

INSIDE

- New options for dry eye patients: p. 6
- Special Needs Clinic in Forest Grove: p. 9
- First look at our new clinic lanes in Forest Gove: p. 10

pacificu.edu



Pacific University College of Optometry

EYE ON PACIFIC

As vision subspecialties continue to grow, we can ensure that patients continue to get the care they deserve.

Winter | 2016

Treating Eyelid and Periocular Lesions

LORNE YUDCOVITCH, OD, MS, FAAO | MEDICAL EYE CARE SERVICE CHIEF

GERALD MELORE, OD, MPH | EYELID AND PERIOCCULAR SERVICE CLINICAL

One of the specialty services at Pacific University College of Optometry is the Eyelid and Periocular Service, also known as the "Lumps and Bumps Clinic." This service is currently available on Tuesday mornings alternating between the Pacific EyeClinic in Portland and Forest Grove. Patients are also seen on select Tuesday afternoons at the Pacific EyeClinic in Hillsboro. This service is purposed for managing eyelid and adnexal conditions.

Patients present to optometrists with a variety of eyelid and periocular lesions. Most lesions are benign, and are of no consequence other than an unsightly appearance; however, some can result in potentially serious complications. Even if the lesion is benign,



Figure 1: Eyelid lesion as noted on general observation. Note the pedunculated appearance and extension of the lesion below the upper eyelid margin.

Eyelid Lesions (continued)

the patient may be self-conscious about the appearance and want it removed for cosmetic reasons. In other situations, the lesion may create physical discomfort, irritation/pain, or even visual problems. In a worst-case scenario, the condition may be cancerous in nature, requiring prompt management. Often these patients are extremely grateful and appreciative once the lesion is removed.

Many eyelid lesions are a result of aging skin and are unavoidable in susceptible individuals. As our population continues to age, more of these elderly patients will present with eyelid anomalies. As primary eye care providers, optometrists must understand these conditions in order to best care for patients. Our Eyelid and Periocular Service faculty is available to provide consultations and second opinions for your patients. In conjunction with professional consultation, we offer management of several conditions. Here we share an example of one patient referred for management of his eyelid condition.

Case Report

A 58-year-old Caucasian male presented as a referral from a private practice optometrist for further evaluation and management of a longstanding bump on his right eyelid. He reported that this bump has grown gradually over the last year or two and that it was physically irritating and cosmetically bothersome. In the last year, the patient felt that it interfered with his visual activities on a daily basis. Medical history was positive for hay fever and hypercholesterolemia, for which he was taking simvastatin. Ocular history included mild pre-surgical nuclear sclerotic cataracts, ocular rosacea, and seasonal allergic conjunctivitis, for which he was taking Bepreve ophthalmic eye drops before and during the allergy season. Family history was positive for a mother with type 2

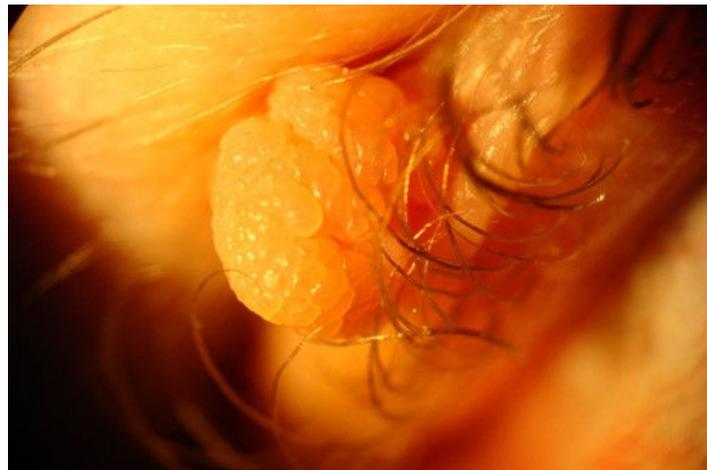


Figure 2: Biomicroscopic appearance of the lesion. Note the lobulated, 'cauliflower-like' appearance.

diabetes mellitus. The patient reported no medication allergies and did not smoke or drink alcohol.

