Evaluation of Indoor Tanning Health Claims

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This report was prepared for the New York State Office of the Attorney General. It examines the risks associated with indoor tanning and evaluates the veracity of health claims presented by the indoor tanning industry to promote indoor tanning. The report is jointly authored by Sophie Julia Balk, M.D.; David E. Fisher, M.D., Ph.D.; Alan C. Geller, MPH, RN; and Martin A. Weinstock, M.D., Ph.D. This report is based upon their knowledge and expertise as well as the materials referenced herein.

**Introduction**

1. “Indoor tanning” is the use of tanning beds or tanning booths to tan the skin for cosmetic purposes.\(^1\) Over the past several decades, indoor tanning has become increasingly popular. Each day, over one million people in the United States indoor tan.\(^2\) Tanning salons are ubiquitous; they now outnumber Starbucks or McDonalds in large U.S. urban areas.\(^3\)

2. Tanning beds contain sunlamps, which expose users to ultraviolet (UV) radiation that is much stronger than natural sunlight—up to fifteen times more intense than the sun, frequently resulting in burning.\(^4\) The U.S. Food and Drug Administration (FDA) has approved sunlamps for a very narrow purpose—“to tan the skin.”\(^5\) The FDA has *not* approved tanning beds for “health” purposes.

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\(^1\) Tanning beds are designed to be used lying down, while tanning booths are designed to be used standing up. Tanning beds are often called sunbeds in Europe.


3. As will be explained in more detail below, indoor tanning significantly increases the risk of skin cancer including melanoma, the type of skin cancer responsible for the most deaths. The harmful effects of UV exposure increase over time. Thus, indoor tanning devices pose a greater risk for children and teens by boosting overall lifetime exposure. Indoor tanning also increases the risk of eye damage and wrinkles, changes skin texture, and can be addictive.

4. Despite the serious and well-established health risks, however, indoor tanning salons and trade associations continue to aggressively market and promote indoor tanning as safe, often focusing their advertising on teenage girls and young women. What is more, many salons and trade associations assert an array of purported health benefits in their advertising, including on websites and social media. This is true in New York State where tanning salons, including Total Tan, Inc. and Portofino Sun Center, have claimed that indoor tanning is a safe way to obtain vitamin D and prevent and treat cancer. These salons have also asserted that indoor tanning has physiological and psychological benefits, reduces blood pressure, and treats asthma. As detailed below, these and other health benefit claims are not supported by generally accepted science.

Prominent Organizations Deem Indoor Tanning a Cancer Risk and Advocate Banning Minors from Indoor Tanning

5. Recognizing the high cancer risk associated with indoor tanning, in 2009, the World Health Organization’s International Agency for Research on Cancer reclassified indoor

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tanning devices from “probable carcinogen” (Group 2A) to its highest risk level of “carcinogenic to humans” (Group 1) placing tanning beds in the same category as cigarettes.\textsuperscript{7}

6. In July 2014, the U.S. Surgeon General issued a call to action to various sectors across the nation to address skin cancer as a major public health problem.\textsuperscript{8} A key goal of the call to action is to reduce the harm caused by indoor tanning, which is causing an estimated 400,000 cases of skin cancer per year and is an entirely preventable method of exposure.\textsuperscript{9}

7. The leading national dermatological organization, the American Academy of Dermatology, supports the World Health Organization and also calls for an outright ban on the production and sale of indoor tanning equipment for non-medical purposes.\textsuperscript{10} The American Academy of Pediatrics, an organization of more than 60,000 pediatricians, pediatric surgeons and pediatric subspecialists, calls for banning minors from tanning indoors.\textsuperscript{11} The American Medical Association calls for banning minors from tanning indoors.\textsuperscript{12}

8. The following leading national medical organizations recognize the high cancer risk associated with indoor tanning:\textsuperscript{13}


\textsuperscript{9} Id. at 57.


Risks of Indoor Tanning

Indoor Tanning Increases Skin Cancer Risk

9. Skin cancer, which includes melanoma, basal cell carcinoma, and squamous cell carcinoma, is the most common of all cancers in the United States with more than 3.5 million skin cancers in over 2 million people diagnosed annually. Over the past 30 years, more people have been diagnosed with skin cancer than all other cancers combined. Over the course of their lifetimes, it has been estimated that one in five Americans will develop skin cancer. Every year in New York State alone, approximately 3,500 people are diagnosed with melanoma and 100,000 people are diagnosed with basal or squamous cell carcinoma.

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16 Id.

