

Skin Deep



Winter 2010/2011 – News and information from the Department of Dermatology

CALENDAR

HARTFORD PSORIASIS NETWORK MEETINGS

January 13, February 10 & March 10 at 7PM

**First Church of Christ,
12 S. Main St. West Hartford
Hartford Psoriasis Network
1-877-546-5558 x209
hartford@support.psoriasis.org**

UConn DERMATOLOGY GRAND ROUNDS, 8 AM, WEDNESDAYS

**February 2 & March 2
Dermatology Waiting Room
21 South Rd., 2nd Floor, Farmington**

UConn DERMATOLOGY JOURNAL CLUB, 12:15 PM, WEDNESDAYS

**December 22, January 19 & 26,
February 16 & 23, & March 16
Dermatology Conference Room
21 South Rd., 2nd Floor, Farmington**

OFFICE CLOSINGS:

**Friday, December 24 &
Monday, December 27 in observance
of Christmas
Friday, December 31 in observance of
New Years Day**

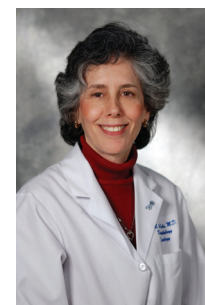
WE UPDATE OUR CALENDAR AND EVENTS ON A REGULAR BASIS. TO SUBMIT AN EVENT OR FOR MORE INFORMATION, FEEL FREE TO CONTACT OUR MAIN LINE AT 860-679-4600.

Best Wishes this Holiday Season!

OUR OFFICE WOULD LIKE TO WISH EVERYONE A VERY HAPPY, HEALTHY AND SAFE HOLIDAY SEASON. WE'D LIKE TO TAKE THIS OPPORTUNITY TO THANK YOU FOR CHOOSING UConn DERMATOLOGY ASSOCIATES AS YOUR DERMATOLOGY PROVIDER AND WE LOOK FORWARD TO SERVICING YOUR MEDICAL NEEDS IN 2011. HAPPY HOLIDAYS!!

Letter from our Chairman

Not Taking Good Health for Granted: When we take an updated medical history and the patient tells us, "nothing is new," we should all rejoice! In this regard, "nothing new" or "everything is ordinary" is a gift. Sometimes my patients share with me that their spouse, child, grandchild or best friend is ill. Worse than suffering ourselves, is the misfortune of having to bear witness to the suffering of those we love. Many of us have been at the receiving end of heart wrenching news about an accident involving a loved one, or a bad outcome to a medical test that means we or someone we love will have to go through life-altering therapy before things are "ordinary" again. We have learned the hard way that the words "nothing new" are the sweetest words we can say when we are asked to update our medical status. Unfortunately, the daily chores of life are sometimes overwhelming and often obscure the tremendous pleasure each day has to offer us. Most of us take for granted good health. It is not until we are told that we have melanoma, skin lymphoma or life-altering psoriasis that we appreciate all of our previous days of good health as a gift. We need to pay attention to the gifts of each day without distractions from our cell phone, palm pilot, job demands, or financial pressures and to enjoy each and every sweet moment life throws our way. During this holiday season filled with family and friends, let's rejoice in what we have. I pray for ordinary days for the people I love so that they continue to enjoy good health and happiness. There are no new fancy job titles or physical objects that will make me happy. Waking up next to my husband, a day without pain, catching the sunrise or sunset on my way to work or home, a phone call from a grandchild, dinner with friends – these are the things I want my life to be filled with. And of course, I hope for healthy patients to whom I do not have to share bad news.



- Jane Grant-Kels, MD

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Department of Dermatology
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Farmington, CT 06030-6230



The Myths of Indoor Tanning



Artificial tanning is a multi billion dollar **per year** business. Proponents of tanning services claim benefits of artificial light treatment. A recent article in the New England Journal of Medicine (NEJM 363:10; 901-903) refutes these claims and further states that tanning is addictive.

Myth 1: *UV exposure from tanning beds is safer than UV exposure from natural light.* Indoor tanning devices rely more heavily on UVA

wavelengths & that may account for a lower rate of sunburn compared to those who are exposed to both the UVA & UVB wavelengths present in natural sunlight. But UVA also damages DNA & may be carcinogenic without causing sunburn.

Myth 2: *People who are regularly exposed to tanning have a lower rate of malignant melanoma.*

In the United States, malignant melanoma is increasing more rapidly than any other cancer. The rate of new melanoma diagnoses among girls & women ages 15 to 39 is particularly dramatic. Researchers widely suspect that the use of indoor tanning may be partially responsible for this alarming increase.

