BIOGRAPHICAL SKETCH

NAME: Robert T Chang, MD

eRA COMMONS USER NAME (credential, e.g., agency login): rchang3

POSITION TITLE: Professor of Ophthalmology, University Medical Line, Stanford University

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)*

INSTITUTION AND LOCATION	DEGREE *(if applicable)*	Completion Date MM/YYYY	FIELD OF STUDY
University of Missouri, Kansas City	BA	12/2002	Biology
University of Missouri, Kansas City School of Medicine	MD	12/2002	Medicine
Post Doctoral Research Fellow Bascom Palmer Eye Institute		07/2003	OCT
Evanston Northwestern Hospital (Northshore)		07/2004	Internship
Washington University St. Louis Department of Ophthalmology and Visual Sciences		07/2007	Residency
University of Miami, Bascom Palmer Eye Institute		07/2009	Fellowship

Positions and Employment

2026- Professor of Ophthalmology, Stanford University School of Medicine
2020-2026 Associate Professor of Ophthalmology, Stanford University School of Medicine
2009-2019 Assistant Professor of Ophthalmology, Stanford University School of Medicine and Bio-X
2015-2016 Stanford Biodesign Faculty Fellow Program
2017 Stanford StartX Professor-in-Residence Accelerator Program

Professional Memberships and University Administrative Service

2007- Fellow, American Academy of Ophthalmology (AAO)
2009- Member, American Glaucoma Society (AGS)
2009-2016 Department of Ophthalmology Faculty Call Schedule Organizer
2010- Co-Director AUPO-Certified Glaucoma Fellowship Program
2011- Stanford MedScholars Advisor
2013-2021 ACGME Ophthalmology Clinical Competency Milestone Project Review Committee
2015 Non Voting Faculty Member Committee on School of Medicine Curriculum and Academic Policy
2015-2017 Stanford MD Admissions Committee
2015-2018 Selected Member of Stanford Center for Population Health Sciences (PHS)
2015-2019 Appointed Faculty Fellow, Stanford Center for Innovation in Global Health (CIGH)
2016-2025 Medical Director of Employer Based Optometry Service, Stanford University
2016-2021 Vice President, Asia Pacific Tele-Ophthalmology Society (APTOS)

Honors

2002 Alpha Omega Alpha
2007 Heed Ophthalmic Fellowship
2008 American Glaucoma Society Advocacy Day Fellow Representative
2013 Best Pivot, Stanford StartxMed Innovation Challenge
2015 First Place, “Medidash” Philips Healthsuite Hackathon
2016 American Academy of Ophthalmology Achievement Award
2016 Robert Howard Next Step Award “Lunair: a personal air pollution protection device”
2021 Stanford Leadership Development Program (LDP)
2022 Stanford Medicine Leadership Academy (SMLA)

B. **Invited National and International Lectures**

INVITED INTERNATIONAL LECTURES

1) AI, Robotics, Digital Innovation and Virtual Health Chair Asia Pacific Academy of Ophthalmology (APAO), Singapore – 3/19/27
2) “Innovation Slam” APOIS, Korea – 10/31/26
3) “Agentic AI Uses in Ophthalmology” ISER, Spain – 8/25/26
4) “Current and Emerging Concepts in Glaucoma” Tan Tock Seng Hospital Invited Lecture, Singapore 7/23/26
5) “Integration of AI Into Daily Glaucoma Care” Asia-Pacific Glaucoma Congress (APGC), Singapore – 7/26/26
6) Chips, Code, Canals, and Channels: What’s Next in Glaucoma, Microt Invited Lecture, Korea – 6/25/26
7) “The Future of Autonomous AI Agents in Eyecare, Moving Beyond AI Agents into Physical AI” APTOS, Shanghai – 6/6/26
8) “AI, Digital Innovation and Virtual Health” Session Coordinator APAO, Hong Kong – 2/7/26
9) “AI Fairness in Ophthalmology: Identifying and Mitigating Bias in Model Development” APOIS, China – 11/7/25
10) Innovation & Impact - "Creative Biodesign Thinking and Start-Up Pitch Challenge" TIES Workshop, China – 11/6/25
11) “AI Tools in Research” Annual Retreat NUS, Singapore – 7/5/25
12) “Hackers Among Hawkers: Cooking Up a New Generation of MD Innovators” Tan Tock Seng Invited Lecture, Singapore – 7/1/25
13) “Generative AI for Ophthalmology Practice” Asia Pacific Tele-Ophthalmology Society (APTOS) Japan – 6/27/25
14) “Empowering Patients Using AI Agents: Revolutionizing Ophthalmic Education” Asia Pacific Academy of Ophthalmology (APAO), India – 4/5/25
15) “Eye on the Future: What's Happening in AI,” Moderator Latest Deep Learning and Foundation Models, Fireside Chat – Asia Pacific Tele-Ophthalmology Society (APTOS), Hong Kong – 12/15/24
16) “How Large Language Models Will Transform Clinical Care” European School for Advanced Studies in Ophthalmology (ESASO), Italy – 12/2/24 virtual meeting
17) “Multifocal IOL Implantation During Cataract Surgery in Glaucoma Patients” Ulsan Hospital and HERO symposium, Korea – 11/25/24
18) “AI Avatars: Eye-Opening Advances in Glaucoma Care” Korean Glaucoma Society (KGS) Keynote Korea – 11/23/24
19) “Generation AI – A Brave New World” AIcademy Stanford Center Peking University (SCPKU) – 11/22/24 virtual meeting
20) "How Large Language Models Are Transforming Clinical Care" International Society for Eye Research (ISER), Argentina – 10/24/24
21) “Empowering a Future-Ready World: Exploring AI and Generative Models” SPICE E-China SCPKU, China – 8/1/24
22) "How AI is Transforming Ophthalmology, Medicine, and the World" Poly U Invited Speaker, Hong Kong, 7/1/24
23) “The AI evolution from CNN to LLM to RLHF – What Does It All Mean?” Asia-Pacific Glaucoma Congress (APGC) – Philippines 5/25/24

24) "AI + Ophthalmology. GenAI + LLMs Have Changed Our World" Speed Class Back on the Farm 2.0 SCPKU - 5/18/24 virtual meeting

25) "How Foundational Model Finetuning May Change the Approach to AI for Glaucoma Imaging," "Challenges and Opportunities in Glaucoma AI," Chair Asia Pacific Academy of Ophthalmology APAO, Indonesia - 2/23/24

26) "When Will We See an Approved AI Algorithm for Glaucoma Imaging?" APOIS, APVRS Hong Kong - 12/9/23

27) "How Large Language Models will Transform Clinical Care" Asia Pacific Tele-Ophthalmology Society (APTOS) Thailand - 12/2/23

28) "From Biodesign to Designing Your Life" - Asian Liver Center, SCPKU - 8/12/23 virtual meeting

29) "From Med Device Research to Entrepreneurship: How the Stanford Biodesign Process Helps" ARTIC Engineering, NUS, Singapore - 6/20/23

30) "From Med Device Research to Entrepreneurship: How the Stanford Biodesign Process Helps," Poly U Invited Speaker, Hong Kong - 3/27/23

31) Keynote "Leveraging Technology for Community Eye Care," Launch of NUS Medicine Centre for Innovation and Precision Eye Health, Singapore – 3/25/23

32) "Telemedicine in the United States", "AI for Glaucoma Imaging: Opportunities," Scientific Program Co-Chair, Applying Big Data, Artificial Intelligence and Telemedicine in Ophthalmology, Asia Pacific Academy of Ophthalmology (APAO), Malaysia - 2/25/23

33) "Update on AI and Digital Innovation in United States" International Society for Eye Research (ISER) Australia - 2/22/23

34) "How to Teach Glaucoma Surgery" Peking University People's Hospital, 12/17/22 - virtual meeting

35) Israel Biodesign Course Instructor, Tel Aviv - 9/18/22-9/22/22

36) Moderator, Asia Pacific Tele-Ophthalmology Society (APTOS), China – 9/3/22 virtual meeting

37) "AI and Glaucoma" Flying Eye Hospital, Glaucoma Lectures and Surgery, Orbis Foundation, Ethiopia 7/8/22 virtual

38) "Role of Organizations in Nurturing Talent" LV Prasad Eye Institute, 6/8/22 virtual meeting

39) RB Memorial Conference on Translational Research in Medicine (TRIM), 2022 IIT Bombay, India 4/19/22 virtual meeting

40) "Doc, Any Procedure for My Glaucoma That's Not a Trab?" Peking University People's Hospital, 11/20/21 - virtual meeting

41) Scientific Program Committee Co-Chair, Asia Pacific Tele-Ophthalmology Society (APTOS), Thailand, 8/28/21- virtual meeting

42) "Musings in Tele Glaucoma" APTOS-APOIS Webinar Series on Zoom 8/14/20 - virtual meeting

43) "Anterior Segment Trauma" World Ophthalmology Congress (WOC) Capetown, South Africa 6/26/20 - virtual meeting

44) APTOS Webinar Series #1: Telemedicine in the Time of COVID-19, on Zoom 6/12/20 - virtual meeting

45) Scientific Program Coordinator, Big Data, AI, and Telemedicine in Ophthalmology, Asia Pacific Academy of Ophthalmology (APAO), China 4/23/20 - cancelled

46) "Design Thinking Workshop" Lingyuned Teacher Education Workshop - 11/16/19

47) "All You Need to Know About AI" Chulalongkorn University Hospital Grand Rounds, Thailand - 11/12/19

48) Flying Eye Hospital, Glaucoma Lectures and Surgery, Orbis Foundation, Myanmar - 9/22-9/28/19

49) Scientific Program Committee Co-Chair, Asia Pacific Tele-Ophthalmology Society (APTOS), India - 9/21/19

50) "The Role of Artificial Intelligence (AI) in Medicine," Tilganga Institute of Ophthalmology, Visiting Professor, Nepal - 5/23/19

51) "Developing a Silicon Valley Mindset; from MD to Innovator" T3 Career Fair, China - 4/13/19

52) Session Co-Chair Ophthalmic Epidemiology, Telemedicine, Big Data & Artificial Intelligence Program, Speaker "Blockchain and Big Data," "Blockchain and Data Sharing for AI," Asia Pacific Academy of Ophthalmology (APAO), Thailand - 3/7/19

53) Lifeline Express Foundation, Glaucoma International Conference Lectures, China - 11/10/18

54) "Healthcare Entrepreneurship: How Innovation and Technology is Revolutionizing the World of Medicine" CIS Alumni, Hong Kong, 11/7/18

55) "Blockchain Project for Medical Imaging Data Storage" Pacific Rim Alliance for Population Health (PRAPH) and Zhejiang Stanford Co-Lab, China - 10/31/18

56) "Welcome to Doctor Innovation Training" Medical Workshop, Shanghai Jiaotong University, China - 10/20/18

57) "Welcome to Doctor Innovation Training" Medical Workshop, China - 10/19/18

58) "Big Data Blockchain and Ophthalmic Service" Chinese Ophthalmology Society (COS), China - 9/18/18

59) "How to Be a Better Scientist Inventor" Shanghai Jiao Tong University, China - 7/30/18

60) "Uveitic Glaucoma" Chaoyang International Uveitis Summit Forum, China - 7/28/18

61) "Welcome to Changing the Future of Medical Care" Peking Union Medical College, China - 7/28/18

62) "Introduction to Design Thinking" Lingyuned Educational Series, China - 7/22/18

63) "Innovation from Physician" Peking University Third Eye Hospital, China - 7/18/18

64) Scientific Program Committee Co-Chair, Asia Pacific Tele-Ophthalmology Society (APTOS), Singapore – 7/8/18

65) “Using Machine Learning in Glaucoma Research,” World Ophthalmology Congress (WOC), Spain – 6/16/18

66) "Managing Patients with Myopia and Glaucoma -- How AI Can Help?" International Imaging and Perimetry Society, Japan - 5/10/18

67) “Combining Functional and Structural Test for Glaucoma Detection,” “Suprachoroidal Devices Including Cypass,” Asia-Pacific Glaucoma Congress (APGC), Korea – 4/15/18

68) “Artificial Intelligence in Ocular Imaging,” “APTOS Session: AI Screening in USA**,”** Asia Pacific Academy of Ophthalmology (APAO), Hong Kong – 2/8/18

69) “Retinal Imaging and AI” Panel, “Small Company Presentation” Panel, Ophthalmology Futures Asian Forum, Hong Kong – 2/7/18

70) Lifeline Express Foundation, Glaucoma International Conference Lectures, China – 12/1/17

71) "Embracing the AI Revolution in Medicine, Stanford Biodesign and Digital Health Innovation" Visiting Professor, Chinese University of Hong Kong (CUHK), Hong Kong - 11/27/17

72) “Digital Health Innovation and the AI Revolution” Visiting Professor, Centre for Eye Research Australia (CERA), Australia – 8/1/17

73) “Introduction to Biodesign” Australia China Research Stakeholders Meeting, Australia – 7/31/17

74) Scientific Program Committee Chair, Asia Pacific Tele-Ophthalmology Society (APTOS), “Promises and Pitfalls of AI and Digital Health,” Hong Kong – 7/14/17

