

# Berkeley Optometry & Vision Science



## ANNUAL REPORT 2020

University of California, Berkeley  
School of Optometry  
and Vision Science Program

Full Report will be available @ <https://optometry.berkeley.edu/governance/annual-report/>

## ACADEMIC PROGRAMS: FACULTY/STUDENTS

John Flanagan, Dean of the School of Optometry, successfully completed his first year of his second term on 6/30/2020. Dr. Chris Wilmer is Associate Dean for Clinical Affairs, Dr. Nancy McNamara is Associate Dean for Student Affairs and Dr. Gunilla Haegerstrom-Portnoy is Associate Dean for Academic Affairs. Monica Porter is the Senior Assistant Dean for Operations, Kristen Williams is the Assistant Dean for Development and Alumni Relations and Jessica Rivers replaced Meg St. John as Assistant Dean for Admissions and Student Affairs. Eric Craypo is the Director of Communications.

### Faculty and Alumni

Dr. Barry Winston and Optical Faculty Ken Lowe retired on 6/30/2020. Dr. Sarah Fisher retired 12/31/20. The School successfully recruited Dr. Jorge Otero-Milan who officially joined us in July 2020. The School now has 100 faculty, 43 full time clinical faculty members and several part-time clinical faculty for a total faculty FTE count of 75.

### Optometry Faculty Research

From July 1, 2019 through June 30, 2020, optometry faculty members generated \$10.0M in direct cost funding. Most projects are 3-5 years and funding was received from various federal agencies (NIH, NSF, and DOD) as well as private foundations and industry.

The NEI T32 Training Grant has been continuously funded for 43 years, and the Core Grant has been funded for 27 years. The School of Optometry has one other research training grant for optometry students (T35) which is now in year 27. The T32 and T35 grants were successfully refunded for another 5 years for August 2018 (T32) and May 2019 (T35) and the Core grant was also successfully refunded for 5 years in Sept 2018.

### Professional Student Performance

NBEO Part (First Time Takers Only)	Berkeley Pass Rate	National Pass Rate
<b>I: Applied Basic Science</b> July, Nov 2020 (3 <sup>rd</sup> year students) Class of 2021 Delayed due to COVID-19	90.6%	78.8%
<b>II: Patient Assessment and Management</b> December 2019 (4 <sup>th</sup> year students) Class of 2020	97.0%	90.2%
<b>III: Clinical Skills</b> Fall 2019-Spring 2020 (4th year students) Class of 2020	91.0%	85.5%
<b>Ultimate Pass Rate</b> Passed all 3 parts before graduation (graduating class) Class of 2020	92.5%	92.2%

## ADMISSIONS AND STUDENT AFFAIRS OFFICE

### Staff

The office is currently staffed by Assistant Dean Jessica Rivers and Associate Director Kait Guthrie, with active recruitments to replace Associate Director Carissa Caloud, and Coordinator, Eurie Nam.

### Recruitment: Admissions Statistics

We matriculated 51 new OD students in Fall 2020. Our quality remains high, as reflected by the first year Class of 2024 who had a median OAT AA = 350 and an average Biology/Chemistry/Physics(BCP) GPA = 3.5.

### **Diversity Outreach –**

Established in 2020, the Berkeley Optometry Council for DEI and Belonging led by a newly appointed Director of Diversity, Equity, Inclusion and Belonging, includes representatives from all student groups and units within the Berkeley Optometry community: Senate Faculty, Clinical Faculty, Senior Assistant Dean for Operations, Assistant Dean for Admissions and Student Affairs, Clinic Staff, Optometry Student Leadership, Vision Science Graduate Students, Postdoctoral Fellows, National Optometric Students Association (NOSA) Presidents, NOA Faculty Representatives, Berkeley Optometry Alumni Representatives, Dean, Associate Dean for Admissions and Student Affairs, and Associate Dean for Clinical Affairs. The mission is to identify and support opportunities to improve diversity, equity, inclusion and belonging within Berkeley Optometry. To fulfill this mission, there are four areas of focus: (i) pipeline and recruitment; (ii) retention and mentoring; (iii) climate; and (iv) measuring success and monitoring accountability. Within each area of focus we will engage with our students, faculty, staff, alumni, and local communities. We will partner with UC Health and national optometric organizations to extend our programmatic goals beyond the Berkeley Campus.

