**Teaching and Mentoring FY14-FY23**

**Time and Effort: 0%**

\*\*\*\* \*\*\*\*, OD, MBA was appointed Instructor upon hiring in 2013 and was promoted to Assistant Professor in 2017 on the Clinical Attending Pathway at the University of Arkansas for Medical Sciences, College of Medicine (UAMS COM). She is applying for Associate Professor on this non-tenured track in September 2023.

**Highlights**

**Ophthalmology Residents**

* Didactic Education, Jones Eye Institute
  + Course Developer and Director for Optics and Contact Lens Education
  + 5-6 week course with 3, 1-2 hour lectures per week and final examination
  + Optics Journal Club meeting
  + Main lecturer for course **(See attached course schedule)**
  + Course Recordings, In-person lectures, Worksheets, and Review Material provided
* Clinical Teaching, Jones Eye Institute
  + Educate residents on refractive methods, clinical optics, and contact lens fittings
  + Supervise residents preforming clinical skills including slit lamp examinations, binocular indirect, retinoscopy, and contact lens fittings
  + PGY-1 residents rotate through Dr. \*\*\*\*’s clinic while on UAMS month-long rotation
  + PGY-2 residents rotate through Dr. \*\*\*\*’s clinic a total of 16 weeks out of the year
  + PGY-4 residents interested in comprehensive or cornea subspecialty return and rotate with Dr. \*\*\*\* an additional month during their elective rotations

**Family Medicine Residents**

* Clinical teaching, Jones Eye Institute
  + Educate residents on common systemic disease and its associated eye manifestations.
  + Review treatment of common eye conditions that are likely to appear in primary care clinic or emergency department.

**Optometry Students**

* Clinical Teaching
  + Shadowing of optometry students and those undergrad students who are interested in optometry as a field of study

**Optometric Physicians**

* Clinical teaching, Jones Eye Institute
  + This is usually during the specialty lens clinic. These optometrists are interested in prosthetic and scleral fittings and want to learn technique or are considering referring patients for services.
* Lectures, Statehouse Convention Center and Jones Eye Institute
  + Arkansas Spring Optometry Convention- yearly state convention lecture series (4 hours)
  + Quarterly lecture series for community optometrists
  + Scleral lens lectures and fitting labs
* Mentoring
  + Support of junior faculty optometrists
  + Shadowing and in-clinic training of Epic Kaleidoscope, ordering and review of eye testing, clinic flow, referral processes upon hiring
  + Assign resident lectures and provide feedback of lectures given
  + Support junior optometrists working in the state of Arkansas through state association mentoring program

**Medical Students** (1/2 day sessions, 3rd and 4th year students split by faculty in clinic)

* Clinical Teaching, Jones Eye Institute
  + Direct supervision of basic patient workup for eye exam (VA, pupils, fields, extraocular motility)
  + Education of clinical findings and review of ophthalmic special testing
  + Rated at the highest level (5) on surveys
* Practice Labs
  + Training first and second year medical students in small, rotating groups on pupillary function, extraocular motility, and confrontation visual fields

**Undergraduate Students**

* Certified Ophthalmic Medical Technology (COMT) Students
  + Didactic Lecturer of Optics and Contact Lens from 2014-2021
  + Clinical shadowing and instruction

**Detailed Description of Teaching and Mentoring Activities**

**Ophthalmology Residents**

**Didactic**

Dr. \*\*\*\* has been teaching the residents optics since joining the faculty at the end of 2013. At that time, there was not a designated optics teacher or course, and Dr. Richard Harper, the resident director, was teaching 3 optics lectures every March. The residents take a national ophthalmology-specific exam (OKAP-Ophthalmic Knowledge Assessment Program) every March, so the timing of the optics lectures was in an attempt to provide a quick review before the exam. Historically, optics had the lowest scores on the national exam. Since Dr. \*\*\*\* was asked to take over the resident’s optics and contact lens education in 2016, an improvement in the resident’s OKAP performance has been noted and more importantly, an improvement in patient care due to a better understanding of clinical refractive issues and treatment options. Since 2016, there have been 5 years in which residents performed better than when compared to the average of all sections, and 2 years in which optics scores were average. In 2017 and 2023, the residents scored the highest on the optics section when compared to all other sections. Other sections include general medicine, ocular pathology, neuro-ophthalmology, pediatrics and strabismus, oculoplastics, cornea, glaucoma, and retina.