10. Melanoma is responsible for about 75% of skin cancer deaths. One American
dies from melanoma every hour. About 600 New Yorkers die from skin cancer each year and
77% of those deaths are attributed to melanoma. Melanoma is the most common cancer for
young adults 25-29 years old and the second most common cancer for adolescents and young
adults 15-29 years old.

11. Non-melanoma (also called keratinocyte) skin cancers such as basal cell and
squamous cell carcinoma are very common, but generally not fatal. They can lead to facial
deformity, disfigurement, and scarring, and can be costly to treat when they recur. Non-
melanoma skin cancers place burdens on our healthcare system, costing the United States $650
million annually.

12. In New York State, more than 10,000 outpatient surgeries for melanoma and non-
melanoma skin cancer are performed each year. In 2012 alone, Medicaid patients in New York
State diagnosed with skin cancer cost $10.7 million. Treatment of all types of skin cancer can
lead to scarring, large lesions, and particularly disfiguring treatments. Recognizing that indoor

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19 Id. at 4.
20 Skin Cancer in N.Y. State, supra footnote 17, at 18.
23 Skin Cancer in N.Y. State, supra footnote 17, at 17.
tanning leads to health care costs, Congress included a 10% tax on indoor tanning in the Affordable Care Act.25

13. A systematic review estimated the years of potential life lost and the value of productivity loss from morbidity and premature mortality resulting from melanoma and non-melanoma skin cancer.26 After extracting data from 16 relevant studies, the review estimated that the average number of years of potential life lost per death was approximately 15 years for melanoma and 10 years for non-melanoma skin cancer. The indirect costs attributable to melanoma and non-melanoma skin cancer in one year were $76.8 million for morbidity (including lost workdays, caregiver lost workdays, and restricted activity days), and ranged from $1 billion to $3.3 billion for premature mortality. Therefore, skin cancer leads to significant years of potential life lost and indirect costs associated with premature mortality and morbidity.

14. Overwhelming evidence shows that indoor tanning causes skin cancer, and the causal link between indoor tanning and skin cancer is generally accepted in the scientific community. In a recent review of published studies, about 6,200 melanomas per year in the United States were attributed to tanning beds along with nearly 245,000 basal cell cancers and 165,000 squamous cell cancers.27 Another recent review estimated a 1.8% increase (95% confidence interval of 0% to 3.8%) in risk of melanoma for each additional session of tanning bed use per year.28 Within that same review, based on 13 informative studies, individuals who

27 Mackenzie R. Wehner et al., Int’l Prevalence of Indoor Tanning, A Systematic Review & Meta-Analysis, 150 JAMA Dermatology 390, 398, Table 2 (2014). “[T]he extremely high incidence of skin cancer means that there are more skin cancer cases attributable to indoor tanning than lung cancer cases attributable to smoking.” Id.
first used tanning beds before the age of 35 had an estimated 59% greater risk of melanoma compared to those who did not use tanning beds.29

15. Both animal studies and epidemiological studies show the link between UV exposure and melanoma.30 Many melanomas occurring in indoor tanners—even in a country with large populations exposed to intense sun such as Australia—were more attributable to indoor tanning than to the sun.31 Use of cutting edge genome sequencing technology has indicated that the genomic DNA of human melanomas is riddled with thousands of “UV signature” mutations, which represent chemical errors within melanoma cells that are known to be caused by UV radiation (di-pyrimidine mutations).32 This constitutes direct experimental evidence showing the link between UV exposure and skin cancer.

16. It should be noted that multiple genetic and environmental factors have been implicated in the development of skin cancer. There are several known genetic conditions that predispose a person to develop melanoma, and there are individuals who develop melanoma on non-UV exposed areas, such as inside the mouth or in the genital areas. In addition, certain individuals may be predisposed to melanoma because of immunosuppression, preventing them


32 Eran Hodis et al., A Landscape of Driver Mutations in Melanoma, 150 Cell 251-63 (2012), available at http://ac.els-cdn.com/S0092867412007787/1-s2.0-S0092867412007787-main.pdf?_tid=q93493e0-cee7-11e3-862a-00000aab0f26&acdnat=1395179755_fa36879d742a45c9ea82c0f08ad3c08 (last visited Jun. 11, 2014).
from mounting the normal immunologic defense against early tumor development. However, these predisposing factors do not negate the overwhelming evidence of the role of UV exposure in the development of most melanomas, and the role of indoor tanning in increasing that risk.