The Berkeley Optometry Diversity, Equity, Inclusion & Belonging (DEIB) Student Council was also established in 2020. This council recommends initiatives that weave DEIB into all aspects of optometric education with the goal of improving the campus experience for students of all races, ethnicities, identities and backgrounds. Furthermore, we are involved with the expansion of recruitment and outreach efforts that cultivate a more robust pipeline to our profession, with a focus on underserved communities. The council consists of optometric student representatives from every grade level, and intimately collaborates with the UCBSO general DEIB council, the Black Alumni Mentorship Council, administrators, faculty, staff, vision science graduate students and other optometric student groups such as NOSA.

**Berkeley Alumni Student & Resident Mentoring Program:** We are partnering with our alumni to create a support network for our graduate students. Our alumni have committed to provide individualized mentoring and career advice to our students. These efforts will be spearheaded by the newly formed Berkeley Optometry's Black Advancement Initiative Council (BAI), led by Berkeley Optometry alumni Drs. Joy Harewood, Sheryl Guillory, Farah Gulaid and Cristen Adams.

Our National Optometric Student Association (NOSA) chapter is thriving. NOSA members at Berkeley Optometry continue to host instructional workshops to teach optometric Spanish and assist with vision screenings in underserved communities. NOSA also organized and presented for the ASAO at summer visits, targeting underrepresented minority high school and middle school students to learn about STEM fields.

### **Opto-Camp**

In 2006, the Admissions and Student Affairs Office launched "Opto-Camp." The goal of Opto-Camp is to provide in-depth information about Optometry as a career track to those who are underrepresented in the profession and/or first-generation college students.

While we were not able to hold the program in person, our 15th year was still as memorable as ever with 84 campers joining us across North America to participate in our virtual program over a two week period. The first week consisted of workshops, alumni panels, and virtual eye exams, and the second week with application prep and closing with our campers presenting on their project designs on How THEY will impact Optometry!

Berkeley Optometry is seeing an increasing yield of Opto-Campers into the professional degree program. Furthermore, each year, admits who were former Opto-Campers are being selected to

receive prestigious Graduate Opportunity Program (GOP) Fellowships from the Graduate Division. There were 11 Opto-Camp alumni among the newly admitted class.

### **Scholarships and Awards**

The School of Optometry offered its OD students a wide range of both external scholarships and internal awards to help make the cost of an optometric education more affordable and accessible, and to recognize student accomplishments. In addition to increasing the amount of Departmental Awards, the School committed to offering an additional GOP Fellowship for the upcoming admissions cycle. A total of seven awards were issued in fall 2020. These GOPs provide a \$30,000 scholarship for the first year of study to incoming graduate students whose backgrounds, life experiences, and/or work contribute to diversity within their discipline or in the graduate community at large.

### **Professional Student Support Funds**

Thanks to the generous support of faculty and alumni, Professional Student Support Funds (PSSF's) were awarded to 134 current students.

### **Departmental Aid**

It is the goal of Berkeley Optometry to award its current students, in good academic standing with a cumulative GPA of 3.0 or above, departmental aid as available. Students are awarded a flat amount depending on their class year and residency status. This year, the School made extra efforts to recognize the increasing cost of attendance and increased the departmental awards given to each student.

### **The White Coat Ceremony**

To celebrate the achievements of the second-year class and their transition into the third year, Berkeley Optometry hosts the "White Coat Ceremony" at the end of Summer Clinic. Due to the COVID-19 pandemic, this ceremony was postponed.

