

# Skin Deep



Autumn 2016 – News and Information from the Department of Dermatology

## CALENDAR

**UConn DERMATOLOGY  
GRAND ROUNDS, 8 AM  
WEDNESDAYS**

**October 5, November 2, December 7  
Dermatology Waiting Room  
21 South Rd., 2nd Floor,  
Farmington**

**UConn DERMATOLOGY  
JOURNAL CLUBS, 12:15 PM**

**October 19 & 26, November 18 & 23  
21 South Rd., 2nd Floor,  
Farmington**

**HARTFORD PSORIASIS NETWORK  
MEETINGS, 7:00 PM TO 8:45 PM**

**October 13 & November 10  
Lucy Robbins Welles Library  
95 Cedar St., Newington**

**RSVP to register or for questions:  
Marjorie: 860-888-6669 or Missy:  
860-635-0580**

*WE UPDATE OUR CALENDAR AND EVENTS ON A  
REGULAR BASIS. TO SUBMIT AN EVENT OR FOR  
MORE INFORMATION, FEEL FREE TO CONTACT  
OUR OFFICE AT 860-679-4600.*

## Letter from Our Chairman

*I*n addition to routine skin examinations, dermatologists are seeking new technologies that provide earlier diagnosis of skin cancers. Several new technologies that are FDA approved are now available at UConn in our Department of Dermatology.



Although we have been obtaining total body cutaneous photography for at least two decades, we have recently added a new imaging device, Fotofinder, that takes digital photos of the entire cutaneous surface. Fotofinder automatically uses computer controlled focusing so that each image is crystal clear, and therefore the user may zoom in and examine each lesion very carefully. Importantly, the Fotofinder allows the inclusion of dermoscopic images allowing the user to perform serial digital dermoscopic monitoring. Finally, the advanced computer technology incorporates the overlay and comparison of newer images to older stored images and then specifically highlights changing lesions.

UConn Dermatology has also acquired and become highly skilled at reflectance confocal microscopy (RCM), a high resolution, non-invasive imaging methodology that allows visualization of the skin at a cellular level comparable to what we see after a biopsy. RCM images reveal horizontal sections of skin unlike routine histopathology where vertically-sectioned skin samples only allow for evaluation of <2% of the sampled lesion. Therefore, RCM provides an examination of more of the lesion than a biopsy. In our department, we recently completed a study that showed that using RCM reduces unnecessary biopsies by about 60%.

These new technologies provide greater accuracy and precision, and increase our ability to diagnose cancers earlier. They also help the practitioner avoid unnecessary biopsies, thus reducing both pain and scarring. Please feel free to refer patients to UConn for these novel and important advances in dermatologic care.

**- Bruce Strober, MD, PhD  
Professor and Chairman**

## THE HISTORY OF CLINICAL TRIALS

- Mona Shahriari, MD

Clinical trials are the optimal method to establish the efficacy of a drug compared to a placebo or another drug. However, the evolution of clinical trials into its modern day form has been quite the journey.

The world's first clinical trial is recorded in the "Book of Daniel" in the Bible<sup>1</sup>. King Nebuchadnezzar ordered his people to eat only meat and drink only wine, a diet that he believed would keep them in sound physical condition<sup>1</sup>. But, several young men of royal blood, who preferred vegetables, objected<sup>1</sup>. As a result, the king allowed them to follow a diet of legumes and water for 10 days. At the end of the 10 days, the vegetarians appeared better nourished than the meat eaters<sup>1</sup>. So, they were permitted to continue with this diet.

The first clinical trial of a novel therapy was conducted accidentally by the famous surgeon Ambroise Pare in 1537<sup>1</sup>. Ambroise Pare was responsible for the treatment of the battlefield wounded soldiers in 1537. As the number of wounded individuals increased, the supply of conventional treatment oil was not adequate to treat everyone. In order to improvise, he made a mix of egg yolks and oils of roses and turpentine



and applied this novel oil to the wounds of the soldiers<sup>1</sup>. When he checked on the soldiers in the morning, he found those who had received the novel oil had little pain, lack of swelling, and had slept through the night. In contrast, those who received the conventional oil were feverish, in pain, and had significant swelling<sup>1</sup>. This accidental trial changed the way Pare treated soldiers moving forward.