17. Sunlamp use also increases the risk of non-melanoma skin cancers. Exposure to indoor tanning was associated with a 67% higher risk for squamous cell carcinoma and a 29% higher risk for basal cell carcinoma in a review and meta-analysis. In another study, individuals who indoor tanned were at least two and a half times more likely to develop squamous cell carcinoma and one and a half times more likely to develop basal cell carcinoma.

Youth, and Young Women in Particular, Are Vulnerable

18. Efforts to market indoor tanning tend to target young women in particular, and the data show that these efforts have been successful—70% of the one million people who indoor tan each day are Caucasian females between 16 and 49 years of age. Children are most susceptible to marketing efforts and are also at particular risk for disease, as the evidence clearly demonstrates that the earlier one indoor tans, the greater the risk for skin cancer in later years.

19. According to the 2011 Youth Risk Behavior Study from the Centers for Disease Control and Prevention, 20.9% of all U.S. female high school students have indoor tanned in

33 Wehner et al., supra footnote 27; see also Leah M. Ferrucci et al., Indoor Tanning & Risk of Early-Onset Basal Cell Carcinoma, 67 J. Am. Acad. Dermatology 552 (2011) (“Ever indoor tanning was associated with a 69% increased risk of early-onset BCC [basal cell carcinoma].”).


36 See, e.g., Wehner et al., supra footnote 27; Boniol et al., supra footnote 28.
2011 compared with 6.2% of males.\textsuperscript{37} Rates were highest among female 17-year-old high school students (27.9%) and older students (31.5%).\textsuperscript{38}

20. As indoor tanning has gained popularity, especially among young women who are targeted by tanning salons, there has been an associated increase in rates of melanoma. National Cancer Institute data was used to investigate changes in melanoma incidence between 1973 and 2004. During that time period, the age-adjusted annual incidence of melanoma among women increased by more than 2.5 times.\textsuperscript{39} In contrast, during the same time period, the age-adjusted annual incidence of melanoma among young men only increased by 1.6 times. In the absence of data that shows marked differences in outdoor sun protection between high school males and females, the gender disparity in indoor tanning further supports the conclusion that high rates and frequent use of indoor tanning by women is the leading cause of increased melanoma rates in women relative to young men.

21. Because scientific evidence shows that indoor tanning is particularly dangerous for younger individuals, the American Academy of Pediatrics states, “Tanning salons are not safe and should not be used by teenagers or others.”\textsuperscript{40} The U.S. Preventative Task Force—an esteemed panel of independent national experts in prevention and medicine that works to improve the health of all Americans by making evidence-based recommendations about clinical preventive services—recommends counseling children, adolescents, and young adults (aged 10


\textsuperscript{38} \textit{Id.}

\textsuperscript{39} Mark P. Purdue et al., \textit{Recent Trends in Incidence of Cutaneous Melanoma Among U.S. Caucasian Young Adults}, 128 J. Investigative Dermatology 2908 (2008).

to 24 years) who have fair skin about minimizing their exposure to UV radiation to reduce risk for skin cancer.\textsuperscript{41}

22. Earlier exposure to sunlamps worsens later outcomes, and exacerbates the risk of later cancers.\textsuperscript{42} Those who begin indoor tanning before they are 35 years old have an estimated 59\% higher risk of melanoma than those who do not.\textsuperscript{43} In one study from Australia, among 18 to 29 year olds who have ever indoor tanned and were diagnosed with melanoma, 76\% of those melanoma cases were attributable to indoor tanning.\textsuperscript{44} Indoor tanning at younger ages also affects basal cell carcinoma risk. A recent study shows that there is a significantly higher risk of developing basal cell carcinoma for individuals who used tanning beds during high school and college in comparison to the ages of 25 and 35 years.\textsuperscript{45}

23. The number of teenage girls that use indoor tanning facilities is particularly alarming. Nearly all studies agree that about one third of white teenage girls use tanning beds, now far eclipsing cigarette use among the same age group.\textsuperscript{46} Girls are six times more likely than boys to use tanning beds, and 40\% of girls who use tanning beds used them 10 or more times in the past year.\textsuperscript{47} The most typical adolescent indoor tanning patron is a teenage girl between the ages of 15 and 18 with a skin type that either usually burns and minimally tans or has a skin type


\textsuperscript{42} See, e.g., Philippe Autier, Perspectives In Melanoma Prevention: The Case Of Sunbeds, 40 European J. Cancer 2367 (2004); Am. Acad. of Pediatrics, Ultraviolet Radiation, supra footnote 40.