Myth 3: *Sun exposure can reduce your risk of cancer.*

There is a possible association between higher levels of Vitamin D and a decreased risk of certain kinds of cancer. Vitamin D can be manufactured in the skin, but the radiation exposure required for skin Vitamin D production is the same level that causes the DNA damage

that can lead to skin cancer. A safer way to ensure adequate Vitamin D levels is oral supplementation. The Vitamin D in oral supplements is as useful to the body as that which is produced from sun exposure.

Myth 4: *Tanning improves mood.* Tanning beds are likely addictive. They stimulate the brain's production of beta-endorphin, an opium-like substance & can produce physical dependency. In addition, tanning has been associated with other addicting behavior, like gambling, smoking, drinking and illegal drug use.

Myth 5: *Tanning improves appearance.* Beauty is definitely in the eye of the beholder. Unfortunately for our patients, convincing them to stop seeking UV exposure is much easier after the sun damage to the skin is apparent. UV light exposure from any source causes enlarged facial pores, blackheads, spider veins and brown spots, & can lead to all forms of disfiguring skin cancer.

Research

Cold Weather Precautions

People who spend prolonged time outdoors, such as hunters, hikers, and the homeless are at increased risk for cold weather skin problems. The very old, very young, those who are not in good physical condition, and people with diabetes and blood vessel disease should take extra precautions.

Chilblains (or pernio) refers to tissue inflammation that occurs after exposure to damp and cold temperatures above the freezing point. Skin on the hands, feet, or face is most commonly affected and can appear swollen and reddish or purple. Chilblains may itch or be painful.

Immersion Foot (Trench Foot) was described in World War I because of repeated exposure to dampness and cold and exacerbated by tight boots. It can occur in cold or warm temperatures, though, when the feet are exposed to continuous moisture. The affected feet are reddened, swollen, painful or numb, and may be covered with bleeding blisters. This condition can lead to permanent nerve and tissue damage.

Frostbite occurs in prolonged cold exposure when the blood vessels in your arms, legs, nose and ears constrict, decreasing blood flow to the extremities and sending that extra blood to internal organs to protect them. If your brain senses danger of hypothermia (when body temperature drops below 98.6 F), the blood

flow to extremities is permanently shut down to prevent the return flow of cold blood back to vital organs. When this happens, frostbite occurs. The first signs of frostbite may include burning, numbness, tingling or itching in the affected areas. These areas may appear blanched.

To prevent cold related skin injury:

- Dress for the weather. Layers are best, and mittens are better than gloves.
- Wear two pairs of socks, the inner layer made of a synthetic fiber, such as polypropylene, to wick water away from the skin and the outer layer made of wool for increased insulation.
- Wear waterproof shoes or boots.
- Keep your head, face, nose, and ears covered.
- Wear loose fitting clothes to avoid a constriction of blood flow to the arms and legs.
- Always travel with a friend in case help is needed.
- Avoid smoking and alcohol. Smoking increases the risk for blood circulation problems and alcohol can seriously impair judgment.



Skin by Justin Finch, MD, PGY3

What is the purpose of skin?

Our skin protects against infection, dehydration and hostile environments; helps regulate body temperature; and acts as a sensory receptor for touch. Skin is the largest organ in the human body, covering 22 square feet of surface area on the average adult.

Is human skin different from that of other animals?

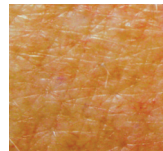
Yes! Though the basic functions of skin remain the same, the skin of other animals is uniquely adapted to suit their habitat. Take, for example, elephant skin, frog skin and shark skin.

Although elephants are indigenous to Africa and Asia, their bodies are surprisingly sensitive to sun and hot climates. Elephants rely on the unique structure of their skin to help stay hydrated, cool and protected from the sun. The outer layer of an elephant's skin is covered with deep wrinkles and crevices. When an elephant bathes in a pool of mud, this extra surface area created by the wrinkles helps the elephant to retain water and stay cool. The mud also helps protect the elephant's skin from the sun's harsh ultraviolet radiation. In addition, the thickness of an elephant's skin helps resist the inner pressure exerted by their massive bodies.

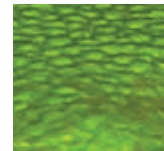
Frog skin is composed of a thin membrane and a vast network of blood vessels. When a frog is submerged in water, oxygen can pass through the skin and directly into the bloodstream, enabling the frog to breathe underwater. Frog skin also contains special mucous-secreting glands (much like a human nose), which help to keep their bodies moist. Some frog species even have specialized poison-secreting glands in their skin to help ward off predators.

Shark skin is composed of rigid scales that point toward the tail. The streamlined array of these scales makes it so efficient for a shark to swim underwater that scientists and manufacturers have worked to replicate the scale patterns in boat hulls and swimsuits. In fact, "shark skin" swimsuits are so efficient that they have been banned from the Olympics. Dense scales on shark skin also act as a protective barrier against harsh environmental elements: their roughness can injure prey that comes in contact with them, and their jagged shape also makes it difficult for parasites, such as algae and barnacles, to grow on the shark.