James Lind is considered the first physician to have conducted a controlled clinical trial of the modern era<sup>1,2</sup>. While working as a surgeon on a ship, he was appalled by the high mortality of scurvy amongst the sailors. He selected 12 patients with similar features that had scurvy. He then proceeded to divide the 12 patients into 6 groups, each receiving

a unique treatment. One of the treatment groups received oranges and lemons. The consequence was that those in the orange and lemon treatment group had the most sudden positive effects and were fit for duty in 6 days following the start of the trial<sup>1,2</sup>. Though the results were clear, it took the British Navy 50 years to make lemon juice a part of the sailor's diet due to the high cost of lemons<sup>3</sup>.

Since James Lind's trial, clinical trials have evolved into a standardized procedure, focusing on scientific assessment of efficacy and guarding of patient safety<sup>3</sup>. Ethical and regulatory measures have been put in place to allow medical progress to occur within a legal and ethical framework. For clinicians and researchers alike, the goal is to improve the health and ultimately the lives of the patients they treat, and through properly designed clinical trials, that has and will be consistently achieved worldwide.

### References:

1. Collier R. Legumes, lemons and streptomycin: A short history of the clinical trial. *CMAJ*. 2009;180:23–24
2. Dodgson S J. The evolution of clinical trials. *The Journal of the European Medical Writers Association*. 2006;15:20–21
3. Bhatt A. Evolution of clinical research: a history before and beyond James Lind. *Perspect Clin Res* 2010;1:6-10

***We have several active clinical trials here in the Department of Dermatology. Presently all are for moderate to severe plaque Psoriasis and are sponsored by pharmaceutical companies. If you have any questions about clinical research here, please contact Cheryl Martin, RN, at 860-679-3475 or e-mail: cmartin@uchc.edu.***



## THE DARK SIDE OF FALL SUN

- ANTHONY CHIARAVALLOTI, MD, PGY3



Fall is finally upon us! This is inevitably the time of year when we head outside to pick fruit and enjoy the leaves changing. Even though the weather is getting cooler, it is still very important to remember sun protection. According to the Skin Cancer Foundation, 1 in 5 people will develop skin cancer, as the most common type of cancer today, affecting millions of Americans a year. 1 in 50 people will develop melanoma, which can carry a very poor prognosis. Keep in mind, this is not just a disease of older adults. Melanoma is the number 1 cancer in people 25 to 29 and number 2 for people 15 to 29. The vast majority of skin cancers are directly caused by harmful ultraviolet rays from the sun but can be cured if detected early.

What can you do? Skin cancer self-examinations or with your partner are very important. We often discuss the ABCDEs of melanoma with patients. This is an easy reference on how to examine yours or a family member's moles. The A is for asymmetry meaning that each half of the mole looks different than the other. The B is for border in that melanomas tend to have an irregular or poorly defined border. The C stands for color indicating multiple colors, especially the American flag (red, white, and blue), or changes in brown or black can be concerning. The D stands for diameter where melanomas are often larger

than 6mm or the size of a pencil eraser. The E stands for evolving meaning that melanomas often change in size, shape or color over time, which should prompt you to alert your doctor.

Since we know harmful UV rays cause the majority of skin cancer, you should attempt to avoid the sun. We want everyone to enjoy the nice weather so we recommend doing it under shade or avoiding the sun between 10 a.m.-2 p.m. when UV radiation is at its peak. If you enjoy being outside, wear sun protective clothing and a wide brimmed hat. These can be more effective than sunscreen.

If sun protective clothing is not for you, then sunscreen should be your best friend when outside. We recommend a sunscreen with SPF of 30 or higher. An ounce or a shot glass sized amount of sunscreen should be used to cover the whole body. Many remember to put on sunscreen before they go outside but many people forget to reapply. It's very important to reapply every two hours or every 45 minutes if you've been in water. Sunburns in your youth is where the majority of the damage is done so it's important to sunscreen your kids and get them in this good habit at a young age. There are many products on the market so try different kinds until you find one that you like and works well with your skin.