\textsuperscript{43} Boniol et al., supra footnotes 28, 29.

\textsuperscript{44} Cust et al., supra footnote 31.

\textsuperscript{45} Mingfeng Zhang, Abrar A. Qureshi, Alan C. Geller, Lindsay Frazier, David J. Hunter, & Jiali Han, Use of Tanning Beds & Incidence of Skin Cancer, 30 J. Clinical Oncology 1591 (2012).

\textsuperscript{46} Guy et al., supra footnote 37.

\textsuperscript{47} Boniol et al., supra footnote 28.
that sometimes burns and gradually tans. According to a 2002 study of 10,000 children and adolescents, 7% of 14-year-old Caucasian girls indoor tan, 16% of 15 year-old Caucasian girls indoor tan, and 35% of 17 year-old Caucasian girls indoor tan. Thus, the number of Caucasian girls who use indoor tanning facilities thus doubles from age 14 to age 15, and then doubles again from age 15 to age 17. Recent studies of adolescents report that rates of tanning bed use among females are more than double those for males.

24. Concerns about indoor tanning among young women are echoed in a 2012 investigative report published by the U.S. Congress House Committee on Energy and Commerce. The report is based on the results of telephone calls to 300 nationwide tanning salons from Congressional staff that identified themselves as 16-year-old girls interested in tanning for the first time. Some 90% of respondents employed by the tanning salons denied that indoor tanning poses health risks and, when asked about skin cancer specifically, more than half denied that indoor tanning would increase a fair-skinned teenager’s risk of developing skin cancer, dismissing the notion as “a big myth,” “rumor,” and “hype.” Some 78% of tanning salons claimed health benefits of tanning ranging from cancer prevention to providing vitamin D to weight loss. The report concluded that tanning salons deny known risks of indoor tanning, provide false information on the benefits of tanning, and fail to follow any recommendations on tanning frequency. The report also concluded that tanning salons target teenage girls with advertising and promotions such as student discounts and “prom,” “homecoming,” and “back-to-school” specials that often include “unlimited” tanning packages.


49 Id.

50 Wehner et al., *supra*, footnote 27.

25. In response to the Congressional investigative report, the leading indoor tanning trade association admitted that “it does highlight the need for us to reevaluate how our industry can do a better job of ensuring that [trade association] member salons are providing accurate and consistent information to their customers nationwide.”

26. Recognizing the dangers associated with indoor tanning, New York State prohibits those under age 17 from indoor tanning and requires that 17 year olds obtain parental consent before tanning. California, Illinois, Nevada, Oregon, Texas, Vermont, Minnesota Louisiana, Hawaii, Delaware, Washington, the United Kingdom, Germany, Scotland, France, and several Canadian provinces have banned indoor tanning for youth under 18. Brazil and Australia have banned indoor tanning beds for everyone, regardless of age.

27. Likewise, the FDA recently placed additional restrictions on sunlamps, strengthening protections by reclassifying sunlamp products from a low-risk device (class I) to a moderate-risk device (class II). Under this reclassification, effective September 2, 2014, sunlamp manufactures will need pre-market certification to demonstrate that their products meet certain performance testing requirements. In addition, the FDA is now requiring all sunlamp products to have the following warning placed in a black box: “Attention: This sunlamp product should not be used on persons under the age of 18 years.” The FDA is also requiring that sales

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and promotional materials accompanying sunlamps contain the following warnings and contraindications:

(A) “Contraindication: This product is contraindicated for use on persons under the age of 18 years.”

(B) “Contraindication: This product must not be used if skin lesions or open wounds are present.”

(C) “Warning: This product should not be used on individuals who have had skin cancer or have a family history of skin cancer.”

(D) “Warning: Persons repeatedly exposed to UV radiation should be regularly evaluated for skin cancer.”

Indoor Tanning Can Lead to Premature Skin Aging, Immune Suppression, and Eye Damage, Including Cataracts and Cancer

28. In addition to increasing skin cancer risk, excessive exposure to UV radiation during indoor tanning can lead to premature skin aging, immune suppression, and eye damage, including cataracts and ocular melanoma.56

29. Indoor tanning leads to premature aging and wrinkles.57 The immediate skin swelling and tanning induced by UV light are a known response to tissue and DNA injury.58 Over time, UV exposure leads to severe collagen loss and a weakening of the skin’s elasticity, resulting in sagging cheeks, deeper facial wrinkles, and skin discoloration.59

56 Lim et al., Adverse Effects of UV Radiation From the Use of Indoor Tanning Equip.: Time to Ban the Tan, 64 J. Am. Acad. Dermatology 893, 895 (2011).
57 See e.g., Ctrs. for Disease Control & Prevention, supra footnote 13.
30. Indoor tanning leads to immune suppression.\textsuperscript{60} The immune system protects the body against organisms or substances that might cause disease. Immune suppression is an impaired ability of the immune system to fight infection or disease.