75) Hot Topics in Glaucoma: “In a Patient with Open Angle Glaucoma, a Concurrent Diagnosis of Moderate to High Myopia: Influences Both Diagnosis and Treatment,” How to diagnose glaucoma among highly myopic eyes,” session co-moderator “Image reading + grading” World Glaucoma Congress (WGC), Finland – 6/30/17

76) “Future Visions of Telemedicine and Artificial Intelligence” APAC Gerontech and Innovation Summit – Healthy Ageing, Hong Kong – 6/18/17

77) “Machine Learning and Medicine” APSEG Symposium: Personalized Medicine and Big Data, Asia Pacific Academy of Ophthalmology (APAO), Singapore – 3/2/17

78) “How AI Will Save Sight” Chinese University of Hong Kong Invited Lecture, Hong Kong – 1/6/17

79) **“**Telemedicine and Glaucoma: Future Directions,” “Precision Medicine in Glaucoma and MIGS Surgery,” Glaucoma Academy Pfizer Korea, Korea – 10/29/16

80) “Culture and Innovation: A Look at the Educational Systems” International Grand Rounds, 130th Anniversary of Beijing Tongren Hospital Memorial Lecture, China – 8/25/16

81) “Cyclophotocoagulation with Micropulse Technology” and “Istent and Collector Channel Patency” Co-Chair Free Paper 3 Session, Asia-Pacific Glaucoma Congress (APGC), Thailand – 7/15/16

82) “MedTech Innovation Within Current US Healthcare” Hong Kong Science Technology Park (HKSTP), Hong Kong – 6/29/16

83) “Clinical Service Innovation in Tele-Ophthalmology” Asia Pacific Tele-Ophthalmology Society (APTOS), China – 6/19/16

84) “Precision Medicine in Glaucoma” Visiting Professor Kaohsiung Veterans General Hospital, Taiwan – 3/28/16

85) “iStent and Collector Channel Patency” and “Digital Health Innovation Overview” Asia Pacific Academy of Ophthalmology (APAO), Taiwan – 3/25/16

86) “Future Role of ICT Advances in Eye Care Including Impact of M-Health: 3D Printing and Hackathons, Potential for Ophthalmology?” World Ophthalmology Congress (WOC) Session Chair, Mexico – 2/5/16

87) “Similarities and Differences Between Chinese and American Policies in Medical Innovation” Invited Panel Digital Healthcare Speaker, Caixin Annual Summit, China – 11/7/15

88) “Applications of Machine Learning in Ophthalmology” Shaozhen Li Invited Named Lecture and Parallel Symposium “Digital Health Innovation and Smartphone Adapters to Take Pictures of the Eye” International Symposium of Ophthalmology (ISO), China – 10/31/15

89) Lifeline Express Foundation, Glaucoma International Conference Lectures, China – 10/17/15

90) “Digital Health Innovation: A Personal Journey in Silicon Valley” Stanford Center at Peking University Innovation VISA Teleconference Lecture, China – 7/24/15

91) “When and What Treatment to Start in Glaucoma Suspect” World Glaucoma Congress (WGC), Hong Kong – 6/7/15

92) “Smartphone and Tablet Computers for Ophthalmic Information for Private Study or by the Bedside: Ophthalmic Imaging Anterior and Posterior Segment” Asia Pacific Academy of Ophthalmology (APAO), China – 4/3/15

93) Lifeline Express Foundation, Glaucoma International Conference Lectures, China – 11/1/14

94) “Updates on Portable Ophthalmic Imaging” Senior Instructor, Asia-Pacific Glaucoma Congress (APGC), Hong Kong – 9/27/14

95) “Innovation in Mobile Healthcare: Using Smartphones as Medical Devices” Public Lecture at Stanford Center at Peking University, China – 6/12/14

96) “Mobile Health in Ophthalmology: A View From Silicon Valley” Chinese Ophthalmology Society, China – 5/31/14.

97) “Endocyclophotocoagulation” World Ophthalmology Congress (WOC), Japan – 4/5/14

98) “Smartphones and Gadgets: How to Practice Neuro-Ophthalmology Anywhere in the 21st Century” North American Neuro-Ophthalmology Society (NANOS) Symposium, Puerto Rico – 3/5/14

99) “Visual Field Defects in Myopes and 6 Lessons Using SD-OCT” Visiting Professor Glaucoma Update Mettapracharak Hospital, Thailand – 12/27/13

100) “6 Lessons: SD-OCT for Glaucoma” Visiting Professor Seoul National University Hospital, Korea – 12/23/13

101) “Myopia and Glaucoma: Visual Field Defects in High Myopes” International Symposium of Ophthalmology (ISO), China – 11/11/13

102) “Glaucoma: Early Diagnosis and Prevention of Blindness” Pan-American Congress of Ophthalmology (PAAO), Brazil – 8/10/13

103) “Glaucoma and Myopia: Challenges and Pearls for Progression Detection” World Glaucoma Congress (WGC), Canada – 7/19/13

104) Lifeline Express Foundation, Glaucoma International Conference Lectures, China – 6/13/13

105) Lifeline Express Foundation, Glaucoma International Conference Lectures, China – 9/1/12-9/2/12

106) “OCT: ONH, RNFL, GCA, GPA” Visiting Professor Hong Kong Sanatorium and Hospital Grand Rounds, Hong Kong – 7/5/12

107) “Collagen Disease and Glaucoma” Asia Pacific Academy of Ophthalmology (APAO), Korea – 4/16/12

108) “Cirrus OCT” Visiting Professor Seoul National University Hospital, Korea – 9/23/11

109) Visiting Professor Lanzhou University Ophthalmology Conference, China – 8/12/11

110) “Trabeculectomy Failure” World Glaucoma Congress (WGC), France – 7/2/11

111) Lifeline Express Foundation, Glaucoma International Conference Lectures, China – 6/19/11-6/23/11

112) “Management of Acute Angle Closure” Asia Pacific Academy of Ophthalmology (APAO), Australia – 3/21/11

113) Lifeline Express Foundation, Cataract and Glaucoma International Conference Lectures, China – 12/16/10-12/19/2010

INVITED REGIONAL AND NATIONAL LECTURES

1) “Glaucoma” Hawaiian Eye, Maui – 1/20/27

2) “Transforming Eye Care, Where AI Agents and Smartphones are Taking Us” AAO New Orleans – 10/10/26

3) “Think Tank: Navigating the Technology Frontier in Ophthalmology” Invited Visiting Professor, Loyola University, Chicago – 9/19/26

4) “AI Applications in Healthcare,” GMT Institute, Stanford Faculty Club – 7/7/26

5) “Big Data and AI,” Co Moderator, American Society of Cataract and Refractive Surgery (ASCRS), Washington DC – 4/11/26

6) “Glaucoma Progression Analysis” Hawaiian Eye Big Island, Kona – 1/21/26

7) “Transforming Eye Care, Where AI Agents and Smartphones are Taking Us” AAO Orlando – 10/18/25

8) "AI Hype vs. Reality: How Will Eye Care Change?" Santa Clara County Optometric Society, Santa Clara - 9/25/25

9) “Glaucoma and AI,” American Society of Cataract and Refractive Surgery (ASCRS), Los Angeles – 4/25/25
10) Co-Moderator Glaucoma Section, Sonoma Eye, San Diego – 3/22/25
11) “Large Language Models for Glaucoma Education,” “Precision Glaucoma: Beyond IOP Reduction as Success” Utah Ophthalmology Society Annual Meeting, Salt Lake City, 1/30/25
12) “Best Practices Perimetry and Imaging,” “Drug and Diagnostics” panel, Hawaiian Eye Kauai, 1/22/25
13) American Academy of Ophthalmology (AAO) Glaucoma Subspecialty Day AGS Symposium Committee and Speaker, and Co-moderator Surgical Videos and Lab 119: Digital Ophthalmology and Glaucoma, Chicago – 10/20/24
14) “Intro of AI Application in US Healthcare Industry,” Enlightenment Program, SCPKU Stanford – 9/15/24
15) “Eye on the Future: AI and Generative Models” 16th US-Japan Future Forum, Sunnyvale – 9/13/24
16) “Outside the White Coat,” Panelist, YoungMD Connect (YMDC Live), Austin – 4/20/24
17) “AI Evolution and Glaucoma Care,” “Introducing the Latest Digital Tools for Planning and Performing Cataract Surgery,” “How to: YES Advocating for Digital Change in Your Practice,” “Navigating Real-World Obstacle to Digital Transformation in Your Practice,” ASCRS Boston-4/5/24
18) Co-Moderator Glaucoma Section, Sonoma Eye, Sonoma – 3/23/24
19) "Should We Fear or Embrace Our Future Machine Overlords?" American Glaucoma Society (AGS), Huntington Beach - 3/2/24
20) "Glaucoma and Cataract Surgery," "Standalone MIGS" panel, Hawaiian Eye Maui, 1/17/24
21) American Academy of Ophthalmology (AAO) Glaucoma Subspecialty Day Committee Member and Co-moderator Late Breaking Section, San Francisco - 11/3/23
22) “Updates in the Glaucoma Treatment Paradigm,” Bay Area Optometric Council, San Francisco - 6/4/23
23) Young MD Connect (YMDC) Mentoring Session 5/17/23 virtual
24) Common Ophthalmic Issues in the Office” Good Samaritan Hospital CME Lecture, San Jose, 5/17/23 - virtual
25) Roundtable Discussions “Virtual Reality, Making Connections,” National Association of Vision Care Plans (NAVCP), Tucson - 4/20/23
26) Debate “Intracameral bimatoprost, Why bother if one and done?” Hawaiian Eye Grand Hyatt Kauai - 1/18/23
27) “AI and Role in Interventional Glaucoma,” Interventional Glaucoma Congress (IGC), Salt Lake City - 11/19/22
28) American Academy of Ophthalmology (AAO) Glaucoma Subspecialty Day Committee Member and Co-moderator Surgical Videos, and Lab 119: Digital Ophthalmology and Glaucoma, Chicago - 9/30/22
29) "Deep Learning for Glaucoma Detection Using 3D Macular OCT Scans" AGS Virtual Research Symposium - 5/14/22 virtual meeting
30) "AI Past Present and Future as It Applies to the Clinical Arena" International Corporate Health Leadership Council, Salt Lake City - 4/28/22
31) "Real World Safety Analysis of an Intracanalicular Dexamethasone Insert using the Intelligent Research in Sight (IRIS) Registry" American Society of Cataract and Refractive Surgery, Washington DC 4/24/22
32) "Glaucoma Lightning Rounds" Hawaiian Eye Hilton Waikoloa, Big Island, Hawaii - 1/19/22

33) "What Can You Do with an MD Degree" Harker School Medical Club, San Jose - 12/10/21 virtual

34) Lab 120 "Smartphones in Ophthalmology #TheFutureIsAI" American Academy of Ophthalmology (AAO), New Orleans - 11/13/21

35) Interventional Glaucoma Congress (IGC), Chicago, 10/7/21-10/9/21

36) “That’s Debatable: AI will Dominate Eye Care in 10 years” Hawaiian Eye Grand Wailea, Maui – 1/20/21 moved to 5/12/21

37) "Useful Apps for Managing Glaucoma Patients" American Glaucoma Society (AGS) Breakfast Roundtable Moderator, San Francisco - 3/6/21 - virtual

38) "Technologies to Enable Global Ophthalmology" PH 196 Global Ophthalmic Public Health and Epidemiology of Eye Disease, Guest Lecturer, UC Berkeley - 2/18/21

39) "Telemedicine and AI" UCSF Ophthalmology Update, San Francisco - 12/4/20

40) Lab 120 “Smartphones in Ophthalmology #TheFutureIsAI” American Academy of Ophthalmology (AAO), Las Vegas – 11/14/20 – virtual meeting, postponed

41) “Session 3: Datasets Standardization, curation, data hosting, data, ownership/use” Panel CCOI Glaucoma Day, Stanford Webinar – 9/3/20

42) “Biodesign Unmet Needs in Beauty” L’Oreal Innovation Webinar – 6/22/20

43) “Angle Surgery in Uveitis Patients” Sonoma Eye, Fairmont Sonoma – 4/3/20 cancelled

44) “AI and Ophthalmology” PH 196 Global Ophthalmic Public Health and Epidemiology of Eye Disease, Guest Lecturer, UC Berkeley 2/20/20

45) Member Value Tools from the IRIS Registry and Verana Health: How to Improve Your Practice" AAO Course American Academy of Ophthalmology (AAO), San Francisco - 10/14/19

46) "The Impact of Artificial Intelligence (AI) on Ophthalmology" Symposium, "The Evolution and Effect of Genomic Medicine, Blockchain, and Robot-assisted Surgery on the Practice of Ophthalmology" Symposium, American Academy of Ophthalmology (AAO), San Francisco - 10/13/19

47) "OCT-A and Glaucoma" UCSF Napa CME Course, Rohnert Park - 9/13/19

48) Visiting Professor 23rd Annual Yale Glaucoma Symposium, Woodbridge - 9/6/19

49) “How to Choose the Correct MIGS Device and Manage Post-op Expectations” American Glaucoma Society (AGS) Breakfast Roundtable Lead Moderator, San Francisco – 3/17/19

