kuppermann, MD, PhD  
**8:35-9:05 a.m.** Pierre Baldi, PhD  
**Q&A:** Professor, Institute for Genomics and Bioinformatics, School of Information  
and Computer Sciences, UCI  
**AI and Deep Learning in the Biomedical Sciences**

**9:05-9:35 a.m.** Aaron Lee, MD, MSc  
**Q&A:** Assistant Professor, Department of Ophthalmology, University of Washington  
**9:30-9:35 a.m.** Applications of Artificial Intelligence in Vision Science

**9:35-10:05 a.m.** Peter Chang, MD  
**Q&A:** Assistant Professor, Co-Director, Center for Artificial Intelligence in Diagnostic Medicine (CAIDM), Department of Radiological Sciences, UCI  
**Opportunities for Healthcare AI Research and Clinical Applications at UCI**

**10:05-10:35 a.m.** William Karnes, MD  
**Q&A:** Associate Professor, Gastroenterology, Department of Medicine, UCI  
**10:30-10:35 a.m.** The Promise of Artificial Intelligence for Improving Colonoscopy Quality, Documentation and Quality Reporting

**10:35-11 a.m.** Break and poster viewing

## COGNITIVE AND NEURAL PROCESSING FOR COLOR VISION: APPLICATIONS FOR DIAGNOSIS FOR EYE DISEASES

**Moderator:** Cristina Kenney, MD, PhD  
**11-11:30 a.m.** Kimberly Jameson, PhD  
**Q&A:** Project Scientist, Institute for Mathematical Behavioral Sciences, UCI  
**11:25-11:30 a.m.** Visual Processing Phenotypes and Opsin Genetics

**11:30-12 p.m.** Michael Webster, PhD  
**Q&A:** Foundation Professor, Director, Center for Integrative Neuroscience  
**11:55-12 p.m.** Adaptation and Compensation in Visual Processing
12-12:30 p.m. Andrew Browne, MD, PhD
Q&A: Assistant Professor, Gavin Herbert Eye Institute, Biomedical Engineering, UCI
12:25-12:30 p.m. Quantifying Color Vision in Disease

12:30-1:35 p.m. Lunch and Poster Viewing

NOVEL APPROACHES FOR DIAGNOSIS AND TREATMENTS

**Moderator:** Eric Pearlman, PhD
1:35-2:05 p.m. Marjan Farid, MD
Q&A: Associate Professor, Gavin Hebert Eye Institute, UCI
2-2:05 p.m. James Jester, PhD
Professor, Gavin Hebert Eye Institute, UCI
*Update in the Clinical Outcomes of Corneal Collagen Crosslinking*

2:05-2:35 p.m. Natalie Afshari, MD, FACS
Q&A: Professor, Department of Ophthalmology, UC San Diego
2:30-2:35 p.m. New Horizons in Corneal Endothelium: Stem Cell Regeneration, Genetics & Gene Editing

2:35-3:05 p.m. Tim Kern, PhD
Q&A: Professor, Gavin Herbert Eye Institute and Henry Samueli School of Engineering, UCI
3-3:05 p.m. Low Intensity Light to Prevent and Reverse Diabetic Retinopathy

3:05-3:30 p.m. Break and poster viewing

STRATEGIES FOR GROUP SYSTEMS PHARMACOLOGY FOR RETINAL DISEASES

**Moderator:** Krzysztof Palczewski, PhD
3:30-4 p.m. Anthony Adamis, MD
Q&A: Senior Vice President, Development Innovation, Genentech/Roche
3:55-4 p.m. Drug Development for Retinal Disease

4-4:30 p.m. Philip Kiser, PharmD, PhD
Q&A: Assistant Professor, Department of Physiology & Biophysics, UCI
4:25-4:30 p.m. Molecular Pharmacodynamics of Visual Cycle Modulation

4:30-5 p.m. Grazyna Palczewska, PhD
Q&A: Director, Medical Device Development, Polgenix Inc.
4:55-5 p.m. Noninvasive, Two Photon Imaging of RPE and Photoreceptors

POSTER AWARDS AND RECEPTION

5-6 p.m. Poster awards | reception
Best poster awards: $500 first prize; $300 second prize; $200 third prize
Hosted reception at the Beckman center