### **Social Media**

We have over 2,400 friends on our Berkeley Optometry Facebook page and nearly 2,400 on our Instagram account. We continue to leverage targeted social media ads through Facebook and google.

## **CONTINUING EDUCATION**

### **Administration**

Content for Continuing Education is organized by the Continuing Education Committee, co-chaired by Drs. Anne Tasaki and Pam Satjawatcharaphong with faculty members, Drs. Patsy Harvey, Harry Green and Dean John Flanagan. In response to the COVID-19 pandemic, Berkeley Optometry launched a series of Online CE courses and programs. The office continues to provide a variety of high-quality courses for optometrists to expand their knowledge as well as fulfill the requirements of licensure renewal by the California State Board of Optometry.

### **Accreditation for Participants**

In 2020, the UC Berkeley Optometry CE Office oversaw and accredited over 13,500 hours of continuing education for which it issued over 4,00 accreditation letters and certificates.

### **CE Programs**

The CE Programs are continually expanding to meet the ever-changing needs of today's optometrists and the modified certification requirements.

### **Additional CE Courses and Events**

In addition to their primary “live programs”, the CE office also participated in accrediting, administering, marketing, and facilitating other UC Berkeley Optometry CE courses, including Oxyopia, b-Talks, and Resident Days. Many of these courses were held virtually due to the COVID-19 pandemic.

### **CLINICAL RESEARCH CENTER**

The mission of the Berkeley Clinical Research Center (CRC) is two-fold: (1) to explore new models and strategies for diagnosis, treatment, and prevention of ocular anomalies by conducting patient-based clinical studies/trials as well as translational research and, (2) to provide training for young professionals who are interested in, or want to pursue careers in, clinical research.

### **Research**

In 2020, our research collaborations remain strong as evidenced in our publications. The CRC research team under Professor Meng Lin’s leadership continues to conduct research studies to further our understanding in the mechanisms responsible for tear film stabilization, identifying factors affecting post-contact-lens aqueous tear mixing as well as assessing and developing diagnostic tools for evaporative dry eye.

### **DEVELOPMENT & EXTERNAL AFFAIRS**

#### **Donors**

The school had a record-breaking Big Give in 2020. Despite these unprecedented times, our community dug deep and generously donated to the school.

#### **Camaraderie**

Due to the COVID-19 pandemic, we hosted our first-ever Virtual Reunion & CE Celebration with a series of events throughout the month of October. Dr. Michael G. Harris, Clinical Professor Emeritus and Senior Lecturer Emeritus at the school of Optometry was the featured speaker for the 2020 Sheldon M. Golden Conference, “AMD: A Personal Journey.” The Alumnus of the Year was awarded to Kelly Nichols, OD, Class of 1995. Carl Jacobsen, OD ‘92 received the Annual Mert Flom Teaching Award from the class celebrating their 25th reunion. Dr. Stephen Chun, OD ‘74 received the Michael G. Harris Distinguished Service Award for his long standing leadership of the Bay Area Optometric Council’s Mentorship Program.

#### **Magazine**

The 2020 edition of the Berkeley Optometry Magazine features an op-ed by four Berkeley Optometry alumnae who identify opportunities to improve diversity, equity, inclusion, and belonging at the school. Other stories include a look at the challenges of creating self-driving cars; new research on augmented reality (AR); and an interview with an alumna who talks about growing up in South Africa, the hardships of living under Apartheid, the joy of casting a vote for Nelson Mandela, and the instinct to make a difference.

### **AWARDS AND HONORS**

Faculty were the recipients of prestigious awards: Dean John Flanagan: President's Award from the American Optometric Association, and named President of ASCO; Dr. Mika Moy: California Optometric Association Excellence in Optometric Education Award, and joined AAO Foundation Board; Dr. Teresa Puthussery: Hellman Award; Dr. Marina Rocchi: Young OD of the Year, California Optometric Association; Dr. William Tuten: Hellman Award; Dr. Tony Adams: Berkeley Optometry Lifetime Achievement Award; Dr. Chris Wilmer: appointed to the AAO Board of Directors; and Dr. Charlotte Yiyi Wang: Hopkins Comprehensive Eye Care Award.