Entering visual acuities were 20/20 in each eye with habitual spectacle correction. Pupils on general observation appeared round and reactive with no relative afferent pupil defect. No photophobia was noted of either eye. Ocular motilities were full and equal in both eyes, with no pain or diplopia noted. Ocular pressures were 14 OD, 13 OS @ 10:15 with non-contact tonometry. Blood pressure was 112/82 mmHg.

General observation showed normal facial symmetry, with mild rhinophyma and telangiectatic vessels along the cheeks and forehead - findings typical of rosacea. A pedunculated (stalked) 8 mm x 10 mm lesion was noted on the patient's upper right eyelid (Figure 1). This lesion was similar in coloration to the surrounding skin and extended below the eyelid margin into the area of the palpebral fissure. Anterior segment biomicroscopy revealed a lobulated and 'cauliflower-like' texture to the mass, with no color irregularity, ulceration, or vascularization (Figure 2). No eyelid ectropion nor entropion

Eyelid Lesions (continued)

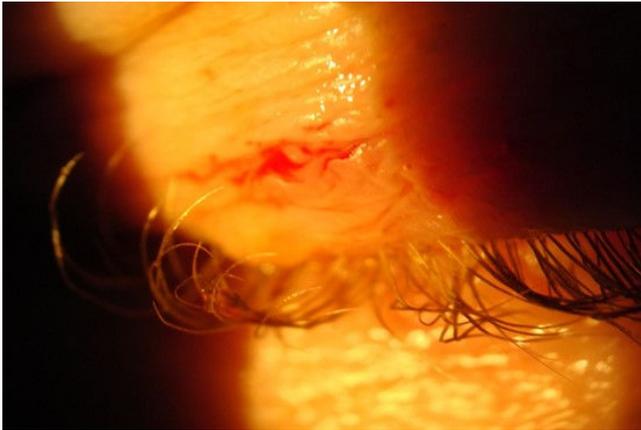


Figure 3: Biomicroscopic appearance of the stalk location immediately after excision.



Figure 4: Eyelid appearance one minute post-excision.

was noted, and no madarosis (lash loss) or poliosis (lash whitening) was evident. All other anterior segment findings were unremarkable, save for the mild cataracts in each eye. Dilated fundus examination performed two weeks prior by the referring doctor was reported to be remarkable only for a small (1/2 disc-diameter) flat choroidal nevus in the left eye that had remained stable for several years.

Based on the history and appearance of the lesion, the diagnosis of benign squamous pedunculated papilloma was made. After educating the patient regarding the diagnosis and discussion of treatment options (observation, removal/destruction) through informed consent, the patient opted for excision of the mass.

The patient was first screened for any allergies to medication or anesthetic, or problems with prior medical procedures. Due to the size of the papilloma, a subcutaneous injection of 0.1 cc of 1% lidocaine with epinephrine was placed around the lesion stalk to reduce pain and limit bleeding. Using precision forceps and scissors, the papilloma was removed with mild bleeding (Figure 3). It was later determined that the patient had forgotten to mention having taken aspirin recently for joint

pain. After 1 minute with mild pressure hemostasis, the bleeding subsided (Figure 4). The patient was provided with prophylactic antibiotic ointment and release instructions.

Although the patient missed his recommended follow-up visit, several weeks later he presented to the clinic reporting complete relief of his ocular and visual symptoms, as well as cosmetic satisfaction.

Discussion

Squamous cell papillomas are generally benign growths arising from stratified squamous epithelium. The human papilloma virus (HPV) has been implicated in causing this growth, although HPV is more closely associated with conjunctival papilloma variant. Papillomas are one of the most common benign eyelid lesions, and there is no race or sex predilection. Frequency of eyelid papillomas increases with age, usually more often seen after age 30. (1) Squamous papillomas are sessile or pedunculated and often similar in color to the surrounding skin. There can be more than one, and they tend to develop at the eyelid margin. With biomicroscopy, the lesions can be seen to have fingerlike projections of tissue covered by thickened, mildly keratinized epithelium. (2)

Eyelid Lesions (continued)



Figure 5: Basal cell carcinoma masquerading as a pigmented papilloma in a different patient.