50) “Keeping a Clear Eye: Cataracts” Dominican Hospital CME Lecture, Santa Cruz – 1/4/19

51) “Glaucoma: Therapeutic Updates, Best Practices, and Barriers to Effective Care” Santa Clara County Optometric Society, San Jose - 11/15/18

52) "Smartphones in Ophthalmology #TheFutureIsAI" American Academy of Ophthalmology (AAO), Chicago - 10/29/18

53) "Home Visual Fields" Glaucoma Subspecialty Day, American Academy of Ophthalmology (AAO), Chicago - 10/27/18

54) "What Can You Do With an MD Degree" Los Altos High School STEAM Week - 10/8/18

55) "Ophthalmology Basics," Biodesign Fellowship Lead Coordinator, Stanford - 8/6/18

56) Moderator, Poster Session 274, Surgery and Wound Healing II, Association of Research and Vision in Ophthalmology (ARVO), Honolulu - 4/30/17

57) "Various Strategies and the Role of Artificial Intelligence in a Tele-Glaucoma Screening Service" SIG Telemedicine and AI Panel, Association of Research and Vision in Ophthalmology (ARVO), Honolulu - 4/29/17

58) “Tips for Adopting MIGS” American Glaucoma Society (AGS) Breakfast Roundtable Co-Moderator, New York City – 3/4/18

59) “Vision and Hearing Screening” Panel Ophthalmology/ENT CME, Sonoma – 2/2/18

60) “Cataracts,” Regional Medical Center of San Jose – 1/9/18

61) Lab 150 “AI Trends in Medicine” American Academy of Ophthalmology (AAO), New Orleans – 11/13/17

62) “Embracing the AI Revolution in Glaucoma” 2017 Weston Invited Lecture, Glaucoma Research Foundation, Palo Alto – 10/7/17

63) 2017 China-US Young Maker Summit & China-US Youth Innovation Center Inauguration Ceremony, New York University (NYU), New York - 9/25/17

64) “Sudden Vision Loss” Dominican Hospital CME Lecture, Santa Cruz – 7/21/17

65) “How MAPS Jumpstarted My Academic Career” MAPS Luncheon Symposium, American Glaucoma Society (AGS), San Diego – 3/4/17

66) “New Innovations in Hacking Glaucoma” Glaucoma 360, Glaucoma Research Foundation, San Francisco – 2/5/17

67) “How Artificial Intelligence (AI) Help Save Sight” 2016 Young Ophthalmology Symposium, American Academy of Ophthalmology (AAO), Chicago – 10/17/16

68) “Updates in Portable Imaging” The Virtual and Mobile Glaucoma Office Symposium, American Academy of Ophthalmology (AAO), Chicago – 10/17/16

69) “Case #2: Diagnostic and Therapeutic Challenges in High Myopia” Glaucoma Subspecialty Day, American Academy of Ophthalmology (AAO), Chicago – 10/15/16

70) “Ophthalmology for the Primary Care Physician” Regional Medical Center of San Jose – 3/15/16

71) “Smartphone Imaging: New Options” Glaucoma 360 OD Meeting, San Francisco – 1/30/16

72) “Structural and Functional Glaucoma Progression Analysis and Precision Medicine” Glaucoma 360, Glaucoma Research Foundation, San Francisco – 1/30/16

73) Lab 140 “iPhone and iPad for Ophthalmologists” Course Instructor, American Academy of Ophthalmology, Las Vegas – 11/16/15

74) “New Developments in OCT Imaging for Glaucoma: Update on the Macula” American Glaucoma Society (AGS) Breakfast Roundtable Co-Moderator, San Diego – 3/1/15

75) “The EyeGo and Mobile Health Innovation” PH 196 Global Ophthalmic Public Health and Epidemiology of Eye Disease, Guest Lecturer, UC Berkeley – 2/12/15

76) “Glaucoma Genetics: Facts vs. Fiction” Glaucoma 360, Glaucoma Research Foundation, San Francisco – 2/7/15

77) “Smartphone-Based Tele-Ophthalmology Screening For Diabetic Eye Disease” Bay Area Vision Research Day (BAVRD) Guest Lecturer, UC Berkeley – 2/6/15

78) “New Clinical Dimensions in Glaucoma Diagnostics” Hawaiian Eye Zeiss Academy, Maui – 1/20/15

79) “How to Use SDOCT Effectively for Glaucoma” Zeiss Academy, Oakland – 8/20/14

80) “Smartphone Adaptors for Ocular Image Capture” Glaucoma 360, Glaucoma Research Foundation, San Francisco – 2/8/14

81) “Structure and Function in Glaucoma Diagnostics: The Trials and their Impact on the Development of New Technologies” Hawaiian Eye Zeiss Symposium, Kauai – 1/21/14

82) Lab 192a and 192b “iPhone Physician Education and Reference Tools” Course Instructor, American Academy of Ophthalmology, New Orleans – 11/17/13

83) “Update in Ophthalmology” Dominican Hospital CME Lecture, Santa Cruz – 7/12/13

84) “Fixing the Plumbing of the Eye” American Society of Ophthalmic Registered Nurses (ASORN) Lecture, Palo Alto – 4/27/13

85) “The Art of Fundus Photo Interpretation” Glaucoma 360, Glaucoma Research Foundation, San Francisco – 2/2/13

86) Lab 192a and 192b “iPhone Physician Education and Reference Tools” Course Instructor, American Academy of Ophthalmology, Chicago – 11/11/12

87) “OCT Diagnostic Performance Studies” Invited Panel Speaker FDA AGS Workshop, Washington D.C. – 10/5/12

88) “Myopia and Glaucoma” Glaucoma 360, Glaucoma Research Foundation, San Francisco – 2/3/12

89) Lab 152a and 152b “iPhone Patient Education and Social Media” Course Instructor, American Academy of Ophthalmology, Orlando – 10/24/11

90) “Retcam Goniography” American Glaucoma Society (AGS) Pre-Surgical Meeting, Naples – 3/3/10

STANFORD UNIVERSITY LECTURES

1) “Glaucoma Surgery and Lasers” Stanford Basic Science Review Course, Palo Alto – 7/16/26
2) “Glaucoma Surgery and Lasers” Stanford Basic Science Review Course, Palo Alto – 7/15/25
3) “Embracing LLMs in Academia” OHNS Grand Rounds, Palo Alto - 1/6/25
4) “Optic Nerve Imaging” Stanford Basic Science Review Course – 7/15/24
5) Ophthalmology 201 Course Lecture, Palo Alto - 11/3/22
6) "Doctors and Innovation: The Survival Guide at Stanford" OHNS Grand Rounds, Palo Alto - 10/13/22
7) “Optic Nerve Imaging” Stanford Basic Science Review Course, Palo Alto, 7/18/22
8) Chapter 4,5: Glaucoma Anterior and Posterior Segment Imaging Review 9/30/21 – virtual meeting
9) "How to Maximize Optic Nerve Imaging for Glaucoma Management" Stanford Basic Science Review Course 7/20/21 - virtual meeting
10) "What's Next in Glaucoma AI" Stanford Basic Science Review Course 7/12/21 - virtual meeting
11) Chapter 5: Glaucoma Imaging Review 9/10/20 – virtual meeting
12) “What’s New in Optic Nerve Imaging,” “Machine Learning in Glaucoma” Stanford Basic Science Review Course, Palo Alto – 7/13/20, 7/31/20
13) “The Role of Artificial Intelligence in Medicine” CARE Summer Internship Lecture in Data Science, AI, and Medical Technology - 6/18/19
14) "Blockchain in Healthcare" Center for Digital Health Workshop Presentation - 2/15/19
15) "Mobile Health Needs" BioE 273 Stanford Biodesign for Mobile Health Panel - 10/3/18
16) "Vision Care: Landscape Overview of Ophthalmology" Biodesign Fellows Lecture - 8/6/18
17) "Health Hackathons" Center for Digital Health Workshop Presentation - 5/23/18
18) "Designing a Wearable Personal Air Pollution Sensor and Filter Device for China and Beyond" Spectrum Biodesign MedTech Highlights - 4/9/18
19) "Precision Health in Glaucoma" Stanford Glaucoma Resident Lecture - 3/15/18
20) "Precision Medicine in Glaucoma" Stanford Glaucoma Resident Lecture - 12/8/17
21) “Genetics of Glaucoma” and “Optic Nerve Imaging” Stanford Basic Science Review Course, Palo Alto – 7/19/17
22) “Mobile Health Needs” BioE 273 Stanford Biodesign for Mobile Health Panel – 10/5/16
23) “Genetics of Glaucoma” and “Optic Nerve Imaging” Stanford Basic Science Review Course, Palo Alto – 7/20/16
24) “Ophthalmology as a Career” Ophthalmology Interest Group Panel, Stanford – 4/26/16

25) “Need Finding in Mobile Health” SHIFT Digital Health Panel, Stanford – 4/8/16
26) "Innovation in Glaucoma" Stanford Glaucoma Resident Lecture - 4/7/16
27) “Vision and Aging: Glaucoma, Macular Degeneration, and Cataracts” Stanford Physician Assistant (PA) Program Guest Lecturer – 1/11/16
28) “Enabling Technologies” BioE 273 Stanford Biodesign for Mobile Health Panel – 10/7/15
29) “Genetics of Glaucoma” Stanford Basic Science Review Course, Palo Alto – 7/22/15
30) “Vision and Aging: Glaucoma, Macular Degeneration, and Cataracts” Stanford Physician Assistant (PA) Program Guest Lecturer – 1/12/15
31) “OCT and Visual Field Progression Analysis” Stanford Glaucoma Resident Lecture – 11/13/14
32) “Genetics of Glaucoma” Stanford Basic Science Review Course, Palo Alto – 7/23/14
33) “APAMSA Presents: Medicine in Asia: Practice, Policy & Technology” Guest Speaker Panel, Stanford – 2/25/14
34) “Istent” Stanford Glaucoma Resident Lecture – 3/27/14
35) “Genetics of Glaucoma” Stanford Basic Science Review Course, Palo Alto – 7/24/13
36) “OKAP Glaucoma Review” Stanford Glaucoma Resident Lecture – 2/21/13
37) “Visual Field Interpretation” Stanford Glaucoma Resident Lecture – 12/20/12
38) “Optic Nerve Interpretation” Stanford Glaucoma Resident Lecture – 10/11/12
39) “Genetics of Glaucoma” and “Aqueous Dynamics” Stanford Basic Science Review Course, Palo Alto – 7/16/12
40) “Tube versus Trabeculectomy” Journal Club Stanford – 12/20/11
41) “iPhone Apps and the Present/Future of Patient Education” Grand Rounds Stanford Ophthalmology Department, Palo Alto – 11/1/11
42) “Acute Angle Closure” Stanford Glaucoma Resident Lecture – 10/13/11
43) “Normal Tension Glaucoma” Stanford Glaucoma Resident Lecture – 10/11/11
44) “Glaucoma Overview” Stanford Glaucoma Resident Lecture – 9/1/11
45) “Genetics of Glaucoma” Stanford Basic Science Review Course, Palo Alto – 7/20/11
46) “Cirrus OCT Ganglion Cell Analysis” Stanford Research Day, Palo Alto – 6/25/11
47) “Glaucoma Technology: Surgical Innovation” Stanford BioDesign Program, Palo Alto – 1/29/11
48) “Cataracts and Glaucoma” Stanford Glaucoma Resident Lecture – 1/18/11
49) “Glaucoma Lasers” Stanford Glaucoma Resident Lecture – 12/23/10
50) “New Glaucoma Surgeries” Stanford Glaucoma Resident Lecture – 10/7/10
51) “Glaucoma Pharmacology” Stanford Glaucoma Resident Lecture – 8/31/10
52) “Glaucoma Devices: Diagnostic and Therapeutic” Stanford BioDesign Program, Palo Alto – 8/26/10
53) “Genetics of Glaucoma” Stanford Basic Science Review Course, Palo Alto – 7/12/10
54) “Common Eye Issues” Stanford Physician Assistant (PA) Program Guest Lecturer – 7/8/10
55) “Update on Cirrus OCT RNFL and ONH” Stanford Research Day – 6/12/10
56) “Glaucoma Pharmacology” Stanford Glaucoma Resident Lecture – 4/20/10
57) “Tube and Trabeculectomy Postoperative Management” Stanford Glaucoma Resident Lecture – 1/19/10
58) “Glaucoma Coding” Stanford Glaucoma Resident Lecture – 11/10/09

59) "Optical Coherence Tomography (OCT) in Glaucoma" Chinese Zeiss Meeting, Stanford – 10/21/09

60) "Trabectome" Grand Rounds Stanford Ophthalmology Department, Palo Alto – 10/6/09

61) "Gonioscopy" Stanford Glaucoma Resident Lecture – 10/8/09

62) "Visual Field Testing" Stanford Glaucoma Resident Lecture – 9/1/09

C. **Peer-Reviewed Publications**

PEER-REVIEWED PUBLICATIONS IN PRESS

1) Ong JCL, Ning Y, Collins GS, Bitterman DS, Beecy AN, **Chang RT**, et al. International Partnership for Governing Generative Artificial Intelligence Models in Medicine. *Nat Med*. 2025 Jun 30. doi: 10.1038/s41591-025-03787-4. Online ahead of print.