Human Skin



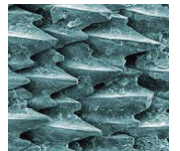
Frog Skin



Elephant Skin



Shark Skin



Cosmetics



Laser Tattoo Removal by Justin Finch, MD, PGY3 & Judy Colligan, RN

How does it work? Have you ever noticed how your back gets very hot when wearing a black t-shirt on a sunny day? That's because the sunlight is absorbed by the color of your shirt. A laser is a highly concentrated light beam. The ink in a tattoo, like that dark hat on your head, can be heated by a laser. This heat disrupts the tattoo pigment, allowing your body to absorb and eliminate it.

What does the laser feel like? Many people liken laser tattoo removal to the feeling of a rubber band snapping on your skin. The laser has a built-in skin cooling system, and many times we also use an anesthetic such as a topical numbing cream to create the most comfortable experience.

How long does laser tattoo removal take? Most tattoos take between five to fifteen treatments for maximum results. Since every person and every tattoo is unique, during your consultation, we can estimate how many sessions your tattoo removal will require.

Will it work on any tattoo? There are some individual factors that will affect your response to the laser. These include: **Tattoo Color:** Dark colors such as black, red, dark orange and dark blue usually respond relatively quickly to laser treatments. Light and bright colors like green, purple, brown, light orange and light blue may require more visits. White can be a difficult color to remove.

Type of Ink: A particular tattoo color may be made of several different kinds of ink. For

example, any of at least eight different inks may be used to create a green tattoo. Generally, amateur ink responds more quickly than professional ink.

Your Skin Tone: Lighter skin tones generally have a higher success rate, but many skin types are treatable.

Depth of Tattoo: Deep tattoos, such as one tattoo that has been covered by another, require more treatments. Professional tattoos run deeper in the skin than amateur tattoos.

What will the tattoo look like after a laser treatment? Immediately after treatment there will be a slight frosting on the area treated. Redness and swelling at the treatment site will occur and may last up to 2 days. This seems to decrease with subsequent treatments. Pinpoint bleeding may also occur.

How will the area feel after a laser treatment? The area is sore for a couple days. An ointment is applied after, Vaseline or Aquaphor, which is soothing and will keep the area well lubricated.

How do I take care of the tattoo? After the redness abates, the skin will scab over. It is important at this stage to have the area covered with Vaseline (or Aquaphor) while the area is scabbed over, this will enhance the sluffing of ink and prevent itching.

It is very important not to pick, scratch or aggressively wash the area in order to prevent possible scarring.