Differential diagnoses of papilloma include, but are not limited to, the following:

- acrochordon (skin tag)
- eyelid nevi
- molluscum contagiosum
- verruca (plantar wart)
- sebaceous cyst
- chalazion/hordeolum
- xanthelasma
- seborrheic keratosis
- pyogenic granuloma
- basal cell (Figure 5), squamous cell, sebaceous cell carcinoma
- malignant melanoma (especially amelanotic variant)

Treatment options for squamous papillomas include lesion destruction (through cryotherapy, thermal application, carbon dioxide or argon laser ablation, photodynamic therapy, or chemical cautery) or more commonly, excision (3). Radiofrequency excision has also been performed with some success. (4) In cases where eyelid margin papilloma excision may lead to unacceptable cosmetic outcome, intralesional interferon injection or similar medications such as imiquimod may be an effective treatment option. (5) Potential complications of treatment include bleeding, scarring, lid notching, infection, and lesion recurrence. These complications are rare, and outcome prognosis is usually excellent.

Summary

The case above exemplifies a very common eyelid condition and treatment. There are a multitude of other eyelid lesions and anomalies that can be treated with various in-office procedures.

Examples of conditions treated with chemical or thermal cautery include verrucae, dermatosa papulosa nigra, xanthelasma, keratocanthoma, solar keratosis, ectopic punctum with resulting epiphora, spastic entropion with resulting trichiasis, and punctal occlusion. Examples of conditions requiring minor excisional and/or drainage procedures include pedunculated verruca and skin tags, sudoriferous cyst, sebaceous cyst, chalazia, and abscess of the lid.

Additional treatments modalities include fulguration (which utilizes electric current), radiofrequency excision, steroid injection, and pressure expression. In addition, consideration and application of topical, injectable, and/or oral medications is often part of the management regimen.

Common referrals to our Eyelid and Periocular Service include:

- Chalazion injection and/or excision
- Benign lesion excision/destruction
- Cyst removal/expression
- Lacrimal disorders/dilation & irrigation/punctal closure
- Eyelid shape abnormalities/age-related changes
- Eyelid or periocular inflammations/infections
- Atypical lesion evaluation/triage
- Second opinions/consultations

We are happy to provide specialized evaluation and, when indicated, treatment for your patients. Please feel free to reach us at our Forest Grove, Portland, and Hillsboro Pacific EyeClinic locations.

Eyelid Lesions (continued)

Selected References

1. Bashour, M. Eyelid Papilloma. Medscape: Drugs & Diseases website article. Updated: Mar 21, 2016. <http://emedicine.medscape.com/article/1211855-overview#a4>
2. Eagle R. The eyelid and lacrimal drainage system. In: Eye Pathology: An Atlas and Text. Philadelphia: LWW, 2011:241-242.
3. Shields JA, Shields CL. Chapter 1: Benign tumors of the eyelid epidermis. In *Eyelid, Conjunctival, and Orbital Tumors: An Atlas and Textbook (3rd Ed)*. Lippincott Williams & Wilkins. 2015.
4. Eshraghi B, Torabi HR, Kasaie A, Rajabi MT. The use of a radiofrequency unit for excisional biopsy of eyelid papillomas. *Ophthal Plast Reconstr Surg*. 2010 Nov-Dec;26(6):448-9.
5. Lee BJ; Nelson CC. Intralesional interferon for extensive squamous papilloma of the eyelid margin. *Ophthal Plast Reconstr Surg*. 2012; 28(2):e47-8.

Advances in Medical Eye Care

LORNE YUDCOVITCH, OD, MS, FAAO | MEDICAL EYE CARE SERVICE CHIEF

Green does not always mean good.

A patient presented for a repeat RNFL OCT. Two years prior, the RNFL showed borderline thinning (yellow) in the superior-nasal section (Figure 1). The most recent RNFL OCT (Figure 2) shows normal thickness (green) throughout indicating the patient is within normal limits. Both scans show excellent image acquisition quality with no shadowing of the cross-section scans.

Did the patient's RNFL improve? Note that the scan circle position is slightly different between scans (a baseline 'lock' was not established for subsequent comparison). Additionally, disc malinsertion and myopic atrophy influenced the results, with one scan crossing the atrophy inferior-temporally. The initial scan shows a large peak inferiorly (rectangle), likely due to an inferior-temporal retinal venule. The follow-up scan shows a significant drop (20 micrometers) in that inferior-temporal section (oval), yet the scan analysis is normal, or green, in that quadrant.