31. Indoor tanning can cause eye damage including photokeratitis, and long-term exposure can increase the risk of developing cataracts.\textsuperscript{61} Photokeratitis is a painful, but short-term, eye condition caused by exposure of insufficiently protected eyes to UV rays. Symptoms include eye tearing, pain, swelling of the eyelid, hazy or decreased vision and a feeling of having sand in one’s eye. A cataract is a clouding of the eye’s natural lens, causing blurry vision or, ultimately, blindness. Eye injuries, along with skin burns and syncope (fainting), caused by indoor tanning results in thousands of emergency room visits per year.\textsuperscript{62}

\textbf{Indoor Tanning Can Be Addictive}

32. Studies increasingly indicate that tanning can be addictive, particularly in younger individuals. Early age of first indoor tanning use (between 13 and 17 years of age) was significantly associated with both the presence of tanning addiction disorder and problematic tanning behavior.\textsuperscript{63} Excessive indoor tanning can be included in the spectrum of addictive behaviors. 90 of 229 study participants who tanned indoors met the Diagnostic and Statistical Manual of Mental Disorders criteria for addiction to indoor tanning.\textsuperscript{64} Frequent tanners can distinguish between UV tanning beds and non-UV beds (which were the same in every respect

\textsuperscript{60} Lim et al., \textit{supra} footnote 56.


\textsuperscript{63} Cynthia R. Harrington et al., \textit{Addictive-Like Behaviours to Ultraviolet Light Among Frequent Indoor Tanners}, 36 Clinical & Experimental Dermatology 33, 35, 38 (2010).

\textsuperscript{64} Catherine E. Mosher & Sharon Danoff-Burg, \textit{Addiction to Indoor Tanning: Relation to Anxiety, Depression, & Substance Use}, 146 Archives of Dermatology 412 (2010).
except for UV radiation), indicating that UV produces perceived behavioral effects known as “reinforcing stimuli.” Some 21% of adolescents who tanned indoors more than one time in the past year reported “difficulty in quitting” indoor tanning.

33. Indoor tanning’s addictive qualities have been linked to increased tanning frequency and endorphin release, and individuals who stop abruptly can face withdrawal-like symptoms of nausea and jitters. Exposure to UV radiation from a commercial tanning bed induced a response similar to nicotine, methamphetamine and cocaine. A high percentage of frequent indoor tanners experience behaviors consistent with other addictive disorders. In some individuals, indoor tanning has met Diagnostic and Statistical Manual criteria for a substance-related disorder. For example, some individuals continue to tan past the point

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65 Steven R. Feldman et al., Ultraviolet Exposure Is a Reinforcing Stimulus In Frequent Indoor Tanners, 51 J. Am. Acad. Dermatology 45 (2004).
70 Cynthia R. Harrington et al., Activation of the Mesostriatal Reward Pathway With Exposure to Ultraviolet Radiation (UVR) vs. Sham UVR in Frequent Tanners: A Pilot Study, 17 Addiction Biology 680-86 (2012).
71 Harrington et al. (2010), supra footnote 63; Cynthia R. Harrington et al., Activation of the Mesostriatal Reward Pathway with Exposure to Ultraviolet Radiation (UVR) vs. Sham UVR in Frequent Tanners: A Pilot Study, Addiction Biology 680, 681 (2011).
72 Nolan et al., supra footnote 69; Molly M. Warthan et al., UV Light Tanning as a Type of Substance-Related Disorder, 141 JAMA Dermatology 963-66 (2005), available at http://archderm.jamanetwork.com/article.aspx?articleid=398011 (last visited Mar. 26, 2014);
necessary to achieve their desired appearance. Laboratory studies in mice have demonstrated UV addiction behavior.

34. Research into the addictive effects of indoor tanning “provide[s] a fascinating potential explanation for the growth of the tanning bed industry despite the known health risk of excessive UV exposure.”

Lack of Health Benefits Associated With Indoor Tanning

Indoor Tanning Is Not a Safe Source of Vitamin D

35. Many tanning salons assert through consumer-facing materials (including websites and social media) that indoor tanning is a safe and efficient way to obtain vitamin D. A number of salons have provided links on their websites to the Vitamin D Council website, which asserts that vitamin D can be used to address a wide array of health conditions.