A common question asked by patients is if sunscreen will make you vitamin D deficient. This is a myth. The body only requires about five minutes of sunlight to make the vitamin D needed for the day. People with deficiency can increase their intake with vitamin D supplements. Putting this all together, the cancer preventing benefits of sunscreen far outweigh any potential side effects and we recommend its use to all of our patients.

For more information or to find out about free screenings in the community, visit [www.spotskincancer.org](http://www.spotskincancer.org).

## *In the News!*

### *Phlebotomist Here at UConn Dermatology*

We are pleased to announce that starting this November, our office in Farmington will have a full-time phlebotomist. The phlebotomist's hours will be 8 a.m. to 5 p.m., Monday thru Friday.

### *Back to School - Lice Reminder!*

Reminding all parents and guardians of school aged children to be mindful of lice. Lice (louse) are parasites that are found on human heads. They spread by personal contact or the sharing of combs, brushes, caps, and other clothing. Head lice will not go away on their own. If you suspect your child has an infestation, there are several steps you should take right away. Call your doctor to confirm the diagnosis. Notify your child's day care or school so other students can be checked. Examine all other members of the household for signs of lice. Finally, treat everyone who's infected at the same time.

### *Project SEARCH*

Project SEARCH is a one year school-to-work program that takes place entirely at the workplace. Students learn skills needed to be independently employed through total workplace immersion. The program focus is on serving young adults with a variety of developmental disabilities. Sponsorship of this program is provided by Favarh, Dors, Connecticut's Department of Developmental Services, Regional School District No. 10, and UConn Health. Our department has accepted interns since the Fall of 2015 and is extremely proud to be participating in this program and are glad to report that last years interns have all secured employment in the private sector.

### *Tell a Friend About UConn Dermatology*

With offices in Farmington, Canton, and Southington, our highly experienced and board certified faculty and providers will administer excellent health care for you, your family and friends. We thank you for choosing UConn Health for your dermatologic care. Call for an appointment today and we will be glad to assist you.

**For more information or to schedule an appointment, please contact at:**

**UConn Health  
Department of Dermatology**

**Main Line: 860-679-4600**

**Web: [health.uconn.edu/dermatology](http://health.uconn.edu/dermatology)**

## **Mona Shahriari, MD**

Dr. Shahriari is an assistant professor of dermatology at UConn and a board certified dermatologist. She is also the associate director of our department's clinical trials. She earned her undergraduate degree in biology and her medical degree at UConn. Dr. Shahriari went on to Baystate Medical Center to complete her intern year of residency and then came back to UConn to complete her dermatology residency where she was a chief resident. Her clinical interests include psoriasis, atopic dermatitis, pigmented lesions, and pediatric dermatology. She also is fluent in the languages of Farsi and Persian.



## **Anthony Chiaravalloti, MD, PGY3**

Dr. Chiaravalloti is currently one of our second year dermatology residents. He graduated from St. John Fisher College with an undergraduate degree in biology. He then earned his medical degree from SUNY Upstate Medical University. Dr. Chiaravalloti completed his transitional year of residency at St. Joseph Hospital in Syracuse, NY before coming to UConn. He is a native of Syracuse, NY and a die hard Orange fan, often leaving him conflicted as he embraces his new life as a UConn Husky.



## **Phototherapy Department**

Many common dermatologic diseases are thought to be caused by a dysregulation of the skin's immune system. Phototherapy is useful in the treatment of psoriasis, atopic dermatitis, vitiligo, pityriasis rosea, lichen planus, cutaneous T-cell lymphoma (CTCL), and intractable itching. Exposure is directed towards the involved area of skin and can include total body, hand and foot, or other specialized modalities. Our department offers a full range of phototherapy treatment modalities including: UVB, PUVA, and narrowband UVB. The Department of Dermatology offers phototherapy booths and numerous hand and foot units for localized therapy. We also have a 308nm Excimer laser that is highly effective in treating localized (less than 10% BSA) areas including periorbital, scalp, hands and feet. It is FDA approved for psoriasis, vitiligo and atopic dermatitis. Coming soon, we will be providing phototherapy services in our Canton office as well. If phototherapy is needed for your skin condition, please contact us for an appointment.