Be careful trusting 'green.' Look at the details to find the truth. We are happy to consult with you on test data.

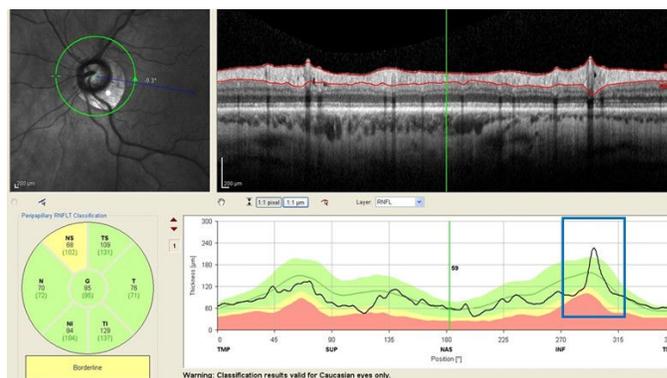


Figure 1. Initial OCT RNFL scan. Note the 'borderline' analysis and the inferior RNFL peak (rectangle).

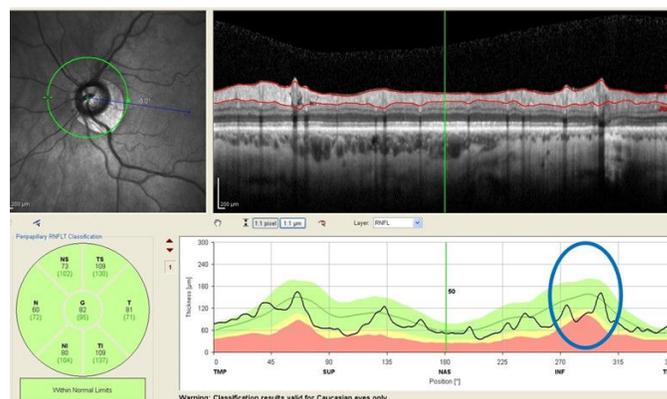


Figure 2. Subsequent RNFL scan. Note the 'within normal limits' analysis and the inferior RNFL drop (oval).

Advances in Dry Eye Disease

TRACY DOLL, OD, FAAO | PACIFIC DRY EYE SOLUTIONS COORDINATOR

For patients with dry eye disease we now have two new prescribing options for inflammatory-based ocular surface dryness: Restasis Multidose™ and Xiidra™.

Restasis (cyclosporine ophthalmic emulsion 0.05%) is now available with a new delivery system. The bottle offers a unidirectional valve and venting system (Figure 1). The tip prevents backflow and allows for sterility of the medication. There are 5.5 mL of drops in a large, 10 mL bottle, making it easier to squeeze. There is no cost difference between the vial and bottle prescription, and all cost savings programs apply to both delivery systems.

Xiidra (lifitegrast ophthalmic solution 5%) is an entirely new class of topical medication that has been FDA approved to treat the signs and symptoms of dry eye disease (Figure 2). While the exact mechanism of Xiidra is not known, we do know that Xiidra prevents the interaction of ICAM-1 on the surface of the ocular tissues from binding to LFA-1, a receptor on the surface of T cells. Since T cells signal the inflammatory cascade, the inhibition of the binding of I-CAM-1 to LFA-1 results in an anti-inflammatory effect in ocular surface dryness. Xiidra is supplied in single use