## **OPTOMETRY CLINICS**

### **Leadership**

In 2020 Dr. Meredith Whiteside, Chief of Primary Care, took on the additional role of Safety Committee Chair in response to the COVID-19 pandemic. In this role her committee established and revised all safety protocols in consultation with Environmental Health and Safety, Occupational Health, and University Health while following the guidelines set by the City of Berkeley Public Health Department, California Department of Health, and the Center for Disease Control. Committee members include clinic faculty (Drs. Kuniyoshi Kanai, Carl Jacobsen, Angela Shahbazian and Deborah Orel-Bixler), Director of Digital Health (Dr. Harry Green), preclinic faculty (Dr. Robert Dister), the Chief of the Eyewear Center (Ms. Vicki Rich), staff managers (Ms. Angelica Gonzales and Mr. Rob Herrick) and the School's Privacy Officer (Ms. Beth Taylor).

In 2020 Dr. Harry Green, Director of Digital Health, took on the title of Chief of Telehealth and the task of establishing Telehealth in response to the COVID-19 pandemic. This included urgent care, binocular vision, sports vision, low vision, contact lens evaluations and dry eye. He joined the Committee on Clinical Instruction in the spring.

### **New Clinic Faculty**

The clinical faculty team acquired a few new hires for the academic year 2020-2021. New OD Clinical Faculty are: Dr. Joan Castaneda, a graduate of UC Berkeley Optometry where she completed a residency in Ocular Disease. She is a full-time clinical faculty member and teaches in Med Mod, Berkeley Outpatient Clinic and the West Oakland Health Center. Dr. Ghazal Naseri is a graduate of UC Berkeley Optometry where she completed a residency in Primary Care and Contact Lenses. She is a part time clinical faculty member and teaches in primary care and contact lenses. Dr. Charlotte Wang is a graduate of UC Berkeley Optometry where she completed a residency in Primary Care and Community Health.

## **Faculty Development and Support**

### **American Academy of Optometry Chicago**

There was a strong showing at the American Academy of Optometry meeting, held remotely October 2020 due to COVID-19, with in-house and external faculty attending over a 2 week period. Five clinical faculty achieved fellowship and many clinical faculty members presented lectures, symposia, papers, and workshops.

### **bTalks, Optometry Discussion Series**

Monthly bTalk lectures have continued in 2020 with a short pause due to COVID-19 and the implementation of Remote Clinical Learning Series (RCLS). After starting up again, the lectures were changed to remote presentations via Zoom. About 20-25 doctors/residents and ~10 students attend each lecture and the positive feedback continues. We are trying to expand our presenters and topics. Of the lectures this year, 12 are internal faculty and 2 are outside lecturers.

### **Digital Health**

The Digital Health Clinic (DHC) is a telemedicine program that works with 180+ clinics around the State of California to screen diabetic patients for sight-threatening diabetic retinopathy. Due to this great need in the community, DHC works mainly in Federally Qualified Health Centers (FQHC) and Rural Health Centers (RHC) where the need is greatest. The DHC is also active in teaching optometry students and optometric residents in telemedicine.

### **Clinical Curriculum**

The Berkeley Optometry clinics provide a diverse clinical experience for students in primary care and specialty clinics. During non COVID-19 times, third year students are in patient care 3-4 days a week rotating through primary care, eyewear center, and various specialty clinics. During their first session in clinic, third year students work more closely with instructors. During this summer session, there is usually a 3:1 ratio of students to instructors. All other primary care/contact lens clinics have a 4:1 student to instructor ratio. Throughout the year, some primary care clinics teach third and fourth year students together, with fourth year students serving as mentors to their peers. Specialty clinics allow for more direct attention between students and doctors. In this setting, doctors will see patients directly or oversee 1-2 students examining one patient. Our local external community clinics for fourth year students also have doctors overseeing 1-3 students at a time.