|  |  |  |
| --- | --- | --- |
| Year | Clinical Optics | Average |
| 2015 | 54 | 57 |
| 2016 | 54 | 57 |
| 2017 | 57 | 52 |
| 2018 | 53 | 53 |
| 2019 | 57 | 54 |
| 2020 | 54 | 50 |
| 2021 | 56 | 53 |
| 2022 | 56 | 56 |
| 2023 | 60 | 57 |

**Table 1**

**Graph 1**

**Clinical Teaching**

Each PGY-2 resident spends 4 weeks in clinic with Dr. \*\*\*\*. Since every resident enters at a different skill level, she customizes the rotation to individualize the learning experience for each resident. The major goal of the rotation is to understand the refractive state of the eye, applied clinical optics, non-surgical treatment options, and when to make appropriate referrals for surgery. Time is spent performing refractions, retinoscopy, lensometry, contact lens fittings, and understanding the optics of the slit lamp, indirect ophthalmoscope, direct ophthalmoscope, fundus cameras, scanning lasers, and corneal topographers. Residents complete a combination of in-clinic shadowing, hands-on training with patients, and daily reading and worksheet assignments **(see attached example of 1 optics clinical rotation schedule and 1 contact lens clinical rotation schedule)**. Reading assignments are to supplement the in-clinic learning, and the worksheets include physical, geometric, and ophthalmic optics problems for better comprehension of the fundamentals of clinical optics. Residents also examine every work-in patient, or problem focused exam, to gain a better grasp of acute vision issues and their resultant effects on patient’s vision and ability to function. This allows for review of contact lens-related issues such as corneal ulcers, superficial punctate keratitis, corneal neovascularization, corneal edema, corneal abrasions, conjunctivitis, and giant papillary conjunctivitis. These work-in patients can also expose the residents to cranial nerve palsies, diabetic eye complications, acute retinal pathology, glaucoma, and other eye diseases that can worsen suddenly. In Dr. \*\*\*\*’s specialty contact lens clinic, the residents gain invaluable experience with specialty lens fittings on patients with keratoconus, pellucid marginal degeneration, Salzmann’s nodular dystrophy, limbal stem cell deficiency, post refractive surgery complications, corneal transplants, aphakia (without a natural lens), and corneal lacerations and sutures after traumatic globe repair. Immediate feedback is given to the resident after a patient encounter or at the end of the session during a casual debriefing and reflection of the clinic learning points and daily takeaways.

An anonymous survey completed by the residents is conducted on each faculty member. The survey consists of 18 categories scaled 1 through 5 and is completed yearly by each resident. Dr. \*\*\*\* has survey data starting in 2016 extending through 2022 (27 individual surveys). She consistently averages scores in the 4’s and 5’s among the categories and has never dropped below a score of 4. There are many categories in which Dr. \*\*\*\* outperforms her colleagues with a higher-than-average score from the residents. A representative sample has been pulled and can be viewed below.

|  |  |  |
| --- | --- | --- |
| CATEGORY | \*\*\*\* AVERAGE | PEER AVERAGE |
| Shared Specialty Expertise | **5** | **4.89** |
| Established a nonthreatening environment | **5** | **4.85** |
| Demonstrated effective interviewing and listening skills | **5** | **4.84** |
| Check patients’ histories and physical findings | **5** | **4.86** |
| Demonstrated empathy, respect, & compassion for patients | **5** | **4.90** |
| Involved patients in the decision-making process | **5** | **4.87** |
| Presented new ideas and research | **5** | **4.67** |

**Resident Comments (anonymous):**

“Showing great care for resident’s education.”