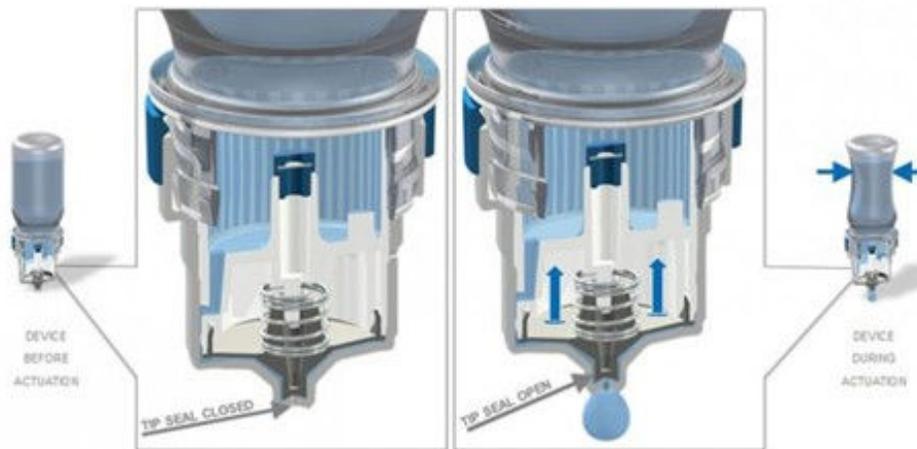


Figure 2: Xiidra is a new topical medication approved for dry eye disease.

vials with twice per day dosing. The main side effects include ocular irritation, dysgeusia (taste alteration), and transient blurred vision. Patients feel symptom relief and there is reduced corneal staining between 2-12 weeks.

With the use of advanced diagnostics to aid in the identification of proper candidates for anti-inflammatory prescription therapy, Pacific Dry Eye Solutions is seeing excellent results with both Restasis and Xiidra.

If we can be of help to your dry eye patients, don't hesitate to contact us at the Pacific EyeClinic Beaverton (503-352-1699).



Schematic drawing of the OSD during actuation depicting the opening of the tip seal

Figure 1: Restasis offers a unidirectional valve.

Advances in Vision Rehabilitation

CHRISTI CLOSSON, OD, FAAO | LOW VISION SERVICE CHIEF

QUIZ: What vision level constitutes LOW VISION?

A. 20/100; B. 20/80; C. 20/200; D. 20/40; E. 20/400

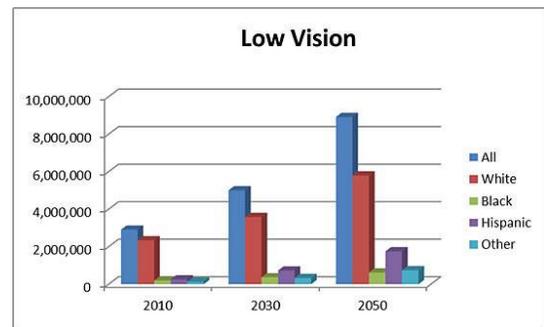
Low vision is in fact defined as 20/40 or worse in the better eye!

If you guessed incorrectly, you're not alone. Most of us don't even begin put low vision on our radar until someone is 20/80 to 20/100, or worse. However, patients with 20/40 are painfully aware how their vision causes difficulty with even the simplest of tasks.

Let's look at the facts. According to the NEI, the number of cases of low vision was almost 3 million in 2010. By 2030, the prediction is 5 million cases, and by 2050 there will be almost 9 million cases.

The bottom line is that the number of low vision patients is steadily increasing. We are in a unique position to refer our patients to low vision services.

So, whenever you see a patient with best corrected vision of 20/40 or worse, consider referring for low vision care.



Advances in Contact Lenses

MATT LAMPA, OD, FAAO | CORNEA AND CONTACT LENS SERVICE CHIEF

Modern contact lenses have seen many advancements. As it relates to the irregular cornea, few contact lens options have rivaled the modern scleral lens. With the increasing utilization of scleral lenses there are several questions that remain about the effects on the ocular surface. One of the most fundamental questions is how much do the lenses settle on the eye.

Scleral lenses contact the eye first on the bulbar conjunctiva. Because the bulbar conjunctiva is comprised of fluid filled, non-keratinized, stratified columnar epithelium, it can compress when force is applied. How much the conjunctiva compresses is of significant clinical importance.

Our studies at Pacific University have demonstrated that over an eight hour period, scleral lenses settle approximately 130 microns (Figure 1). Over 30 days they settle 150 microns. This indicates that most of the settling of the lens takes place in the first several hours to days.