Our clinics operated according to the original curriculum (described above) from the beginning of January until mid-March 2020, when Alameda County announced a mandatory shelter-in-place (SIP) order due to the escalating COVID-19 pandemic. On the afternoon of March 16, 2020, all third and fourth year in-person patient care for Berkeley Optometry Clinics, internal and external, ceased at the end of the business day. In response to the SIP order, Berkeley Optometry launched a fully remote, online learning program, titled the Remote Clinical Learning Series (RCLS). The transition from in-person patient care to remote clinical learning for students was seamless, with zero gap days between the end of in person education and the beginning of remote education.

In order to best provide each student with a remote clinical education program that covered the topical areas they would have likely encountered during their in-person patient care clinics prior to the COVID-19 shutdown, the RCLS program delivered a balanced curriculum spanning the topical areas of: myopia control, contact lenses, dry eye, binocular vision, sports vision, glaucoma, pharmacology, anterior and posterior segment ocular disease, systemic disease, primary care, low vision, pediatrics, optometric law, billing/coding, medical malpractice, grand rounds, practice management, eye surgery, ocular manifestations of systemic disease, laboratory testing and imaging, ocular emergencies, optical prescribing, oculoplastics, orientation and mobility training, telehealth, and neurology.

The 2020 Summer Preclinic Bootcamp was also successful in accomplishing its goals of simulating the Third Year Summer I clinical experience while refreshing the students' examination skills to the clinic-ready state. Student responses to surveys indicated their appreciation in many areas including performing full exams, working on efficiency and exam flow, checking in with an attending, personalized feedback, confidence building, and small instructor/student ratios. Feedback from Summer II instructors indicated that Bootcamp prepared the students well for their introduction to Summer Clinic. Significant areas noted by instructors included improved confidence and comfort in the exam room, willingness to make exam and prescribing decisions, and EMR familiarity. Many instructors and students have suggested permanently incorporating this style of clinical preparation in the semester preceding entering summer clinic.

### **Changes to Clinical Training Sites/Externships**

An affiliation agreement was established for VA Kernersville Health Care Center in Kernersville, NC. The first student will attend in January 2021.

Due to the Covid-19 pandemic, on Tuesday March 17, 2020, 4th year students both on internal and external rotations were released from clinical patient care to required remote learning and academic work. No students completed externships in the Spring 2 term, 2020. Due to the

ongoing Covid-19 pandemic, several externships had a delayed start for the Summer 2020 session and several others were cancelled by the sites for summer and/or fall.

### **Equipment and Facilities Improvements**

In 2020 some rooms were refreshed and repurposed in order to contribute to a better work, learning and patient care environment. There is a newly dedicated dispensing area for the Eyewear Center. This space now allows more patients to be served by our Optical team in a safe, socially distanced manner while providing a focused, dispense-adjustment, problem solving centric educational experience for our students. With much of our admin staff working remotely, the admin suite was converted to a 70 seat classroom. Several technological upgrades were also implemented to streamline business processes.

### **RESIDENCIES**

The optometry residency program at the School of Optometry seeks to recruit and admit the best qualified post-graduate optometrists and provide them with advanced clinical education and concentrated clinical experience in specialty areas of optometry. This mentored educational and clinical experience will prepare optometrists for life-long scholarship in patient care, education, and optometric leadership.

#### **Administration**

The Residency Program is administered by Kuniyoshi Kanai, OD, FAAO, Director of On-Campus Residency Programs, and Christina Wilmer, OD, FAAO, Director of Affiliated Residency Programs.

#### **Current Programs**

The on-campus and affiliated residency programs include the following areas of emphasis and residency training positions.