“Dr. \*\*\*\* is a great mentor. She does a good job of teaching residents refraction and contact lenses.”

“\*\*\*\* \*\*\*\* does a good job teaching optics and contact lenses to us residents. She is also a good role model for patient care and interactions.”

“Dr. \*\*\*\* is beloved by her patients and all the people she works for. She is an excellent instructor and we appreciate the time she invests in helping us learn difficult/high yield optics concepts.”

“Dr. \*\*\*\* \*\*\*\* is a superb clinical mentor and role model. She is excellent with patients and very generous with her knowledge. A very patient teacher, she promotes a healthy learning environment that allowed me to effectively learn difficult material.”

“Such a great teacher. She really knows what she is doing and cares about teaching and patients!”

“Great teacher!”

“Dr. \*\*\*\* is a great clinician and great teach of the residents. She is knowledgeable of optics and contact lens fitting and we are fortunate to be able to learn from her.”

“Very much enjoyed working with Dr. \*\*\*\*. Gained valuable foundational skills in refraction and contact lens fitting that will serve me well throughout the remainder of my training.”

**Medical Students**

**Clinical and Didactic Teaching**

Dr. \*\*\*\* currently hosts a half day of medical students every Wednesday in her specialty clinic. This is largely comprised of 3rd year medical students, but also includes 4th year medical students who are pursuing a career in ophthalmology. This has varied throughout the years as the amount of ophthalmology faculty has changed and shadowing has been redistributed. Dr. \*\*\*\* has been hosting medical students since 2014, but since 2020, the medical student and ophthalmology resident schedule has changed. In 2020, the amount of time that Dr. \*\*\*\* was scheduled with the residents increased, and it was very challenging to have both residents and medical students in a full clinic and be able to give patients, residents, and students adequate attention. Medical students have recently started rotating with Dr. \*\*\*\* again, but this is why there is no medical student survey data from 2020-2023. While in clinic, medical students get hands on training with patients. In general, the medical students are assigned the task of taking a chief complaint, ocular history, family history, and medical history, or performing key elements of the eye exam such as visual acuity, extraocular motility testing, pupil evaluation, and direct ophthalmoscope examination. After the patient is dilating, Dr. \*\*\*\* has the medical student shadow her for the remainder of the patient’s exam to provide continuity and to observe the exam from the beginning to end. Dr. \*\*\*\* will show the medical student interesting findings through the teaching tube at the slit lamp and/or review ophthalmic imaging such as retinal, corneal, or optic nerve scans. Medical student surveys can be found below.

**Practice Lab**

Dr. \*\*\*\* participated annually in training labs where the entire class of first or second-year medical students would be scheduled to meet at the Jones Eye Institute for hands-on instruction for 3–4 hour sessions. These ICM II Labs were organized by administration and involved teaching pupillary function, extraocular motility, confrontation visual fields, and direct ophthalmoscopy in small, rotating groups of 6-8 students. The students would all dilate one eye, so that they could sit as a patient for their classmates for direct ophthalmoscopy examination. No ICM II Lab has occurred since the COVID19 Pandemic.

**A 15-question survey is given to each rotating medical student. Below is a representative sample of the questions and Dr. \*\*\*\*’s scores compared to the mean.**

|  |  |  |
| --- | --- | --- |
| MEDICAL STUDENT SURVEYS  CATERGORY | \*\*\*\* RATING | MEAN |
| Enthusiastic | 5 | 4.9 |
| Answered my questions clearly | 5 | 4.9 |
| Actively involved me patient care | 5 | 4.9 |
| Clinically competent/ knowledgeable | 5 | 5 |
| Provided timely, constructive feedback without belittling me | 5 | 4.9 |
| Approachable | 5 | 4.9 |
| Clearly communicated expectations regarding my responsibilities | 5 | 4.9 |
| Explained basis for decisions | 5 | 4.9 |
| Clearly communicated expectations | 5 | 4.9 |
| Provided opportunities to practice skills | 5 | 4.9 |
| Emphasized my comprehension of concepts rather than fact recall | 5 | 4.9 |
| Supervision was appropriately balanced | 5 | 4.9 |
| Overall excellence of instructor | 5 | 4.9 |