PEER-REVIEWED ORIGINAL RESEARCH PUBLICATIONS

1) Koornwinder A, Zhang Y, Ravindranath R, **Chang RT**, et al. Multimodal Artificial Intelligence Models Predicting Glaucoma Progression Using Electronic Health Records and Retinal Nerve Fiber Layer Scans. TVST, *Transl Vis Sci Technol*. 2025 Mar 3;14(3):27.
2) Radcliffe NM, Harris J, Garcia K, Zwick E, **Chang RT**, Mbagwu M. Standalone Canaloplasty and Trabeculotomy in POAG: A 36-Month Analysis from the AAO IRIS® Registry (Intelligent Research in Sight). *Am J Ophthalmol*. 2025 Mar;271:436-444.
3) Ding X, **Chang RT**, Liu L, Yangfan Y, Lu L, Lin X. The Clinical Spectrum and Possible Pathogenesis of Progressive Outer Retinal Necrosis. *Br J Ophthalmol*. 2024 Dec 17;109(1):107-112.
4) Berneshawi AR, Shue A, and **Chang RT**. Glaucoma Home Self-Testing Using VR Visual Fields & Rebound Tonometry vs. In-Clinic Perimetry & Goldmann Applanation Tonometry: A Pilot Study. TVST, *Transl Vis Sci Technol*. 2024 Aug 1;13(8):7.
5) Nascimento e Silva R, Kim JA, Li Y, Chen C, Chaudhry AF, Zhang M, Villarreal A, Berneshawi AR, Liu J, Shue A, Chang DS, **Chang RT**. Repeatability and Reproducibility of a Virtual Reality Headset Perimeter in Glaucoma and Ocular Hypertensive Patients. *Transl Vis Sci Technol.* 2024 Jun 3;13(6):14.
6) Wang SK, Tran EM, Wan L, Yan W, Kosaraju R, Sun Y, **Chang RT**. Comparing a Head-Mounted Smartphone Visual Field Analyzer to Humphrey Perimetry in Glaucoma Patients: A Prospective Study. *J Glaucoma*. 2024 Oct 1;33(10):742-747.
7) Wolf K, Chemudupati T, Kumar A, Franco JA, Montague AA, Lin CC, Lee WS, Fisher AC, Goldberg JL, Mruthjunjaya P, **Chang RT**, Mahajan VB. Using Electronic Health Record Data to Determine the Safety of Aqueous Humor Liquid Biopsies for Molecular Analyses. *Ophthal Sci* 2024 4(5): 100517.
8) Wolf J, Rasmussen DK, Sun YJ, Vu JT, Wang E, Espinosa C Camilo Espinosa, Bigini F, **Chang RT**, et al. Liquid-Biopsy Proteomics Combined with AI Identifies Cellular Drivers of Eye Aging and Disease In Vivo. Cell. 2023 Oct 26;186(22):4868-4884.e12
9) Ran AR, Wang X, Chan PP, Wong OM, Yuen H, Lam NM, Chan NC, Yip W, Young AL, Yung HW, **Chang RT**, et al. Developing A Privacy-preserving Deep Learning Model for Glaucoma Detection: A Multi-Centre Study with Federated Learning. Br J Ophthalmol. 2023 Oct 19:bjo-2023-324188.
10) Wolf J, Chemudupati T, Kumar A, Rasmussen DK, Wai KM, **Chang RT**, et al. Biobanking of Human Aqueous and Vitreous Liquid Biopsies for Molecular Analyses. J Vis Exp. 2023 Sep 11;(199).
11) Bernstein IA, Zhang Y, Govil D, Majid I, **Chang RT**, et al. Comparing the Performance of Ophthalmologist and ChatGPT Responses to Online Patient Eye Care Questions. JAMA Netw Open. 2023 Aug 1;6(8):e2330320.
12) Gui H, Zhang, V, **Chang RT**, Wang SY. Real-World Agreement of Same-Visit Tono-Pen Vs Goldmann Applanation Intraocular Pressure Measurements Using Electronic Health Records. Heliyon. 2023 Jul 27;9(8):e18703
13) Huang MJ, Samuelson TW, De Francesco T, Levin A, Sieck E, Gazzard G, Porter M, Gallardo M, **Chang RT**, Liu WW, Chaya C, Gulati S, Shah M. Managing primary open-angle glaucoma in the setting of suboptimal surgical outcomes in the fellow eye. J Cataract Refract Surg. 2023 Jul 1;49(7):764.

14) Jan C, Xin J, Dong Y, Butt T, **Chang R**, Keay L, Friedman DS, Congdon N. Patterns and Determinants of Incident Cataract Surgery in China from 2011 to 2015 Using a Nationally representative Longitudinal Database. BMJ Open. 2023 Jun 21;13(6).
15) Sun MT, Tran M, Singh K, **Chang R**, Wang H, Sun Y. Glaucoma and Myopia: Diagnostic Challenges. Biomolecules. 2023 Mar 20;13(3):562.
16) Awh CC, Barteselli G, Madakia S, **Chang RT**, Stewart JM, Wieland MR, Brassard R, Callaway NF, GUne S, Heatherton P, Malhotra V, Willis JR, Pieramici DJ. Management of Key Ocular Adverse Events in Patients Implanted With the Port Delivery System With Ranibizumab (PDS). Ophthalmol Retina. 2022 Nov; 6(11):1028-1043.
17) Sun MT, Beykin G, Lee WS, Sun Y, **Chang R**, Nunez M, Li KZ, Knasel C, Rich C, Goldberg, JL. Structural and Metabolic Imaging after Short-term Use of the Balance Goggles System in Glaucoma Patients: A Pilot Study. Journal of Glaucoma 31(8):p 634-638, August 2022.
18) Ran AR, Wang X, Chan PP, Chan NC, Yip W, Young AL, Wong MOM, Yung HW, **Chang RT**, et. al. Three-Dimensional Multi-Task Deep Learning Model to Detect Glaucomatous Optic Neuropathy and Myopic Features From Optical Coherence Tomography Scans: A Retrospective Multi-Centre Study. Front Med (Lausanne). 2022 Jun 15;9:860574
19) Pieramici DJ, Wieland MR, Stewart JM, **Chang RT**, Gune SA, Malhotra VK, Barteselli G, Awh CC. Implant Insertion Procedure of the Port Delivery System With Ranibizumab: Overview and Clinical Pearls. Ophthalmic Surg Lasers Imaging Retina. 2022 May;53(5):249-256. doi: 10.3928/23258160-20220408-01. Epub 2022 May 1.
20) Graff JM, Sheth VS, **Chang RT**, Menezes AR, Barteselli G, Malhotra VK. Conjunctiva and Tenon's Capsule Handling in the Port Delivery System with Ranibizumab Implant Insertion Procedure: Surgical Pearls. Ophthalmic Surg Lasers Imaging Retina. 2022 May;53(5):266-273. doi: 10.3928/23258160-20220415-03. Epub 2022 May 1.
21) Noury E, Manni SS, **Chang RT**, Ran AR, Cheung CY, Thapa SS, Rao HL, Dasari S, Riyazuddin, M, Chang D, Nagaraj S, Thma CC, Zadeh R. Deep Learning for Glaucoma Detection and Identification of Novel Diagnostic Areas in Diverse Real World Data Sets. Transl Vis Sci Technol. 2022 May 2;11(5):11. doi: 10.1167/tvst.11.5.11.
22) Aziz R, Bindiganavale, M, **Chang RT**, Moss HE. Patient Personality and Illness Perceptions in Relation to Follow-Up Appointment Adherence in Neuro-ophthalmology. J Neuroophthalmol. 2022 Jun 1;42(2):180-186. doi: 10.1097/WNO.0000000000001533. Epub 2022 Mar 24.
23) Rothman, A. L., **Chang, R.,** Kolomeyer, N. N., Turalba, A., Stein, J. D., Boland, M. V. American Glaucoma Society Position Paper: Information Sharing Using Established Standards is Essential to the Future of Glaucoma Care. *Ophthalmol Glaucoma* 2021 Dec 18;S2589-4196(21)00279-9. Online ahead of print.
24) Liu X, Wang G, Wang X, Wang Y, Min Y, **Chang RT**, et al. Daytime napping is associated with retinal microcirculation: a large population-based study in China. *Sleep* 2021 Nov 20;zsab277. doi: 10.1093/sleep/zsab277. Online ahead of print.
25) Beykin G, Stell L, Halim MS, Nunez M, Popova L, Nguyen BT, Groth SL, Dennis A, Li Z, Atkins M, Khavari T, Wang SY, **Chang R,** Fisher AC, Sepah YJ. Phase 1b randomized controlled study of topical recombinant human nerve growth factor (rhNGF) for neuroenhancement in glaucoma. *Am J Ophthalmol.* 2021 Nov 13;234:223-234. doi: 10.1016/j.ajo.2021.11.002. Online ahead of print.
26) Lee EB, Wang SY, **Chang, RT.** "Interpreting Deep Learning Studies in Glaucoma: Unresolved Challenges" *Asia Pac J Ophthalmol*: May-June 2021;10(3):261-267
27) Tang F, Wang X, Ran AR, Chan CKM, Ho M, Yip W, Young AL, Lok J, Szeto S, Chan J, Yip F, Wong R, Tang Z, Yang D, Ng DS, Chen LJ, Brelén M, Chu V, Li K, Lai THT, Tan GS, Ting DSW, Huang H, Chen H, Ma JH, Tang S, Leng T, Kakavand S, Mannil SS, **Chang RT**, et al. A Multitask Deep-Learning System to Classify Diabetic Macular Edema for Different Optical Coherence Tomography Devices: A Multicenter Analysis. *Diabetes Care*. 2021 Sep;44(9):2078-2088.
28) Idriss BR, Tran TM, Atwine D, **Chang RT**, Myung D, Onyango J; Smartphone-Based Ophthalmic Imaging Compared to Spectral Domain Optical Coherence Tomography Assessment of Vertical Cup-to-Disc Ratio among Adults in Southwestern Uganda. *J Glaucoma*. 2021 Mar 1;30(3):e90-98.
29) Ludwig CA, Srikanth P, Greven MA, Smith SJ, **Chang RT,** Leng T. Automatic Identification of Referral-Warranted Diabetic Retinopathy using Deep Learning on Mobile Phone Images. *Transl Vis Sci Technol*. 2020 Dec 4;9(2):60.