Recent publications within our department

- * **A. Berke, MD, P. Kerr, MD, J. Grant-Kels, MD & M. Murphy, MD** - Hoss DM, Berke A, Kerr P, Grant-Kels JM, Murphy M. Prominent papillary dermal edema in dermatophytosis (tinea corporis). *J. Cutan Pathol.* 2010; 37:237-242.
- * **S. Dadras, MD, PhD - 1)** Berk DR, LaBuz E, Dadras SS, Johnson DL & Swetter SM. Melanocytic tumors of uncertain malignant potential and melanoma in children, adolescents, & young adults: the Stanford experience 1995-2008. *Pediatr Dermatol.* 2010 May;27(3): 244-54 **2)** Ramos-Herberth FI, Karamchandani J, Kim J and Dadras SS. SOX10 immunostaining distinguishes desoplastic melanoma from excision scar. *J Cutaneous Pathol.* 2010 Sep;37(9): 944-52. **3)** Rimella A, Jokinen CH, Rubin BP, Mihm MC, Weiss SW, North PE and Dadras SS. Expression of Prox1, lymphatic endothelial nuclear transcription factor, in kaposiform hemangioendothelioma & tufted hemangioma. *Am J Sur Pathol.* 2010 Nov;34(11): 1563-73.
- * **J. Finch, MD - PGY3 & D. Whitaker-Worth, MD** - Finch J, Munhutu MN, Whitaker-Worth D. Atopic Dermatitis and Nutrition. *Clinics in Dermatology* 2010 28(6): 605-614.
- * **J. Finch, MD - PGY3** - Finch J, Milker's nodule, *eMedicine* (June 14, 2010), www.emedicine.medscape.com/article/1132823
- * **J. Grant-Kels, MD** - Driscoll MS, Kwon E-K, Skupsky H, Kwon S-Y, Grant-Kels JM. Nutrition & the deleterious side effects of nutritional supplements. *Clinics in Dermatology* 2010; 28:371-379.
- * **J. Grant-Kels, MD & M. Murphy, MD (Chapters) - 1)** Grant-Kels JM, Murphy M. "Melanocytic nevi". In: Bope ET, Rakel RE, Kellerman R (eds). *Conn's Current Therapy* 2010, WB Saunders, Phila., PA, 2010: 836-839. **2)** Murphy M, Grant-Kels JM. Chap. 2 "Spongiotic Dermatitis", *The Textbook of Dermatopathology*, 3rd ed., edited by Raymond Barnhill, MD.; Medical Publishing Division, McGraw-Hill Professional, New York, NY. 2010: 15-35.
- * **J. Grant-Kels, MD & M. McCusker, MD - PGY4** - McCusker MM, Grant-Kels JM. Healing fats of the skin: the structural & immunologic roles of omega-6 and omega-3 fatty acids. *Clinics in Dermatology* 2010; 28:440-451.
- * **J. Grant-Kels, MD, M. Rothe, MD & J. Ricketts, MD - PGY4** - Nutrition & psoriasis. *Clinics in Dermatology* 2010; 28:615-626.
- * **J. Grant-Kels, MD, J. Whalen, MD & M. Payette, MD - PGY3** - Nutrition & nonmelanoma skin cancers. *Clinics in Dermatology* 2010; 28:650-662.
- * **J. Grant-Kels, MD, P. Kerr, MD & K. Slade, APRN** - Shahriari M, Kerr, P, Slade K, Grant-Kels JM. Vitamin D & the skin. *Clinics in Dermatology* 2010; 28:663-668.
- * **M. Murphy, MD - 1)** Phelps A, Murphy M. Pigmented Classic Poroma - a tumor with a predilection for non-acral sites. *J Cutan Pathol* 2010; 37:1121-1122 **2)** Phelps, Murphy M, Elaba Z, Hoss D. Molluscum contagiosum virus infection in benign cutaneous epithelial cystic lesions - report of 2 cases with different pathogenesis? *Am J Dermatopathol.* 2010; 32:740-742 **3)** Rezaul K, Murphy M, Lundgren D, Wilson L, Han D. Combined mass spectrometry- and immunohistochemistry-based approach to determine protein expression in archival melanoma. *Pigment Cell & Melanoma Research* 2010; 23:849-852
- * **M. Murphy, MD, A. Krisjtansson MD, and D. Rozenski, Histotech** - Murphy M, Kristjansson A, Elaba Z, Rozenski D. Monoclonal gammopathy of undetermined significance (MGUS) with incidentally identified cutaneous monotypic plasma cell infiltrates in the absence of specific skin lesions. *Arch Dermatol* 2010; 146:204-206.
- * **M. Murphy, MD, M. Rothe, MD, J. Grant-Kels, MD** - Fedeles F, Murphy M, Rothe M, Grant-Kels JM. Nutrition and bullous skin diseases. *Clin Dermatol.* 2010; 28:627-643.

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

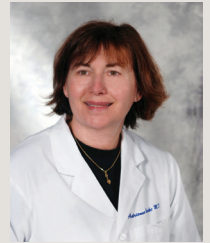
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Web: dermatology.uhc.edu

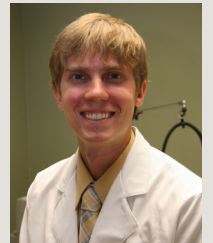
Adrienne Berke, MD

Adrienne Berke, MD, is an Assistant Professor of dermatology and the assistant director of the Dermatopathology Laboratory at the University of Connecticut Health Center. She is board certified in anatomic pathology and dermatopathology. She completed her pathology residency here at the University of Connecticut School of Medicine. She then completed a dermatopathology fellowship at New York University Medical Center. Dr. Berke has been on the faculty in the Department of Dermatology at the University of Connecticut Health Center since 1988. She has co-authored several articles, reviews, case reports and book chapters. Her clinical interests are pigmented skin lesions and immunopathology. Dr. Berke enjoys hiking, swimming and biking.



Justin Finch, MD - PGY 3

Dr. Finch is one of our six residents in the department. He earned an undergraduate degree in psychology and medical degree from the University of Minnesota. Afterwards, he completed his first year of residency in Internal Medicine at Hennepin County Medical Center in Minnesota. His clinical interests include dermoscopy, tropical dermatology, trichogenic neoplasms as well as phaeohyphomycosis and other mycotic diseases. He recently became the second UConn recipient of the Resident International Grant from the American Academy of Dermatology. This grant will allow him to participate in a six week elective in Africa where the Education and Volunteers Abroad Committee established dermatology support programs and teledermatology consulting services. He is also an avid photographer. His works may be seen throughout our clinic.



Medical Assistants

Our dermatology medical assistants seen here are among the best in the state. They are often the backbone of a medical practice. They possess the ability to multi task and their role often changes from day to day. MAs' responsibilities can be tailored to the needs of a practice. They can manage front-office functions and patient flow and handle a wide range of tasks that would otherwise be performed by receptionists, practice managers, nurses and physicians.