36. As explained in detail above, the risks of indoor tanning are substantial. Although UV exposure of particular kinds, including some tanning beds, can increase production of vitamin D, it is generally accepted that a dietary supplement and healthy diet can address vitamin D deficiency or maintain adequate levels without the risks of indoor tanning. In June, the “FDA acknowledged that UV radiation stimulates the body’s production of vitamin D, however, there are safer alternatives to obtain vitamin D other than the use of sunlamp products and UV lamps

73 Harrington et al. (2010), supra footnote 63.


intended to be used in sunlamp products, for example, through an individual’s diet.”77 Likewise, the American Academy of Pediatrics Policy Statement, authored by Dr. Balk, states that deliberate exposure to UV radiation should be avoided due to the associated skin cancer risk and “[g]uidance should be given about vitamin D adequacy obtained through the diet and supplements.”78

37. Salons are not only asserting that customers can obtain vitamin D from tanning beds, but also claiming that vitamin D from sunlight or tanning beds is superior to vitamin D from supplementation. For example, Total Tan maintains on its website79 a link to an article that claims:

Sunlight exposure is the most reliable way to generate vitamin D in your own body. In a one-hour sunbath, the body can manufacture up to 10,000 units of vitamin D. That is more than five times the recently increased recommended daily allowance for the vitamin. This is another example of how wrong ‘health authorities’ can be about vitamins. It is impossible for your body to generate too much vitamin D from sunlight exposure: your body self-regulates and only produces what it needs.80

Similarly, Portofino’s website claims that “[d]uring a typical tanning session your body naturally creates as much Vitamin D as you would get from drinking 100 glasses of milk or eating 25 servings of salmon.”81 Portofino asserts that “The benefit of regular UV exposure as the body’s

77 79 Fed. Reg. at 31,210, supra footnote 55.


only true natural source of sufficient vitamin D production easily outweighs the manageable risks associated with overexposure to sunlight."^{82}

38. There is no evidence that supports indoor tanning as a “superior” method of producing vitamin D. Furthermore, there is nothing in the vitamin D obtained from UV exposure that cannot be obtained through dietary supplementation. In fact, dietary supplementation of vitamin D is identical to what is produced by UV exposure—all without the associated risk of cancer. Thus, because UV exposure from indoor tanning presents health risks and does not provide superior delivery of vitamin D, vitamin D can be attained more safely with dietary supplementation. Indeed, the studies that demonstrate beneficial health effects of vitamin D almost always use oral vitamin D supplements to evaluate the effect of vitamin D.

39. In fact, there are significant limitations on the effectiveness of vitamin D production from indoor tanning. UVA and UVB are different wavelengths of UV light. The body produces vitamin D in response to UVB exposure—not UVA exposure—and the effectiveness of various indoor tanning devices at promoting vitamin D varies with the amount of UVB emitted by a sunlamp.^{84} Modern tanning beds emit negligible UVB emissions and are therefore ineffective at stimulating the body to produce vitamin D. Even with older sunlamps that emit UVB, only a limited amount of vitamin D can be obtained before levels plateau.^{86} The

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^{82} Id. (attributing the statement to Dr. William Grant).


^{84} Robert M. Sayre et al., Variability of Pre-Vitamin D3 Effectiveness of UV Appliances for Skin Tanning, 121 J. Steroid Biochemistry & Molecular Biology 331-33 (2010); Autier, supra footnote 42.


amount of vitamin D synthesized in the body as a result of exposure to indoor UV tanning varies
tremendously, depending on the details of the UV emitted by the particular tanning machine and
the individual being exposed to that UV. For example, while some increases in vitamin D levels
were observed after four, six-minute-long indoor tanning sessions, additional tanning yielded no
significant increase in vitamin D.87 Thus, modern tanning beds, particularly with repeated use,
will not stimulate the production of vitamin D equivalent to 100 glasses of milk (10,000
international units of vitamin D) as asserted by Portofino.88 In any event, this amount would
exceed the upper limit of the recommended daily intake of vitamin D, which may itself be
associated with adverse health effects.89