30) Chansangpetch S, Ittarat M, Yang S, Fisher AC, Singh K, Lin SC, **Chang RT**. “Comparison of 1 Year Effectiveness of Trabecular Microbypass Stent Implantation (iStent) Among Mild, Moderate, and Severe Primary Open Angle Glaucoma.” *J Glaucoma.* 2020 Jul;29(7):542-549.
31) Wang X, Chen H, Ran AR, Luo L, Chan PP, Tham CC, **Chang RT**, Mannil SS, Cheung CY, Heng PA. “Towards multi-center glaucoma OCT image screening with semi-supervised joint structure and function multi-task learning.” *Med Image Anal* 2020; 63: 101695.
32) Yang S, Ittarat M, Tran E, Ferrell P, Wang G, Fisher AC, Li Z, Chang RT. Comparison of Using One Trabecular Microbypass Stent versus Two during Cataract Surgery at Two Sites: One-Year Follow-Up. *Biomed Res Int. 2020* Apr 7;2020:1920352.
33) Russakoff DB, Mannil SS, Oakley JD, Ran AR, Cheung CY, Dasari S, Riyazzuddin M, Nagaraj S, Rao HL, Chang D, **Chang RT**. A 3D deep learning system for detecting referable glaucoma using full OCT macular cube scans. *Trans Vis Sci Tech*. 2020;9(2):12.
34) Liu H, Li L, Wormstone IM, Qiao C, Zhang C, Liu P, Li S, Wang H, Mou D, Pang R, Yang D, Jiang L, Chen Y, Hu M, Xu Y, Kang H, Ji X, **Chang R**, Tham C, Cheung C, Ting DSW, Wong TY, Wang Z, Weinreb RN, Xu M, Wang N. Development and Validation of a Deep Learning System to Detect Glaucomatous Optic Neuropathy Using Fundus Photographs. *JAMA Ophthalmol*. 2019 Sep 12;137(12):1353-60.
35) Ran A, Wang X, Chen H, Luo L, Chan PP, Wong MO, **Chang RT**, Mannil SS, Young AL, Yung H, Pang CC, Tham CC, Cheung CY. “To Detect Glaucomatous Optic Neuropathy by 3D Learning with Optical Coherence Tomography.” *Lancet Digital Health*, Vol. 1, No. 4, e172–e182. August 2019
36) Wang SY, Hernandez-Boussard T, **Chang RT**, Pershing S. Understanding Patient Attitudes Toward Multifocal Intraocular Lenses in Online Medical Forums Through Sentiment Analysis. *Stud Health Technol Inform*. 2019 Aug 21;264:1378-1382.
37) Yu X, Guo H, Liu X, Wang G, Min Y, Chen S, Han S, **Chang RT**, Zhao X, Hsing AW, Zhu S, Yao K. Dry eye and sleep quality: a large community-based study in Hangzhou. *Sleep.* 2019 Oct 21; 42(11).
38) Keel S, Li Z, Scheetz J, Robman L, Phung J, Makeyeva G, Aung KZ, Liu C, Yan X, Meng W, Guymer R, **Chang R**, He M. Development and Validation of a Deep Learning Algorithm for the Detection of Neovascular Age-related Macular Degeneration from Color Fundus Photographs. *Clin Exp Ophthalmol.* 2019 Nov;47(8):1009-1018.
39) Lee MD, Chen SP, Chen TA, Leibold C, Li Z, Fisher AC, Lin CC, Singh K, **Chang RT**. "Characteristics of Cataract Surgery Patients Influencing Press Ganey Patient Satisfaction Scores." *J Cataract Refract Surg*. 2019 Apr;45(4):437-442.
40) Hong K, Wong IYH, Singh K, **Chang RT**. "Corneal Biomechanics Using a Scheimpflug-Based Noncontact Device in Normal-Tension Glaucoma and Healthy Controls." *Asia Pac J Ophthalmol (Phila).* 2019 Feb 18. 2019 Jan-Feb;8(1):22-29.
41) Wang, JK, Roy, SK, Barry M, **Chang RT**, Bhatt AS. "Institutionalizing Healthcare Hackathons to Promote Diversity in Collaboration in Medicine." *BMC Med Educ*. 2018 Nov 20;18(1):269.
42) Wang JK, Pamnani RD, Capasso R, **Chang RT**. "An Extended Hackathon Model for Collaborative Education in Medical Innovation." *J Med Syst*. 2018 Oct 17;42(12):239.
43) Li Z, Keel S, Liu C, He Y, Meng W, Scheetz J, Lee PY, Shaw J, Ting D, Wong T, Taylor H, **Chang R**, He M. "An Automated Grading System for Detection of Vision-Threatening Referable Diabetic Retinopathy on the Basis of Color Fundus Photographs." *Diabetes Care*. 2018 Dec;41(12):2509-2516.
44) Wang SY, Singh K, Stein JS, **Chang RT**. "Reduction of Ocular Antihypertensive Medication Usage After iStent Implantation Concurrent with Cataract Surgery in a Large U.S. Healthcare Claims Database." *JAMA Ophthalmol. 2019 Jan 1;137(1):21-27. doi: 10.1001/jamaophthalmol.2018.4461.*
45) Li Z, He Y, Keel S, Meng W, **Chang RT**, He M. "Efficacy of A Deep Learning System for Detecting Glaucomatous Optic Neuropathy based on Color Fundus Photographs." *Ophthalmology*. 2018 Aug;125(8) 1199-1206.
46) Ludwig CA, Newsom M, Jais A, Myung DJ, Murthy SI, **Chang RT**. “Training Time and Quality of Smartphone-Based Anterior Segment Screening in Rural India.” *Clin Ophthalmol*. 2017 Jul 14;11:1301-1307.
47) Yoo YC, Kim JM, Park HS, Yoo C, Shim SH, Park KH, **Chang RT**. “Relationship Between Retinal Nerve Fiber Layer Defects and the Quadrant and Proximal Location of Optic Disc Hemorrhage.” *Optom Vis Sci*. 2017 Jun;94(6):647-653.

48) Iu LP, Lee R, Fan MC, Lam WC, **Chang RT**, Wong IY. "Serial Spectral-Domain Optical Coherence Tomography Findings in Acute Retinal Pigment Epitheliitis and the Correlation to Visual Acuity." *Ophthalmology.* 2017 Jun;124(6):903-909.
49) Lowry EA, Hou J, Hennein L, **Chang RT**, Lin S, Keenan J, Wang SK, Ianchulev S, Pasquale L, Han Y. "Comparison of Peristat Online Perimetry with Humphrey Perimetry in a Clinic-Based Setting." *Transl Vis Sci Technol*. 2016 Jul 19;5(4):4.
50) Ludwig CA, Murthy S, Pappuru RR, Jais A, Myung D, **Chang RT**. "A Novel Smartphone Imaging Adapter: User Feasibility Studies in Hyderabad, India." *Indian J Ophthalmol.* 2016 Mar;64(3):191-200.
51) Ding X, **Chang RT**, Guo X, Liu X, Holden B, He M. "Visual Field Defect Classification in the Zhongshan Ophthalmic Center- Brien Holden Vision Institute High Myopia Registry Study." *Br J Ophthalmol*. 2016 Dec;100(12):1697-1702.
52) Lee R, **Chang RT**, Wong I, Lai J, Lee J, Singh K. Assessment of corneal biomechanical parameters in myopes and emmetropes using the Corvis ST. *Clin Exp Optom.* 2016 Mar;99(2):157-62.
53) Toy B, Myung D, He L, Pan CK, **Chang RT**, Polkinhorne A, Merrell D, Foster D, Blumenkranz MS. Smartphone Ophthalmoscopy Lens Adapter as an Inexpensive Screening Tool to Detect Referral-Warranted Diabetic Eye Disease. *Retina.* 2016 May;36(5):1000-8.
54) Do AT, Pilai MR, Balakrishnan V, **Chang RT**, Robin AL, Singh K, Lee BW. Effectiveness of Glaucoma Counseling on Rates of Follow-up and Glaucoma Knowledge in a South Indian Population. *Am J Ophthalmol*. 2016 Mar;163:180-189.
55) Long C, Tsay EL, Jacobo SA, Popat R, Singh K, **Chang RT**. Factors Associated with Press Ganey Satisfaction Scores for Ophthalmology Patients. *Ophthalmology.* 2016 Feb;123(2):242-7.
56) Lee R, **Chang RT**, Wong I, Lai J, Lee J, Singh K. Novel Parameter of Corneal Biomechanics That Differentiate Normals from Glaucoma. *J Glaucoma.* 2016 Jun;25(6):e603-9.
57) Choi DY, **Chang RT**, Yegnashankaran K, Friedman NJ. Reversible Conjunctival Pigmentation Associated With Prostaglandin Use. *J Glaucoma.* 2016 Jan;25(1):e56-7.
58) Mwanza JC, Warren JL, Hochberg JT, Budenz DL, **Chang RT**, Ramulu PY. Combining Frequency Doubling Technology and Scanning Laser Polarimetry for Glaucoma Detection. *J Glaucoma.* 2015 Oct-Nov;24(8):561-7.
59) Lin SR, Lai I, Dutta S, Singh K, **Chang RT**. Quantitative Measurement of Fixation Stability During Rarebit Perimetry and Humphrey Visual Field Testing. *J Glaucoma.* 2015 Feb;24(2):100-4.
60) Do AT, Ilango K, Ramasamy D, Kalidasan S, Balakrishnan V, **Chang RT**. Effectiveness of Low Vision Services in Improving Patient Quality of Life at Aravind Eye Hospital. *Indian J Ophthalmol*. 2014 Dec;62(12):1125-31.
61) Lin SR, Fijalkowski N, Lin BR, Li F, Singh K, **Chang RT**. Parallel Rarebit: A Novel, Large-Scale Visual Screening Methodology for School-Age Children. *Clin Exp Optom*. 2014 Nov;97(6):528-33.
62) Silva RA, **Chang RT**, Moshfeghi DM, Leng T. Optic Nerve Pit-associated Choroidal Cleft. *JAMA Ophthalmol*. 2014 Sep 1;132(9):1142.
63) Mwanza JC, Budenz DL, Godfrey DG, Neelakantan A, Sayyad FE, **Chang RT**, Lee RK. Diagnostic Performance of Optical Coherence Tomography Ganglion Cell-Inner Plexiform Layer Thickness Measurements in Early Glaucoma. *Ophthalmology*. 2014 Apr;121(4):849-54.
64) Lee JWY, Chan JCH, **Chang RT**, Singh K, Liu CCL, Gangwani R, Wong MOM, Lai JSM. Corneal Changes After a Single Session of Selective Laser Trabeculoplasty for Open Angle Glaucoma. *Eye (Lond).* 2014 Jan;28(1):47-52. Epub 2013 Oct 18.
65) Mwanza JC, Durbin MK, Budenz DL, Sayyad FE, **Chang RT**, et al. Glaucoma Diagnostic Accuracy of Ganglion Cell-Inner Plexiform Layer Thickness: Comparison with Nerve Fiber Layer and Optic Nerve Head. *Ophthalmology*. 2012 Jun;119(6):1151-8. Epub 2012 Feb 23.
66) Mwanza JC, Oakley JD, Budenz DL, **Chang RT**, et al. Macular Ganglion Cell-Inner Plexiform Layer: Automated Detection and Thickness Reproducibility with Spectral-Domain Optical Coherence Tomography in Glaucoma. *Invest Ophthalmol Vis Sci*. 2011 Oct 21;52(11):8323-9.
67) Bhorade AM, Wilson BS, Gordon MO, Palmberg P, Weinreb RN, Miller E, **Chang RT**, Kass MA; for the Ocular Hypertension Treatment Study Group. The Utility of the Monocular Trial Data from the Ocular Hypertension Treatment Study. *Ophthalmology*. 2010 Jul 8. Epub 2010 Aug 12.
68) Mwanza JC, **Chang RT**, Budenz DL, et al. Reproducibility of Peripapillary Retinal Nerve Fiber Layer Thickness and Optic Nerve Head Parameters Measured with CirrusTM HD-OCT in Glaucomatous Eyes. *Invest Ophthalmol Vis Sci*. 2010 Jun 23. Epub 2010 Jun 23.

69) **Chang RT**, Knight OJ, Feuer WJ, Budenz DL. Sensitivity and Specificity of Time Domain versus Spectral Domain Optical Coherence Tomography in Diagnosing Early to Moderate Glaucoma. *Ophthalmology.* 2009 Dec;116(12):2294-9. Epub 2009 Oct 2.
70) Knight OJ, **Chang RT**, Feuer WJ, Budenz DL. Comparison of Retinal Nerve Fiber Layer Measurements Using Time Domain OCT and Spectral Domain OCT. *Ophthalmology* 2009 Jul;116(7):1271-7. Epub 2009 Apr 22.
71) Lujan BJ, Wang F, Gregori G, Rosenfeld PJ, Knighton RW, Puliafito CA, Danis RP, Hubbard LD, **Chang RT**, Budenz DL, Seider MI. Calibration of Fundus Images Using Spectral Domain Optical Coherence Tomography. *Ophthalmic Surg Lasers Imaging* 2008 Jul-Aug;39(4 Suppl):S15-20.
72) Budenz DL, **Chang RT**, Huang X, et al. Reproducibility of Retinal Nerve Fiber Thickness Measurements Using the Stratus OCT in Normal and Glaucomatous Eyes. *Invest Ophthalmol Vis Sci* 2005 Jul;46(7):2440-3.
73) Mino de Kaspar H, **Chang RT**, Singh K, et al. Prospective Randomized Comparison of 2 Different Methods of 5% Povidone-Iodine Applications for Anterior Segment Intraocular Surgery. *Arch Ophthalmol* 2005 Feb;123(2):161-5.
74) Budenz DL, Michael A, **Chang RT**, et al. Sensitivity and Specificity of the STRATUS OCT for Perimetric Glaucoma. *Ophthalmology* 2005 Jan;112(1):3-9.
75) De Kaspar HM, **Chang RT**, Shriver EM, et al. Three-day Application of Topical Ofloxacin Reduces the Contamination Rate of Microsurgical Knives in Cataract Surgery: a Prospective Randomized Study. *Ophthalmology* 2004 Jul;111(7):1352-5.
76) Ta CN, **Chang RT**, Singh K, et al. Antibiotic Resistance Patterns of Ocular Bacterial Flora: a Prospective Study of Patients Undergoing Anterior Segment Surgery. *Ophthalmology* 2003 Oct;110(10):1946-51.