**Medical Student Comments (anonymous):**

“Dr. \*\*\*\* was tremendously fun to work with. She was the one individual I worked with this week who really took the time to explain to me what I was seeing with each patient and allowed me to be actively involved in the examination. She taught me how to use the indirect ophthalmoscope, which I had never gotten to use before. She was very informative and enjoyable to work with.”

“Dr. \*\*\*\* was a pleasure to work with, she obviously cared for her patients and made a point to make teaching a priority. She was an excellent example as a clinician and I thoroughly enjoyed my time with her. I hope to get the change to work with her in the future.”

“You are an excellent teach and practitioner, and it was a pleasure to learn from you.”

“Dr. \*\*\*\* was a joy to work with in clinic because of her positive attitude and willingness to teach me parts of the eye exam. She discussed her findings with me regarding several different patients and was open to any questions that I had.”

“It was a pleasure working with Dr. \*\*\*\* in her clinic. She went far above and beyond to ensure that I learned as much as possible during our time together. Also, Dr. \*\*\*\* is friendly and approachable making for a very positive learning environment.”

“Good bedside manner and helped me learn how to use the direct ophthalmoscope!”

“I enjoyed my time with DR. \*\*\*\*. She was willing to involve me in her clinic and teach me along the way.”

“Dr. \*\*\*\* was exceptional teacher and doctor. She did an excellent job of explaining patients’ conditions to them and answering every question that they had. She also went out of her way to teach me about each patient’s symptoms and diagnosis. I would recommend her to any patient.”

“Dr. \*\*\*\* was one of the best teachers I had on the whole ophthalmology rotation. She easily found the balance between patient care and outstanding teaching during each patient encounter. She was eager to point out findings and let me use the slit lamp with every patient. She was easy to ask questions of and gave great explanations and answers.”

“Dr. \*\*\*\* was great to work under at JEI. She took time to let me do my own eye exams and point out unique findings to me. She was approachable with questions and knowledgeable with her responses. I truly appreciated my experience with her on the ophthalmology rotation and left with lots of knowledge.”

“Extremely competent and enthusiastic instructor. Really helped me dial in my direct ophthalmoscope skills. Excellent rapport with patients.”

“Dr. \*\*\*\* as great to work with. She was very helpful in explaining different eye pathologies and appropriate treatment including different lens options.”

**Optometry Physicians and Students**

**Clinical**

Dr. \*\*\*\* is always welcoming to community optometric physicians, optometry students, and undergraduate students considering optometry as a field of study. Potential optometry students usually come during summer, Christmas, or Spring break to gain a better understanding of what optometry looks like at in an academic, outpatient setting. Optometry students and community optometric physicians are typically wanting to observe Dr. \*\*\*\*’s specialty contact lens clinic and learn from the complex patients who are scheduled and unique prosthetic fittings performed on that specific day in the outpatient clinic. Dr. \*\*\*\* has a passion for community collaboration and believes that scleral lenses are vastly under-utilized due to the fear of complexity and failure by physicians who do not have as much exposure and experience to the patient demographic in-need. Dr. \*\*\*\* happily teaches her simplified scleral lens fitting method in hopes that knowledge will be disseminated and this technology can reach all patients in Arkansas who desperately need it to have functional vision. One of doctor \*\*\*\*’s most successful education efforts was when she organized a live fitting lab for patients in financial need who qualified for scleral lenses due to eye disease or progressive corneal conditions. She invited an internationally known expert in scleral lens fittings along with 25 community optometrists to participate in a lecture and then live fitting lab afterwards. It was a considered huge success and life-changing for those patients involved.