40. Portofino’s assertions that the benefits of UV exposure outweigh the risks appear
to rely on one article’s critique of the World Health Organization’s findings on indoor tanning’s
association with cancer: William B. Grant, Critique of the International Agency for Research on
Cancer’s Meta-Analyses of the Association of Sunbed Use With Risk of Cutaneous Malignant
Melanoma, 1 Dermato-Endocrinology 294-99 (2009). That article, however, does not represent
generally accepted scientific views or methodologies.90 His study, funded by the indoor tanning
industry, has many flaws including the exclusion of fair-skinned (Fitzpatrick skin type I)
residents in the United Kingdom from his analysis, which biases and undermines his
conclusions. Grant’s conclusions are contradicted by many other studies such as Exposure to
Indoor Tanning Without Burning and Melanoma Risk by Sunburn History, authored by Rachel

87 Thieden et al., supra, footnote 86.
88 Exhibit C.
89 A. Catharine Ross et al., The 2011 Report on Dietary Reference Intakes for Calcium & Vitamin D from the
Institute of Medicine: What Clinicians Need to Know, 96 J. Clinical Endocrinology & Metabolism 53 (2011); see
also Kaveri Korgavkar, Michael Xiong, & Martin A. Weinstock, Review: Higher Vitamin D Status and
Supplementation May Be Associated With Risks, European J. of Dermatology (2014).
90 See, e.g., Weinstock & Fisher, supra footnote 30.
Vogel, Rehana Ahmed, Heather Nelson, Marianne Berwick, Martin Weinstock, and DeAnn Lazovich, in the Journal of the National Cancer Institute (2014). This study reports data from Minnesota showing that tanning is associated with melanoma risk, even when individuals with sunburns are excluded.

41. The vast majority of vitamin D-related health claims made by Total Tan and Portofino have not been proven and are not generally accepted in the scientific community. The Vitamin D Council website asserts that vitamin D can treat everything from acne to cancer to type II diabetes. Although vitamin D is an important nutrient for bone health, studies have not established a clear link between vitamin D and other health benefits. Particular health claims are discussed in more detail below.

**Indoor Tanning Does Not Prevent or Treat Cancer or Heart Disease**

42. In addition to linking to the Vitamin D Council’s information, tanning salons claim that indoor tanning prevents and treats cancer and heart disease.91 For example, Total Tan cites to an article that states:

Contrary to the propaganda, sunlight does not cause cancer. In fact, compelling medical evidence indicates that vitamin D could prevent close to 80 per cent [sic] of all types of cancer. The research results clearly demonstrate that the lower your vitamin D levels in your blood, the higher your risk of developing several cancers. Fifteen cancers have been identified as vitamin D sensitive: colon, stomach, oesophagus, gallbladder, rectum, small intestine, bladder, kidney, prostate, breast, endometrium, ovary, Hodgkins and non Hodgkins lymphoma.92

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91 Vitamin D Council, *supra* footnote 76. For example, the Total Tan website (Exhibit A) states “Research from the Boston University School of Medicine,” and links to *Increasing Vitamin D Level Improves Immunity & Lowers Cancer Risk*, Big News Network, http://www.bignewsnetwork.com/index.php/sid/213377328/scat/a1e025da3e02ca7c (Mar. 21, 2013). The article is attached as Exhibit D.

92 Exhibit B.
Total Tan’s website also links to information asserting indoor tanning prevents heart disease.93 Portofino has similar information, stating “Getting enough vitamin D is linked to reductions in heart disease, diabetes, multiple sclerosis & many cancers—are you getting enough?”94

43. While there is some research suggesting a link between chronic (not intermittent) sunlight exposure and risk of colon, prostate, and breast cancers as well as non-Hodgkin’s lymphoma, exposure to UV radiation in tanning beds has not been found to be protective.95 Sunlamps produce intermittent UV exposure for just minutes at a time, and emit a different mix of UV radiation than the usual solar spectrum.96 In short, indoor tanning is not the equivalent of sunlight exposure and there is no established link between indoor tanning and colon, prostate, and breast cancers or non-Hodgkin’s lymphoma.

44. Even with respect to sunlight exposure, the data is still inconclusive. Acknowledging the studies that show links between prevention of some cancers and sunlight exposure, the U.S. Preventive Services Task Force reviewed the literature on the potential benefits of vitamin D.97 In its review of 165 primary articles and 11 systematic reviews that incorporated over 200 additional primary articles, the Task Force noted inconsistent findings for colorectal and prostate cancer, and insufficient studies for pancreatic cancer. The study

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93 For example, the Total Tan (Exhibit A) website states “UK article on sunscreen or as they say suncream,” and links to Lucy Elkins, Worried Suncream Blocks Vitamin D? Here’s Good News..., MailOnline, http://www.dailymail.co.uk/health/article-2335478/Worried-suncream-blocks-vitamin-D-Heres-good-news-.html#ixzz34NKqrm4y (Jun. 3, 2013) (“Vitamin D is vital for strong bones and may have many other health benefits. Studies have linked it to heart health, and it may also have a role in preventing certain cancers.”). The article is attached as Exhibit E.