PEER-REVIEWED OTHER REVIEW PUBLICATIONS AND EDITORIALS

77) Tham YC, Goh JHL, Nderitu P, et al, Global RETFound Consortium. Building the World's First Truly Global Medical Foudation Model. *Nat Med*. 2025 Sep 8. doi: 10.1038/s41591-025-03859-5. Online ahead of print.
78) Yang Z, Wang D, Zhou F, Song D, Zhang Y, Jiang J, Kong K, Liu X, Qiao Y, **Chang RT**, et al. Understanding Natural Language: Potential Application of Large Language Models to Ophthalmology. *Asia Pac J Ophthalmol (Phila)*. 2024 2024 Jul-Aug;13(4):100085.
79) Aziz R., **Chang RT**, Moss HE. Assessing Illness Perception Factors Associated with Educational Needs in Neuro-Ophthalmology. LIPPINCOTT WILLIAMS & WILKINS. 2020
80) Noury E, Mannil SS, **Chang RT**, Ran AR, Cheung CY, Thapa SS, Rao HL, Dasari S, Riyazuddin M, Nagaraj S, Zadeh R. Finding New Diagnostic Information for Detecting Glaucoma using Neural Networks. updated https://arxiv.org/abs/1910.06302v2, 9/3/20
81) Noury E, Mannil SS, **Chang RT**, Ran AR, Cheung CY, Thapa SS, Rao HL, Dasari S, Riyazuddin M, Nagaraj S, Zadeh R. Detecting Glaucoma Using 3D Convolutional Neural Network of Raw SD-OCT Optic Nerve Scans. arXiv:1910.06302v1, 10/14/19
82) Piech C, Malik A, Scott LM, **Chang RT**, Lin CC. "The Stanford Acuity Test: A Probabilistic Approach for Precise Visual Acuity Testing" arXiv:1906.01811v1
83) Liu Z, Liu M, **Chang R**, Huang P, Zhang C. A Comparison of Ophthalmic Education in China and America. *Annals of Eye Science*. 2017 July;2(7).
84) He L, Toy B, Blumenkranz M, **Chang R**, Myung D. Reply. *Retina*. 2017 Jun;37(6):e77.
85) Cheema A, **Chang RT**, Shrivastava A, Singh K. Update on the Medical Treatment of Primary Open Angle Glaucoma. *Asia Pac J Ophthalmol (Phila).* 2016 Jan-Feb;5(1):51-8.
86) **Chang RT**, Singh K. Glaucoma Suspect: Diagnosis and Management. *Asia Pac J Ophthalmol (Phila).* 2016 Jan-Feb;5(1):32-7.
87) Wang SK, **Chang RT**. An Emerging Treatment Option For Glaucoma: Rho Kinase Inhibitors. *Clin Ophthalmol*. 2014 May;8: 883-890. eCollection 2014. Review.
88) **Chang RT**, Singh K. Myopia and Glaucoma: Diagnostic and Therapeutic Challenges. *Curr Opin Ophthalmol*. 2013 Mar;24(2):96-101.
89) **Chang RT**, Shingleton BJ, Singh K. Timely Cataract Surgery for Improved Glaucoma Management. *J Cataract Refract Surg*. 2012 Oct;38(10):1709-10
90) **Chang RT.** Myopia and Glaucoma. *Int Ophthalmol Clin*. 2011 Summer;51(3):53-63.

91) **Chang RT**, Budenz DL. Diagnosing Glaucoma Progression. *Int Ophthalmol Clin* 2008 Fall;48(4):13-28. Review.
92) **Chang R**, Budenz DL. New Developments in Optical Coherence Tomography for Glaucoma. *Curr Opin Ophthalmol* 2008 Mar;19(2):127-35.

NON PEER-REVIEWED PUBLICATIONS AND CITATIONS

1) JCL Ong, Y Ning, M Liu, Y Ma, Z Liang, K Singh, **RT Chang**, et al. "Regulatory Science Innovation for Generative AI and Large Language Models in Health and Medicine" arXiv preprint arXiv:2502.07794, 2025
2) Wang SY, **Chang RT**. Glaucoma Today. Visual Field Outcomes of Two Major Glaucoma Trials, July/August 2023
3) Sheybani A, Ahmed I, **Chang RT**, Camejo L, et al. Glaucoma Today. "MIGS: An Identity Still in Crisis?" March/April 2022.
4) **Chang RT**. Point-Counterpoint: Corneal Hysteresis and Glaucoma. "Hysteresis Isn't Essential." Review of Ophthalmology. Vol XXVI, No 11. Nov 2020.
5) **Chang RT**. Comment in Editors Selection for IGR-4: Smartphone use in ophthalmology: What is their place in clinical practice? Hogarty DT, Hogarty JP, Hewitt AW. Survey of Ophthalmology 2020; 65: 250-262.
6) Mukamal R. Reviewer: **Chang RT**, Goel RD. "Artificial Intelligence Can Enhance Ophthalmologists, Not Replace Them" https://www.aao.org/eye-health/news/artificial-intelligence-diabetic-retinopathy-diagn. May 2019.
7) **Chang RT**. "The Evolution of Portable Visual Field Testing" Review of Ophthalmology, Vol XXV, No 4. Apr 2019.
8) **Chang RT**. "Big Data and the AAO IRIS Registry Partnership With Verana Health" Cataract and Refractive Surgery Today. Vol 19, No 3. Mar 2019.
9) Santen. **Chang R** "Technology Ushers in a New Era of Dramatic Improvements in the Diagnosis and Treatment of Glaucoma" *Glaucoma Today*. Vol 15, Issue 5. Sept 2017 Insert
10) **Chang RT**. "Is It Glaucoma? Or Just High Myopia?" *Review of Ophthalmology*. Vol XXIV, No 5. May 2017.
11) **Chang RT**, Singh K. "Detecting and Treating Glaucoma in a Myopic Patient Without High IOP" *Glaucoma Today*. Vol 14, Issue 3. May/June 2016.
12) Elkin Z, Choi D, Toy B. Review of "The efficacy and safety of combined cataract surgery with two trabecular micro-bypass stents versus ab-interno trabeculotomy" *Eyeworld Journal Club* Aug 2015.
13) Blum K. "These Pearls Have First Class Pedigree" *Ophthalmology Management*. Vol:19, Issue: Jun 2015:30-32.
14) **Chang RT**. "Unraveling the Genetics of Glaucoma" *Ophthalmology Times*, G360 Supplement, June 1, 2015.
15) **Chang RT**. "Examining the Role of Smartphones in Glaucoma Care" *Glaucoma Today*. Vol 13, Issue 3. May/June 2015.
16) Blum K. "Glaucoma Patients Have Cause to Cheer" *Ophthalmology Management*. Vol:19, Issue: Feb 2015:36-38.
17) **Chang RT**. "Imaging of the Optic Nerve: What Is It and Why Is It Needed?" *Gleams Sept 2014*. http://www.glaucoma.org/treatment/imaging-of-the-optic-nerve-what-is-it-and-why-is-it-needed.php
18) **Chang RT**, et al. BMJ Best Practice Cataract Monograph 2014-present
19) **Chang RT**, Myung D. "Advancements in Smartphone Photography of the Eye" *Cataract & Refractive Surgery Today Europe.* Vol 9, Issue 8. Sept 2014.
20) **Chang RT**. "Technological Advances in 24-hr IOP Monitoring" *Glaucoma Today*. Vol 12, Issue 4. Aug 2014.
21) **Chang RT**. "Smartphone Photography Expected to Accelerate the Age of Telemedicine" *Ophthalmology Times*, Vol 39 No 11, G360 supplement, June 1, 2014.
22) **Chang RT**. "A New Look at Corneal Biomechanics" *Ophthalmology Times*, Vol 38 No 16, Sept 15, 2013.

23) **Chang RT**. "Fundus Photography Still a Valuable Tool in Glaucoma Care" *Ophthalmology Times,* Vol 38 No 8*,* Apr 15, 2013.
24) **Chang RT**. "High Myopia Poses Challenges" *Ophthalmology Times*, Vol 37 No 12, Jun 15, 2012.
25) **Chang RT**. "Cyclodialysis Cleft" *Glaucoma Today*. Vol 10, Issue 3. May/June 2012.
26) **Chang RT**, Singh K. "Risk Factors for Visual Field Progression" *View on Glaucoma*. 2012;7(1):18-22.

POSTER PRESENTATIONS

1) "Microvascular Dropout (MvD) and Retinal Vasculature Variance in Normal and High Tension Glaucoma with Swept Source Optical Coherence Tomography Angiography, presentation" "Clinical Presentations and Predictors of Medication-Free Intraocular Pressure Control After Acute Primary Angle Closure" poster ARVO, Denver, 5/26
2) "Impact on intraocular pressure after switching to Latanoprostene Bunod in patients with glaucoma in real-world clinical practice," "Aqueous Humor Neurofilament Light Chain Level as a Candidate Biomarker for Glaucoma Disease Staging," "Evaluating RetFound: A Foundation Model for Glaucoma Detection Using Macular OCT Images," "Swept Source Optical Coherence Tomography Microvascular Dropout as a Potential Differentiator Between Perimetric Glaucoma and Degenerative Myopia (ARVO) poster, Salt Lake City, 5/25
3) "Multimodal Artificial Intelligence Models Predicting Progression to Surgery Using Electronic Health Records and Retinal Nerve Fiber Layer Scans" (ARVO) poster, Seattle – 5/7/24
4) "Digitization of Humphrey Field Analyzer Reports Into CSV File", "Timing of Intraocular Pressure Measurements for Patients with Primary Open-Angle Glaucoma and/or Ocular Hypertension Treated with Prostaglandin Analogs: an Academy IRIS® Registry Analysis" American Glaucoma Society, Austin 2023
5) "A Multi-Task Deep-Learning System to Classify Diabetic Macular Edema for Different Optical Coherence Tomography Devices: A Multi-Center Analysis" Macula Society, Berlin 2022
6) "Correlated Changes in Retinal Thickness and Visuomotor Function in Asymptomatic Hydroxychloroquine Toxicity Patients", "Repeatability and Correlation of a Virtual Reality Perimeter with Standard Automated Perimetry in Glaucoma Patients", "Feasibility of Glaucoma Home Self Testing Using a Virtual Reality Visual Field Test Combined with Home Tonometry" (ARVO) poster, Denver - 5/1/22
7) "Comparison of Virtual Reality (PalmScan VF2000) Visual Fields Analyzer with Humphrey Visual Field in Glaucoma Patients", "A Multi-Task Deep Learning System to Detect Diabetic Macular Edema and Retinal Abnormalities for Different Optical Coherence Tomography Devices," "An Open-Label Phase Ib Study to Evaluate Retinal Imaging After Short-term Use of the Balance Goggles System (BGS) in Patients with Glaucoma", "Intervisit Repeatability of a Combined Retinal Ganglion Cell Index in Glaucoma" The Association for Research and Vision in Ophthalmology (ARVO) poster, Baltimore - 5/3/20 cancelled
8) "Novel Deep Learning Algorithm Identifying Glaucoma Using Cirrus OCT 3D ONH Cube Scans" American Academy of Ophthalmology (AAO) EPoster, San Francisco – 10/12/19
9) Wang SY, Hernandez-Boussard, T, Chang RT, Pershing S. "Understanding Patient Attitudes Toward Multifocal Intraocular Lenses Through Natural Language Processing of Online Medical Forums." Accepted MedInfo 2019
10) "Refractive Outcomes of Patients Undergoing Combined Cataract Extraction / Cypass Supraciliary Micro-Stent Versus Cataract Surgery Alone" American Society of Cataract and Refractive Surgery (ASCRS) Paper, San Diego - 5/5/19
11) "Diagnostic Assessment of RNFL Segmentation using a Hybrid Deep Learning Approach," "Novel Deep Learning Based Algorithm for Macula and Optic Nerve Head Segmentation versus Cirrus Optical Coherence Tomography in Identifying Glaucoma," "Smartphone-based Retinal Imaging to Characterize Early Functional Retinal Vascular Changes in Diabetic Retinopathy," "A 3D Deep Learning System for Detecting Glaucomatous Optic Neuropathy from Volumetric and En Face Optical Coherence Tomography Scans," "Recombinant human nerve growth factor (rhNGF) eye drops for glaucoma: Results from a prospective double -masked randomized controlled trial" The Association for Research and Vision in Ophthalmology (ARVO) poster, Vancouver - 4/28/19