We don't want the lens to settle to the point that it is in contact with the central cornea, so it is imperative that

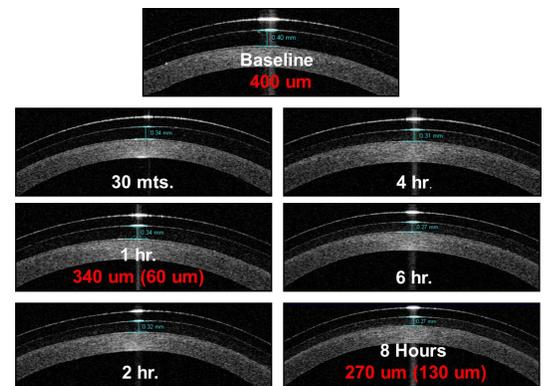


Figure 1: Thinning of the tear layer as the scleral lens settles.

settling of the lenses is accounted for during fitting. Generally, we look for 300 microns of clearance at dispensing.

The Cornea and Contact Lens Specialty Service is available to aid you and your patients in fitting these specialty contact lenses.

Advances in Neuro-Ophthalmic Disease

DENISE GOODWIN, OD, FAAO | NEURO-OPHTHALMIC DISEASE CLINIC COORDINATOR

Often when we think about pupils that don't respond to light but constrict with accommodation (light-near dissociation) we think of Argyll Robertson pupil, and syphilis testing is appropriate. While this is true, there are several other causes of light-near dissociation.

Tonic pupils respond sluggishly to accommodation despite being non-reactive to light. This is often idiopathic but can be caused by systemic conditions that affect the autonomic system such as diabetes or by intraorbital/intraocular lesions or surgery.

Another reason for light-near dissociation is a lesion at the dorsal midbrain. Here, mid-dilated pupils do not respond to light but respond briskly to accommodation. These patients may also exhibit bilateral eyelid retraction, vertical gaze palsy, or convergence-retraction nystagmus.



Right tonic pupil that did not respond to light but responded to a near stimulus.

One other cause of light-near dissociation is aberrant regeneration. This can be caused by a slow growing mass (e.g. aneurysm). If fibers intended for the medial rectus are misdirected to the pupil, light-near dissociation occurs.

At the Neuro-ophthalmic Disease Clinic we are happy to help with any questions you may have regarding pupil abnormalities.

Advances in Binocular Vision

HANNU LAUKKANEN, OD, MEd, FAAO, FCOVD-A | VISION THERAPY SERVICE CHIEF

On behalf of our VT Service, I am very pleased to introduce Dr. Paula Luke, our newest vision therapy/pediatric attending doctor! This semester you can find Dr. Luke in Forest Gove on Monday afternoons. In the spring she will also be at our downtown Portland clinic. We are all very happy to have Dr. Luke with us again!

Dr. Luke received her Bachelor of Science degree in Microbiology from Montana State University and completed her Doctor of Optometry and post-doctoral residency in pediatrics, vision therapy, and visual rehabilitation at PUCO.

Following her residency, Dr. Luke served as an Assistant Professor at both Southern California College of Optometry and Midwestern University Arizona College of Optometry. There, Dr. Luke worked in the areas of vision therapy and acquired brain injury and became a referral source for many local neurologists by delivering

vision care to those with Parkinson Disease. This was a very rewarding time because she was able to see that the smallest changes in vision correction made a significant change in the patient's quality of life.



While Dr. Luke's clinical interests are in the areas of vision therapy and pediatrics, she also enjoys spending time with her husband and dog.

Dr. Luke is excited to be returning to Pacific University College of Optometry as a faculty member and looks forward to serving your vision therapy and pediatric care needs.

Advances in Pediatrics

JP LOWERY, OD, MEd, FAAO | PEDIATRIC SERVICE CHIEF

Many patients with developmental disabilities can be challenging to evaluate. Physical or behavioral conditions can be a barrier to comprehensive health care. According to the most recent CDC children's health survey data, autism now affects 1 in 68 children. Parents of children with behavioral challenges associated with autism may be reluctant to bring their kids to clinical settings where their child may be disruptive in the waiting room or not cooperate for the exam. Most of us cannot imagine how difficult it can be to have a child who requires constant monitoring and whose behavior is rarely appropriate for the situation.