#### **UC Berkeley Optometry**

One position in each of the following areas:

Vision Therapy and Rehabilitation	Deborah Lee, OD, FAAO
Cornea and Contact Lenses	Pam Satjawatcharaphong, OD, FAAO
Ocular Disease	Carl Jacobsen, OD, FAAO
Low Vision / Ocular Disease	Marlena Chu, OD, FAAO
Pediatrics / Primary Care	Deborah Orel-Bixler, PhD, OD, FAAO
Primary Care / Contact Lenses	Christina Wilmer, OD, FAAO
Primary Care / Community Health	Meredith Whiteside, OD, FAAO

#### **Veterans Affairs Central California Health Care System Fresno**

Primary Care Optometry (3 positions)

#### **Veterans Affairs Palo Alto Health Care System**

Primary Care/Low Vision (3 positions)

Primary Care/Brain Injury (1 position)

#### **Sierra Nevada Health Care System Reno**

Primary Care Optometry (2 positions)

#### **Department of Veterans Affairs Medical Center, San Francisco**

Primary Care Optometry (3 Positions)

#### **Current/Past Residents**

The residency application process is very competitive. All residents match through the ORMatch process. All the positions were filled this year.

### **Shared Educational Components**

In addition to patient care, all residents participate in the following educational program components. These are required for successful completion of the program and the awarding of the residency program certificate.

#### **ACOE Site Visit**

In April 2017, the Department of Veterans Affairs Medical Center, San Francisco (SFVA) Primary Care Residency and the Veterans Affairs Palo Alto Health Care System (PAVA) Primary Care/Low Vision Rehabilitation Residency underwent ACOE site visit for their residency programs. As a result, both programs are fully accredited without any recommendations or suggestions. The next site visit is scheduled in 2025.

#### **Summer Research-Training Program**

Berkeley Optometry runs a short-term (10 weeks) summer research-training program for OD students — the T35 training program — whose goal is to introduce talented students to clinical and/or translational research by way of developing their interest, awareness, and enthusiasm for a career in biomedical or behavioral research. Training is provided within the laboratories of 21 faculty mentors in the School of Optometry, who are also involved in the training of pre-doctoral research students and postdoctoral fellows from the Graduate PhD Program in Vision Science. Due to the COVID-19 pandemic, the program followed a hybrid model and was restricted to Berkeley students. Seminar presentations were also offered in collaboration with UHCO.

Optometry schools from across the country are targets of our recruitment efforts aimed at attracting a diverse pool of talented health professional students to our short-term training program. In summer 2020, the grant supported 11 trainees.

The long-term goal is to encourage clinicians to pursue advanced research training after completion of their professional training, preparation for careers in academia, or industry as clinician scientists. As a stepping-stone to these research careers, we encourage UC Berkeley trainees to enroll in research honors after completing this summer training program.

### **OPTOMETRIC STUDENT ASSOCIATION**

Comprised of student representatives from each class, the University of California Optometric Student Association (UCOSA) represents the interests of students to the faculty. UCOSA also organizes vision care services through student-sponsored activities, student activities, textbook sales, and publication of the Berkeley Study Guide for national board exams.

### **VISION SCIENCE**

In 2020, we welcomed six graduate students in the Vision Science Graduate program. Additionally, we have three students who had to defer but will be joining us in 2021. In May 2020, the Vision Science program conferred 1 PhD which was to be expected after conferring a record number of 15 PhDs in 2019. Rich diversity in academic backgrounds among its' members -- including neuroscience, biology, engineering, computer science, psychology, optometry, and others -- is a hallmark of the group. Teresa Puthussery continues in her role as the faculty advisor for postdoctoral fellows and affairs.

From July 1, 2019 through June 30, 2020, optometry faculty members generated \$10.0M in direct cost funding. Most projects are 3-5 years and funding was received from various federal agencies (NIH, NSF, and DOD) as well as private foundations and industry.