12) "A Deep Learning System for Detecting Glaucomatous Optic Neuropathy and Age-Related Macular Degeneration Based on Color Fundus Photographs" World Ophthalmology Congress (WOC) Poster, Barcelona – 6/16/18
13) "Effectiveness of Trabecular Microbypass Stent Implantation (iStent) on Intraocular Pressure in Moderate and Severe Glaucoma: One Year Results" European Glaucoma Society (EGS) Poster, Florence – 5/19/18
14) "Automatic Identification of Referral-Warranted Diabetic Retinopathy Using Deep Learning on Mobile Phone Images," "Characteristics of Cataract Surgery Patients Influencing Press Ganey patient satisfaction Scores," "Comparison of Automated Self-Refraction Using NETRA with Table-Mounted Autorefractor and Subjective Refraction in an Academic Optometry Clinic," "Reduction of Ocular Antihypertensive Medication Usage After IStent Implantation in a Large U.S. Managed Care Network," The Association for Research and Vision in Ophthalmology (ARVO) poster, Honolulu – 5/7/18
15) "Demographic and Postoperative Clinic Visit Factors Impacting Patients' Likelihood of Recommending Providers," "Evaluating Press Ganey Patient Satisfaction Scores in Postoperative Cataract and Glaucoma Patients: Are Patient Satisfaction Scores a Reliable Vehicle to Measure Quality of Care?" American Academy of Ophthalmology (AAO) paper – 2017
16) Lee W, Fisher AC, **Chang RT**. "Comparison of Endoscopic Cyclophotocoagulation Versus Micropulse Transscleral Cyclophotocoagulation in the Treatment of Glaucoma." Stanford Ophthalmology Day Presentation, 6/24/17.
17) Russakoff DB, Oakley JD, **Chang R**. "Deep Convolutional Neural Networks for Automated OCT Pathology Recognition." The Association for Research and Vision in Ophthalmology (ARVO) poster, Baltimore – 5/7/17.
18) Au TJ, Lee M, Singh K, **Chang R**. "Three Year Follow-up of Serial Structural and Function Testing in High Myopes Without Elevated Intraocular Pressure." The Association for Research and Vision in Ophthalmology (ARVO) poster, Baltimore – 5/10/17.
19) Wang JK, **Chang RT**, Pamnani R, Capasso R, "An Extended Hackathon Model to Teach Core Concepts of Biodesign" 3rd Annual Stanford Global Health Research Convening – 1/18/17
20) Shariati MA, Liao K, Yu CY, Witthayaweerasak J, **Chang RT**, Sun MH, Liao YJ. Eye Fatigue During TV Watching: An Infrared Oculography Study of Linearly vs. Circularly Polarized LCD TV" The Association for Research and Vision in Ophthalmology (ARVO) poster, Seattle – 5/4/16
21) Ludwig CA, Newsom M, **Chang RT**. Timing and Quality of Smartphone Adapter Photos to Screen the Anterior Segment of 751 Healthy Students in India, Association for Clinical and Translational Science poster, Washington DC – 4/13/16
22) Yoo Y, Kim J, **Chang RT**, Park K. "The Influence of Proximal and Octant Location of Optic Disc Hemorrhage on the Occurrence of Retinal Nerve Fiber Layer Defect" The American Academy of Ophthalmology (AAO) poster, Las Vegas – 10/15/15
23) Do A, Singh K, Pilai M, Balakrishnan V, **Chang R**, Lee B. "Effectiveness of glaucoma counseling on patient follow-up rates and glaucoma knowledge in a South Indian population" The Association for Research and Vision in Ophthalmology (ARVO) poster, Denver – 5/5/15
24) Blumenkranz M, Toy B, He L, Myung D, Pan C, Polkinhorne A, Merrell D, Foster D, **Chang R**. "Camera Phone Telemedicine-based Screening for Diabetic Eye Disease" Macula Society, Scottsdale – 2/26/15
25) "Design and Rapid Prototyping of a Novel 3-D Printed Smartphone Lens Adapter System" American Academy of Ophthalmology (AAO) Poster PO328, Chicago – 10/20/14
26) TEDMED 2014 Stanford EyeGo Exhibit, San Francisco – 9/11/14
27) Myung D, Toy B, Jais A, **Chang R**, He L, Blumenkranz B. "Camera Phone Telemedicine-based Screening for Diabetic Eye Disease" American Society of Retina Specialists (ASRS), San Diego – 8/12/14
28) "iPhone Photography of Eye Pathology for Remote Triage," "Corneal Applanation Velocity as a Risk Factor for Normal Tension Glaucoma" The Association for Research and Vision in Ophthalmology (ARVO) posters, Orlando – 5/5/14-5/7/14

29) Choi D, Pershing S, Vaziri K, Moshfeghi D, **Chang RT**. "Increasing Incidence of Conjunctival Lesion Excisions After Popularization of Prostaglandin Analogs" American Society of Cataract and Refractive Surgery (ASCRS) Presentation, Boston – 4/26/14
30) "Analyzing Shape Parameterization of SD-OCT Optic Nerve Head Images in High Myopes as a Predictor of Visual Field Defects," "Cirrus SD-OCT Ganglion Cell Analysis Segmentation Errors in High Myopes," "Clinical Utility of Web-based Office and Home Peristat for the Detection of Visual Field Defects in Glaucoma Patients," "Comparison of Online Perimetry and Humphrey Visual Field in Patients with Glaucoma," "Diagnostic Efficacy of RNFL Thickness Sectors for Glaucoma Detection" The Association for Research and Vision in Ophthalmology (ARVO) posters, Seattle – 5/6/13-5/8/13
31) Lu W, Oakley J, Russakoff D, **Chang RT**. Vitreo-Retinal Interface Segmentation from Spectral-domain OCT using Change Detection and Belief Propagation. International Symposium on Biomedical Imaging (ISBI) Paper Presentation, San Francisco – 4/8/13
32) Lin BR, Lin SR, Lai IN, **Chang RT**. Ophthalmology in a Web 2.0 World: Building a Next-Generation Medical Education Tool. American Medical Student Association (AMSA) Poster Presentation, Washington D.C. – 3/16/13
33) Lee R, **Chang RT**, Wong I, and Singh K. Novel Corneal Biomechanical Parameters in Glaucoma Eyes vs. Normal Eyes. American Glaucoma Society (AGS) Poster Presentation, San Francisco – 3/1/13
34) Lin SR, Lai IN, **Chang RT**, Dutta S, Singh K. Comparison of Fixation Target Stability for RareBit and Humphrey Visual Field Tests, European Glaucoma Society (EGS) Poster Presentation, Copenhagen, Denmark – 6/20/12
35) **Chang RT**, Mwanza J, Gendy MG, Oakley JD, Feuer WJ, Budenz DL. HD-OCT in Glaucomatous Eyes, The Association for Research and Vision in Ophthalmology (ARVO) poster, 2010

<u>BOOK CHAPTERS</u>

1) **Chang RT**, Budenz DL. "13. Early Postoperative Bleb Maintenance" Johnson, Sandra M [ed.] *Cataract Surgery in the Glaucoma Patient*, New York: Springer-Verlag, 2024.
2) Lee EB, **Chang RT.** "Secondary Angle Closure Glaucoma" Friedman [ed.] *Decision Making in Ophthalmology*, Freidman [ed.] Elsevier 2022
3) Wang J, Wang S, Lee E, **Chang RT**. "Natural Language Processing in AI" Yogesan [ed.] *Teleophthalmology and Digital Health: A Practical Guide to Applications*, Springer Nature, 2021.
4) **Chang RT**, Budenz DL. "Early Postoperative Bleb Maintenance" Johnson, Sandra M [ed.] *Cataract Surgery in the Glaucoma Patient*, New York: Springer-Verlag, 2017.
5) Fisher A, **Chang RT**, Singh K. "92. Technique" Shaarawy & Sherwood & Hitchings & Crowston [ed.] *Glaucoma 2nd edition*. Elsevier, 2014.
6) **Chang RT**, Budenz DL. "9. Early Postoperative Bleb Maintenance" Johnson, Sandra M [ed.] *Cataract Surgery in the Glaucoma Patient*, New York: Springer-Verlag, 2009.

D. **Grants and Media**

Title	***Granting Agency***	***Role***	***Dates***
Empowering a Future-Ready World: Exploring AI and Generative Models in Healthcare	***Stanford Center Peking Univ. Graduate Seminar Program Award***	***PI***	***2025***
Longitudinal Aqueous Humor NfL in Glaucoma	***Genentech***	***PI***	***2025-2026***
Glaucoma Biorepository Study	***Calico***	***PI***	***2025-2026***
Swept Source OCT Imaging with the DREAM VG-OCT	***Intalight***	***PI***	***2023-2024***

Comparing NGENUITY vs conventional microscope in a new Hydrus user	*Alcon*	*PI*	*2022-2024*
Biorepository in Glaucoma	*Genentech*	*PI*	*2021-2023*
An Open-Label Phase I Study to Evaluate the Correlation and Repeatability of Olleyes with Standard Automated Perimetry in Glaucoma	*Genentech*	*PI*	*2021-2022*
Machine Learning for Eye Care in Nepal: Expanding Access and Improving Care	*Stanford Center for Innovation in Global Health Seed 2017*	*PI*	*2018-2019*
Development and Evaluation of a Compact, Accessible Medical Innovation Curriculum for Undergraduate and Graduate Students	*Stanford UAR*	*PI*	*Oct 2017*
How Can Machine Learning Help Solve Problems in Glaucoma?	*Santen*	*PI*	*Aug 2017-2019*
Designing a Wearable Personal Air Pollution Sensor and Filter Device for China and Beyond	*Spectrum Medtech 2016*	*Co-PI*	*Jan-Dec 2017*
Digital Health Bootcamp Beijing Co-Sponsored with Peking University	*Stanford Center Peking Univ. Graduate Seminar Program Award*	*PI*	*Aug 2016*
Glaucoma Humphrey Field Analyzer / Optical Coherence Tomography Specificity	*Carl Zeiss Meditec*	*PI*	*Feb-Jun 2017*
Digital Health Bootcamp Beijing	*Stanford Center Peking Univ. Graduate Seminar Program Award*	*PI*	*June-July 2015*
091 The Efficacy and Safety of Bimatoprost SR in Patients With Open-angle Glaucoma or Ocular Hypertension	*Allergan*	*Co-PI*	*2015-2019*
Potential Benefits of Circular 2D Polarized LCD TV on Improvement of Eye Fatigue and Eye Movement Control	*TCL Research America*	*Co-PI*	*Aug 2014-2016*
EyeGo Smartphone Ocular Imaging Feasibility Study in China	*Stanford Center Peking Univ. Faculty Fellowship Program Award*	*PI*	*May-June 2014*
EyeGo: Remote Consultation Through Smartphone-Based Ophthalmic Imaging	*Stanford Spectrum Medtech*	*PI*	*2014*
3D printed Smartphone-based Ophthalmic Imaging System for Remote Consultation and Triage	*Stanford Society of Physician Scholars (SSPS)*	*PI*	*2014*
769 A Randomized, Multicenter, Double-Masked, Parallel-Group Study Comparing the Safety and Efficacy of BOL-303259-X 0.024% With Timolol 0.5% in Subjects With Open-Angle Glaucoma	*Bausch and Lomb*	*PI*	*2013-2014*

or Ocular Hypertension – APOLLO phase 3 study			
Peristat Online Visual Field Screening for Glaucoma	***Bio-X Undergraduate Summer Research Program***	***PI***	***June-July 2012***
Employing Gaze-Tracking Analysis to Determine How Subjects Gather Visual Information During Field Testing	***America Glaucoma Society MAPS***	***PI***	***May 2010-2011***
Cirrus SD OCT – Ganglion Cell Normative Database Collection	***Carl Zeiss Meditec***	***PI***	***Jan-Apr 2011***

PATENTS

1) Perkins Coie Single Use Vials for Administering Eye Drops, US Provisional No 62/350,654, filed 6/15/16. Converted by Perkins Coie PCT/US2017/037665, 6/15/17.
2) Stanford Office of Technology and Licensing: S16-026-029, US Provisional No 62/289,445, 62/289,457, 62/289,480, 62/289,546, Systems and Methods for Respiratory Health Management, filed 2/1/16. Converted by Wilson Sonsini, PCT/US2017/015816, 2/9/17.
3) Stanford Office of Technology and Licensing: S13-195/PCT, US Patent: 14/893,951 Modular Lens Adapters for Mobile Anterior and Posterior Segment Ophthalmoscopy, filed 5/30/14 based on PCT/US2014/040203. International PCT/US2016/024265. Licensed 7/10/15. Granted 9,706,718
4) Stanford Office of Technology and Licensing: S15-099/PCT, US Patent: 62/138,271 Modular Smartphone Adapters for Mobile Ophthalmoscopy, filed 3/25/15. Licensed 7/10/15.

EDITORIAL REVIEW SERVICE

1) National Eye Institute **(NEI)** Invited Reviewer – 8/15/24
2) National Eye Institute **(NEI) ZEY1VSN04** Invited Reviewer– 7/29/21
3) National Eye Institute **(NEI) ZEY1VSN01** Invited Reviewer - 3/16/20
4) National Eye Institute **(NEI) ZEY1VSN05** Invited Reviewer - 3/25/19
5) Invited Reviewer for the Austrian Science Fund Proposal - 12/27/18
6) National Eye Institute **(NEI) ZEY1VSN01** Invited Reviewer - 10/17/18
7) National Eye Institute **(NEI) ZEY1VSN04** Invited Reviewer – 7/26/17
8) Bay Area Global Health Innovation Challenge Invited Reviewer – 4/3/17
9) Stanford Learning Design and Technology (LDT) Invited Reviewer – 7/31/15
10) National Eye Institute **(NEI) ZEY1VSN01** Invited Reviewer – 3/17/15
11) National Eye Institute **(NEI)** Audacious Goals **ZEY1VSN05** Invited Reviewer – 12/11/14
12) Editorial Advisory Board for Advances in Therapy – 10/12/09 to present
13) British Medical Journal Best Practice Expert Contributor – 7/12/13 to present
14) Ad Hoc Reviewer for Ophthalmology, Journal of Cataract and Refractive Surgery, British Journal of Ophthalmology, and Eye – 2011-2020

DIGITAL MEDIA AND INNOVATION COURSES

1) Empowering a Future Ready World: Exploring AI And Generative Models Seminar https://solo.stanford.edu/opportunities/scpku-summer-seminar-empowering-future-ready-world-exploring-ai-and-generative-models, 8/4/25
2) Digitising the vision test, Perspectives Lancet https://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736(21)02149-8.pdf 10/9/21
3) Eye, Robot: Artificial Intelligence Dramatically Improves Accuracy of Classic Eye Exam https://www.sciencemag.org/news/2020/06/eye-robot-artificial-intelligence-dramatically-improves-accuracy-classic-eye-exam, 6/3/20
4) Building a World Where Data Privacy Exists Online https://www.nytimes.com/2019/11/10/technology/artificial-intelligence-dawn-song.html, 11/10/19