Our Friday morning pediatrics service at the Forest Grove EyeClinic is devoted to providing expert care for children and adults with developmental disabilities. Dr. Lowery works alongside the pediatrics resident to provide comprehensive eye care for patients within 90 minute time slots. The clinic is relatively quiet on Friday mornings, providing a peaceful environment for the patient. Our clinic staff and opticians greet every child with warmth and compassion.

Many vision conditions, including high refractive error, and accommodative, ocular motor and binocular vision disorders, are more prevalent in patients with developmental disabilities. Unique ocular disease or cortical level visual processing disorders are also very common in this population. Sometimes visual disabilities may be significant enough to require special education services under the umbrella of "visual impairment." It is important to get accurate vision information so that appropriate services can be provided in the school setting.

Children with special needs are best served by a multidisciplinary approach to health and development. We often work with other professionals such as physical or occupational



therapists, speech language therapists, and special education teachers to develop strategies to improve visual abilities in the context of other disabilities.

We welcome all referrals and new patients. To schedule a patient in our special needs service, call our Forest Grove EyeClinic at (503) 352-2020, and let our staff know that the patient has special needs. We always appreciate receiving any previous examination information, even if the findings were limited.



Pacific EyeClinic Updates

CAROLE TIMPONE, OD, FAAO, FNAP | ASSOCIATE DEAN OF CLINICAL PROGRAMS



Original typical Forest Grove clinic exam room.



Recently completed Phase 1 clinic exam room.

Pacific EyeClinic, Forest Grove has a new look! On November 21st, the first phase of our EyeClinic remodel was completed. Gone are the cinder block walls and the exposed plumbing. New furnishings, equipment, instruments, and lighting upgrades have been made possible through the generous support of alumni, friends, and industry, complementing significant University funding. Additional attending faculty offices, new restrooms and lockers with ADA upgrades, as well as improved heating, ventilation and air conditioning throughout, complete the project.

The clinic is remaining open as we continue to refurbish all 18 west wing exam rooms and clinic attending offices in four phases, anticipated to be completed in spring 2017. Patients, students, and faculty have been thrilled with the transformation. Please come by the clinic to take a look!

Fundraising is ongoing, with opportunities for naming of exam rooms in recognition of donors. If you would like to support this endeavor, please contact our Office of University Development at <https://community.pacificu.edu>.

We are also pleased to present Pacific's brand new, 33 foot state-of-the-art mobile EyeVan. Equipped with two complete exam lanes, optometry students, under the supervision of Dr. Sarah Martin, Director of Community Outreach, are able to comfortably perform complete comprehensive examinations, including photography and visual field testing, for underserved populations of all ages, in addition to ongoing vision and eye health screenings. This further expands Pacific's opportunities for community service throughout the state.

The College thanks the many donors and the University for their contributions that made this wonderful upgrade possible.



CE Opportunities

January 2017:

-PUCO Glaucoma Symposium; Woodinville, WA; Jan. 14.

-Island Eyes Conference; Kauai Marriott Resort, Lihue, HI; Jan. 22-28.

-PMOS Proliferative Diabetic Retinopathy in the Age of Anti-VEGF Therapy; BridgePort Brew Pub, Portland, OR; Jan. 23, 6:30.

February 2017:

-OOPA Practice Management Seminar; Embassy Suites Hotel, Portland, OR; Feb. 23.

March 2017:

-PMOS Spring CE Event; Aquariva, Portland, OR; March 4, 8:30 am -3:00 pm.

April 2017:

-PUCO Coeur d'Alene CE; Coeur d'Alene Resort, Coeur d'Alene, ID; April 21-22.

Research Opportunities

We are recruiting children 7-13 years old as research subjects for a research project: Effects of Alternate Occlusion on Children's Fixation Disparity in Reading. Subjects need to make two visits to VPI, two hours each, with the task of reading text on a computer screen.

Subjects should have one of the following:

- Exophoria > 8 prism diopters,
- Esophoria > 3 prism diopters,
- Stereoacuity > 60 arc seconds, or
- Near point of convergence > 8 cm

Compensation: At the end of participation, subjects will be paid \$20 per hour.

If interested, please schedule an appointment through our online scheduler at www.pacificu.edu/vpi and select "Display Resolution Study." For details or any questions, please email vpi@pacificu.edu.