**Lectures**

Dr. \*\*\*\* has led continuing education efforts for community doctors in collaboration with the expertise offered by the many subspecialists at UAMS Jones Eye Institute. Before the COVID19 pandemic, Jones Eye Institute held many lectures for community optometrists in addition to the weekly case conference schedule in which community optometrists and ophthalmologists are invited. Dr. \*\*\*\* and Jones Eye Institute are invited to speak yearly at the Statehouse Convention Center at the Arkansas Optometric Spring Convention largely due to Dr. \*\*\*\*’s continued coordination efforts and relationship with the Arkansas Optometric Association. Summary table provided below.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Year | Title of Lecture/Series | Speakers | Location | Total Hours Offered |
| 2016-2023 | UAMS Rapid Fire Session-Arkansas Optometric Spring Convention | \*\*\*\* + 6-8 Jones Eye Faculty Speakers | Statehouse Convention Center | 4-5 hours offered yearly |
| 2019 | Diabetes and the Anterior Segment | \*\*\*\*, Uwaydat, Sallam, Grigorian P, Chancellor | Jones Eye Institute | 2 hours |
| 2019 | Diabetes and the Eye | \*\*\*\*, Uwaydat, Vines | Spine Institute | 1.5 hours |
| 2019 | OCT Open Forum Discussion | \*\*\*\*, Lee, Warne, Phillips | Jones Eye Institute | 2 hours |
| 2017 | Scleral Lens Fitting Lecture and Wet Lab | \*\*\*\*, Lampa | Jones Eye Institute | 6 hours |
| 2017 | Common Corneal Disorders/Infections Treatment and Management | \*\*\*\*, Warner, Ali, Lemmons | Jones Eye Institute | 2 hours |
| 2016 | Optical Coherence Tomography for the Primary Eye Care | \*\*\*\* K, \*\*\*\* M, Uwaydat, Sallam, Chacko, Morshedi | Jones Eye Institute | 2 hours |

**Undergraduate Students**

**Ophthalmic Medical Technology (OMT) Students**

The certified ophthalmic medical technology bachelor of science program was under the College of Health-Related Professions. This program provided 2 years of intense clinical and didactic training to those wishing to be an ophthalmic technician and also provided a pathway for those progressing to other higher levels of training, such as optometry school. Unfortunately, this program was dissolved in 2021. Dr. \*\*\*\* precepted in clinic with the OMT students and oversaw their learning. The OMT student would work closely with an assigned clinic technician and then Dr. \*\*\*\* would have the student follow her into the room for examination, treatment, and follow up discussion with the patient. Dr. \*\*\*\* also provided a number of lectures and labs to the OMT students on a yearly basis since 2014. In addition to the lectures below, the OMT students attended the resident optics morning conference for 4-6 weeks starting in March every year. During this time, lectures were given 3 times per week along with a final examination at the end of the optics course. OMT-specific education is summarized in the table below.

|  |  |
| --- | --- |
| Title | Type of Education |
| Corneal Topography | Lecture |
| Refractive Error and Specialty Contact Lenses | Lecture |
| Contact Lens Pre-fitting Considerations | Lecture |
| Contact Lens Insertion and Removal Training | Lecture |
| Contact Len Dispensing, I&R, Wearing Schedule, Len Care, Follow-up | Lecture |
| Contact Lens Review for OMTII | Lecture |
| Contact Len Scenario | Oral Exam |
| RGP Modifications and Adjustments | Lecture |
| RGP Len Selection, Evaluation, and ORx | Lecture |
| Scleral Contact Lenses- A Technician’s Guide | Lecture w/ Lab |
| Updates in Contact Lens Technology | Lecture |
| Contact Lens Complications | Lecture |
| Rigid Gas Permeable Lens Fittings | Lab |
| Soft Contact Lens Fitting | Lab |
| Multifocal Contact Lens Fitting | Lab |