5) Three Days in Mandalay on the Flying Eye Hospital, https://www.globalnewlightofmyanmar.com/three-days-in-mandalay-on-the-orbis-flying-hospital/, 10/4/19
6) AI Needs Your Data and You Should Get Paid For It, https://www.wired.com/story/ai-needs-data-you-should-get-paid/, 8/8/19
7) Digital Health Innovation Course Leader, Dreamcatchers MedTech Hackathon in Hong Kong 2019, https://www.dreamcatchers.hku.hk/?p=57491, 6/24/19-6/30/19
8) Eye Ear Nose Throat Innovation Course Co-Organizer, http://eent.stanford.edu, 5/16-19/19
9) Stanford University Biodesign 374 Medtech Innovation Class Judge, 3/12/19
10) Integration of new technology may improve ophthalmologic care, 10/29/18 https://www.healio.com/ophthalmology/imaging-diagnostics/news/online/%7b3cd85d9b-fae7-4bbb-ba56-eb5be56c634c%7d/integration-of-new-technology-may-improve-ophthalmologic-care
11) **Digital Health Innovation Course Leader**, Dreamcatchers MedTech Hackathon in Hong Kong 2018, http://www.dreamcatchers.hku.hk/?page_id=57107, 6/24/18-6/30/18
12) **Invited Innovation Course Senior Instructor**, Biodesign in Sao Paulo, Brazil, http://einsteinbiodesign.com, 5/13/18-5/19/18
13) TreeHacks Health Judge, https://www.treehacks.com, 2/18/18
14) https://www.pcmag.com/news/357844/why-engineering-students-should-consider-hacking-healthcare, 12/15/17
15) http://scopeblog.stanford.edu/2017/12/01/medical-innovation-seminar-brings-global-perspective-to-annual-health-hackathon/, 12/1/17
16) **Digital Health Innovation Course Leader**, Medical Innovation Seminar 2017, http://healthplusplus.stanford.edu/seminar/index.html, 10/16/17-10/22/17
17) Stanford's Robert Chang talks about AI and the future of medicine https://soundcloud.com/cera-org-au/stanfords-robert-chang-talks-about-artificial-intelligence-and-the-future-of-medicine-1/s-WTMM0, CERA, Melbourne, 7/31/17
18) "Artificial intelligence will bring 'reality' to glaucoma diagnosis" http://ophthalmologytimes.modernmedicine.com/ophthalmologytimes/news/artificial-intelligence-will-bring-reality-glaucoma-diagnosis 7/15/17
19) Faculty, The Ophthalmology Innovation Program at the Byers Eye Institute at Stanford http://ophthalmology.stanford.edu/education/ophthalmic-innovation-fellowship.html
20) Oxford Bright Scholars Global Innovation Launchpad Advisor http://oxfordbrightscholars.com/robert-chang-joins/, 7/2/17-7/15/17
21) **Digital Health Innovation Course Leader,** Dreamcatchers MedTech Hackathon in Hong Kong 2017, http://www.dreamcatchers.hku.hk/?p=1838, 6/19/17-6/25/17
https://www.hk01.com/職場創業/100888/-MedTech-Hackathon-濃縮版創業體驗-諗橋解決醫生處理不了事情
http://hk.on.cc/hk/bkn/cnt/news/20170704/bkn-20170704083021205-0704_00822_001.html
https://www.facebook.com/HKUDreamCatchers/videos/1773263159380877
https://www.youtube.com/watch?v=YzNDNYA3Tus
22) Two weeks in China: Lessons on innovating abroad http://scopeblog.stanford.edu/2016/11/16/two-weeks-in-china-lessons-on-innovating-abroad/, 11/16/16
23) Stanford's first health++ Hackathon brings health care innovators together http://news.stanford.edu/2016/11/16/stanfords-first-health-hackathon-brings-health-care-innovators-together/, 11/16/16
24) Eight ways to see inside: A sampler of diagnostics emerging from Stanford http://stanmed.stanford.edu/2016fall/new-health-care-diagnostics-from-cancer-detection-to-IVF-to-telemedicine.html, 11/15/16
25) Health++ Hackathon Judge http://healthplusplus.stanford.edu/information.html#judges, 11/6/16
26) 4 Ideas that Will Change Ophthalmology's Future http://www.aao.org/young-

ophthalmologists/yo-info/article/4-ideas-that-will-change-ophthalmology-s-future, 10/18/16

27) Beijing Tongren Hospital 2016 http://mp.weixin.qq.com/s?__biz=MzIxMzE1NjM3Nw==&mid=2651259609&idx=1&sn=be07c8bba23d40886b04145796b9b9db&

28) Medtech Hackathon brings students together to transform Chinese healthcare delivery 2016 http://scpku.fsi.stanford.edu/news/medtech-hackathon-brings-students-together-transform-chinese-healthcare-delivery

29) **Invited Innovation Course Senior Instructor,** Biodesign in Curitiba, Brazil, http://www.hipuc.com, 7/3/16-7/9/16
http://www.pucpr.br/noticia.php?ref=1&id=2016-07-04_62686
http://scopeblog.stanford.edu/2016/08/05/stanford-doctors-use-biodesign-training-to-spark-health-innovation-in-brazil/

30) "Precision Medicine: Tracking Glaucoma Progression," Laird Harrison, http://ophthalmologytimes.modernmedicine.com/ophthalmologytimes/news/precision-medicine-tracking-glaucoma-progression, 7/1/16

31) **Lunair and Palmm win Robert Howard Next Step Awards** http://www.lunar.com/blog/lunair-and-palmm-win-2016-robert-howard-next-step-awards/, 6/22/16

32) **Digital Health Innovation Course Leader,** Dreamcatchers MedTech Hackathon in Hong Kong, http://www.dreamcatchers.hku.hk/?p=1268, 6/22/16-6/29/16

33) http://mthackathon.com/
https://www.facebook.com/HKUDreamCatchers/videos/1291393884234476/
https://www.youtube.com/watch?v=j8oYP7S_QDQ
http://www.hk01.com/社區/27926/-創業-全港首個醫療黑客馬拉松-創新手法解醫療難題
http://www.hk01.com/社區/28924/-創業-醫生策劃-專才合作-醫療科技創業料成趨勢
http://www.hk01.com/社區/29015/-創業-概念產品改善醫療難題-醫療駭客馬拉松-圓滿結束
http://hk.on.cc/hk/bkn/cnt/news/20160705/bkn-20160705083043367-0705_00822_001.html
http://nr.news-republic.com/web/articleweb.aspx?regionid=3&articleid=68123567

34) "Design Daze" a dFarm Design-a-thon Volunteer Mentor, http://www.thedfarm.org/s2/?page_id=5403, 4/22/16-4/24/16

35) Advisor for Automatic Grading of Eye Diseases through Deep Learning, Nvidia GPU Conference https://mygtc.gputechconf.com/form/session-listing&doSearch=true&queryInput=sadhwani, 4/5/16

36) "Technology Making Patient Care Personal", Jan Beiting, http://www.reviewofophthalmology.com/content/d/cover_focus/i/3592/c/59858/, *Review of Ophthalmology*, 3/4/16

37) Treehacks Health Hackathon Mentor, Stanford University, 2/12/16-2/14/16

38) **Invited Innovation Course Instructor**, Dubai 100, http://dubai100.ae, 2/8/16-2/12/16

39) "Event and Trend Analysis on OCT/VF and Glaucoma Therapy Selection" 2016 Glaucoma Review, Audio-Digest Ophthalmology, Volume 54, Issue 07, 1/30/16

40) "The Doctor-Patient Connection Goes Digital" Christopher Kent, http://www.reviewofophthalmology.com/content/d/cover_focus/i/3506/c/58535/, *Review of Ophthalmology*, 12/8/15

41) Caixin Summit Healthpoint Session http://mp.weixin.qq.com/s?__biz=MzA3NTQ3ODIxNg==&mid=402323187&idx=1&sn=2f6f725b21f85e3de8d507acd47ef5b4&

42) Digital health innovation course helps transform Chinese healthcare delivery http://scpku.fsi.stanford.edu/news/digital-health-innovation-course-helps-transform-chinese-healthcare-delivery

43) **Digital Health "Internet+" Innovation Course Founder and Co-Instructor**, http://www.dhealthchina.com, http://www.dhealthclass.com

http://scpku.fsi.stanford.edu/content/china-digital-health-boot-camp-needfinding-prototyping-and-business-modeling-transform

44) Website director and faculty advisor, http://www.eyeguru.org/
45) "ASCRS Foundation to partner with DigiSight on telemedicine project in Nepal," *EyeWorld* vol 20, no 12 Dec 2015, http://www.eyeworld.org/article-ascrs-foundation-to-partner-with-digisight-on-telemedicine-project-in-nepal
46) Advisor to Team Fusion Systems, placed #15/661, https://www.kaggle.com/c/diabetic-retinopathy-detection/leaderboard, 7/27/15.
47) "Genetics of Glaucoma" 2015 Glaucoma Review, Audio-Digest Ophthalmology, Volume 53, Issue 09, May 7, 2015.
48) "Unraveling the Genetics of Glaucoma for Potential Therapies" http://ophthalmologytimes.modernmedicine.com/ophthalmologytimes/news/unraveling-genetics-glaucoma-potential-therapies, 6/1/15
49) "Smartphone Camera Adapters Get Simpler" Christopher Kent, *Review of Ophthalmology.* http://www.reviewofophthalmology.com/content/d/technology_update/i/3076/c/51484/, 11/11/14.
50) AAO Press Briefing. "iPhones, iPads and 3-D Printers: Five Studies Examine How Innovative Consumer Technologies Are Improving Access to Eye Care," 10/20/14.
51) ABC 7 News, Tim Didion http://abc7news.com/health/iphone-eye-camera-tested-at-stanford-hospital/166373/, 7/7/14.
52) SCPKU Faculty Fellow Public Lecture http://scpku.fsi.stanford.edu/news/scpku-faculty-fellow-speaks-innovation-mobile-healthcare, 6/19/14
53) Elsevier PracticeUpdate, Kathy Freeman http://www.practiceupdate.com/expertopinion/910, 6/7/14.
54) CBS Interactive CNET Video, Sumi Das http://www.cnet.com/videos/how-the-iphone-is-zooming-in-on-eye-care/, 5/28/14
55) SF Chronicle Newspaper Article, Stephanie Lee http://www.sfgate.com/technology/article/Phone-adaptor-gives-doctors-closer-look-at-5433803.php, 4/27/14
56) "Make Your Smartphone an 'EyePhone'" *Review of Optometry*. http://www.revoptom.com/content/d/news_review/i/2823/c/47782/, 4/14/14
57) The Osgood File, http://www.westwood-backup.com/pg/jsp/osgood/transcript.jsp?pid=38355, 4/1/14
58) EyeGo Press Release http://med.stanford.edu/ism/2014/march/eyego.html, 3/7/14
59) Myung D, Jais A, He L, **Chang RT**. Simple, Low Cost Smartphone Adapter for Rapid, High Quality Ocular Anterior Segment Imaging: A Photo Diary. *Journal of Mobile Technology in Medicine*, Vol 3 Issue 1. http://www.journalmtm.com/2014/simple-low-cost-smartphone-adapter-for-rapid-high-quality-ocular-anterior-segment-imaging-a-photo-diary/, 3/6/14
60) Myung D, Jais A, He L, Blumenkranz MS, **Chang RT**. 3D Printed Smartphone Lens Adapter for Rapid, High Quality Retinal Imaging. *Journal of Mobile Technology in Medicine*, Vol 3 Issue 1. http://www.journalmtm.com/2014/3d-printed-smartphone-indirect-lens-adapter-for-rapid-high-quality-retinal-imaging/, 3/6/14

COMMUNITY SERVICE

1) Advisor, AI for Eye - 2019-2020
2) Member of Orbis, Flying Eye Hospital – 2017 to present
3) SHIFT Stanford Student Organization Advisor http://shift.stanford.edu – 4/17/15 to 2019
4) Pacific Free Clinic Volunteer Stanford Faculty – 2015
5) Arbor Free Clinic Volunteer Stanford Faculty – 2014
6) Healthy Scholars Foundation Advisory Board – 2014 to 2015
7) Keepyoursight.org Foundation Volunteer Technology Advisor – 7/31/13 to 3/31/14
8) Stanford Immersion in Medicine Series (SIMS) Shadowing Program Mentor – 2014 to present

9) Faculty Mentor for Stanford Class Med 275B: Biomedical Innovation Incubator – 2014 to 2019
10) Faculty Mentor for Ophthalmology Electives OPHT 300A, 398A – 2014 to present
11) Faculty Mentor for Stanford Class BioE 273: Biodesign for Mobile Health – 2015 to present
12) Lifeline Express Foundation Volunteer Educator, annual trips, China – 2010 to present
13) Vision Health Fair Volunteer and Disc Photo Reading Center Volunteer, Prevent Blindness Northern California – 2010, 2014
14) International Aid Volunteer, Tema Eye Clinic, Ghana – July 2008