Practice Management Tips

CINDI RAPP, RDH | DIRECTOR OF CLINICAL OPERATIONS

Test Your HIPAA Knowledge

What is HIPAA? The Health Insurance Portability and Accountability Act of 1996. It was put in place to protect privacy and security of health information.

What is PHI? Protected Health Information or individually identifiable health information includes demographic data that can be used to identify an individual.

Can you name all 18 HIPAA identifiers? In addition to the demographic information, the list includes medical record number, social security number, account number, license number, photo image, finger or voice print, etc. For a complete list, Google "18 HIPAA Identifiers." What you find may surprise you.

Did you know that PHI should not reside on any personally owned mobile device, which includes, but is not limited to, cell phones, tablets, or thumb drives? If PHI is inadvertently downloaded to a personally owned mobile device, it must be deleted from the device as soon as possible.

When was your last HIPAA training? This is to be completed annually by all staff who have access to identifiable health information that is kept or transmitted by a covered entity, i.e. your practice.

In addition to HIPAA, as the year end approaches, it is always a good time to encourage your team to share those things for which they are thankful. One way, is to share appreciations during your monthly meetings.

"We often take for granted the very things that most deserve our gratitude." ~ Cynthia Ozick

Referral Service Contact Numbers

Pacific EyeClinic Forest Grove

2043 College Way, Forest Grove, OR 97116

Phone: 503-352-2020; Fax: 503-352-2261

Vision Therapy and Pediatrics: Scott Cooper, OD; Graham Erickson, OD; Hannu Laukkanen, OD; JP Lowery, OD; Paula Luke, OD

Medical Eye Care: Ryan Bulson, OD; Lorne Yudcovitch, OD

Low Vision: Karl Citek, OD; JP Lowery, OD

Contact Lens: Mark Andre; Tad Buckingham, OD; Patrick Caroline; Amiee Ho, OD; Beth Kinoshita, OD; Emily Korszen, OD; Hannah Shinoda, OD

Pacific EyeClinic Cornelius

1151 N. Adair, Suite 104 Cornelius, OR 97113

Phone: 503-352-8543; Fax: 503-352-8535

Pediatrics: JP Lowery, OD

Medical Eye Care: Tad Buckingham, OD; Sarah Martin, OD; Caroline Ooley, OD; Lorne Yudcovitch, OD

Pacific EyeClinic Hillsboro

222 SE 8th Avenue, Hillsboro, OR 97123

Phone: 503-352-7300; Fax: 503-352-7220

Pediatrics: Ryan Bulson, OD

Medical Eye Care: Dina Erickson, OD; Amiee Ho, OD; Michela Kenning, OD

Neuro-ophthalmic Disease: Denise Goodwin, OD

Pacific EyeClinic Beaverton

12600 SW Crescent St, Suite 130, Beaverton, OR 97005

Phone: 503-352-1699; Fax: 503-352-1690

3D Vision: James Kundart, OD

Pediatrics: Alan Love, OD

Medical Eye Care: Susan Littlefield, OD

Contact Lens: Matt Lampa, OD

Dry Eye Solutions: Tracy Doll, OD

Pacific EyeClinic Portland

511 SW 10th Ave., Suite 500, Portland, OR 97205

Phone: 503-352-2500; Fax: 503-352-2523

Vision Therapy and Pediatrics: Bradley Coffey, OD; Ben Conway, OD; Scott Cooper, OD; James Kundart, OD; Paula Luke, OD

Medical Eye Care: Ryan Bulson, OD; Candace Hamel, OD; Scott Overton, OD; Carole Timpone, OD

Contact Lens: Mark Andre; Candace Hamel, OD; Emily Korszen, OD; Matt Lampa, OD; Scott Overton, OD; Sarah Pajot, OD; Neeru Shore, OD

Neuro-ophthalmic Disease/Strabismus: Rick London, OD

Low Vision: Scott Overton, OD

Pacific EyeClinic Vancouver

2214 E. 13th Street, Suite 212, Vancouver, WA 98661

Phone: 360-947-3302; Fax: 360-737-2120

Low Vision Service only: Christi Closson, OD