95 Han van der Rhee et al., Is Prevention of Cancer by Sun Exposure More Than Just the Effect of Vitamin D? A Systematic Review of Epidemiological Studies, 49 European J. Cancer 1422-36 (2013) (addressing only the link between sun exposure and certain cancers, not indoor tanning).

96 See, e.g., Autier, supra, footnote 42.

examined the effect of both vitamin D and calcium on cancer, and concluded that synthesizing a
dose-response relation between intake of either vitamin D, calcium, or both nutrients and health
outcomes in this heterogeneous body of literature proved challenging.

45. Similarly, Dr. Clifford Rosen, a member of the vitamin D subcommittee for the
Institute of Medicine, published in The New England Journal of Medicine that “despite the
recent focus in the media on the potential role of vitamin D in reducing the risk of various
chronic diseases, this hypothesis requires testing in large, randomized, controlled trials, and
vitamin D cannot currently be recommended for the purpose of reducing the risk of heart disease
or cancer.”98

46. With respect to breast cancer specifically, no studies directly support the notion
that sunshine or indoor tanning prevents breast cancer, and the evidence is inconclusive
regarding the role of vitamin D in reducing the risk of breast cancer. Although some studies
have found associations between increased vitamin D levels and decreased risk of breast cancer,
a statistically significant inverse association between vitamin D levels and breast cancer remains
unconfirmed.

47. Perhaps the most aggressively misleading claim on Total Tan’s website is its
inclusion of a lengthy “testimonial” from an individual with kidney cancer “published to keep
you abreast of a current event related to UV light as well as to bring awareness to Kidney
Cancer.”99 Despite Total Tan’s statement that “[t]his information is not intended to be used by
any party to make unwarranted health claims to promote sunbed usage,” the testimonial explains
the success of a kidney cancer patient who opted to indoor tan at Total Tan in lieu of taking his

the testimonial as of June 18, 2013 is attached as Exhibit G. It appears that this material has since been removed
from the Total Tan website.
“prescribed [] monthly pill, which was 50,000 unit of a Vitamin D.” Total Tan went on to explain:

One’s kidney and Vitamin D go hand in hand. . . . His level of Vitamin D after the surgery was as low as 13 and with the prescription it got as high as 24, in January of 2012. According to Kurt, the normal level for him should have been 30. When Kurt moved to the Albany area he learned about the benefits of UV light and its relationship to Vitamin D. Kurt began tanning at Total Tan in Malta and Saratoga NY. During his January 2013 check Kurt’s vitamin D level was a 39. The staggering thing was Kurt has just been tanning once or twice per week and NOT taking the 50,000 unit of Vitamin D.

**Indoor Tanning Has Not Been Shown to Treat Asthma**

48. In addition to linking to the Vitamin D Council’s information on asthma, Total Tan’s website links to a BBC News article under the heading “Sunshine and Asthma.” But any implication that indoor tanning can treat asthma is unfounded. Neither the Vitamin D Council’s discussion of asthma nor the BBC article mentions indoor tanning. Thus, even if there were asthma-related vitamin D benefits, dietary supplementation would be sufficient.

**Indoor Tanning Is Not an Established or Safe Way to Lower Blood Pressure or Treat Hypertension**

49. Total Tan’s website links to a web article, “Blood pressure benefits of sun may outweigh cancer risks” under the heading “Sunshine and BP.” The article reports that researchers have found that UV rays release a compound that lowers blood pressure called nitric oxide, which is separate from the body’s manufacture of vitamin D. The article’s suggestion that UV exposure lowers blood pressure is based, however, on studies of relatively few subjects that

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have shown an effect of UVA irradiation on the lowering of systemic blood pressure. These studies, however, have not controlled for changes in diet, exercise, or medication management. It is likely that these changes could have the same—or greater—effect on blood pressure without cancer risk. Moreover unlike UV radiation, numerous safe medications exist, which are broadly successful at maintaining good blood pressure control without inherent carcinogenic risk.

50. As for hypertension (high blood pressure), vitamin D has not been shown to be effective in treating this medical condition. Even if it were effective, a dietary supplement would be a preferable way to obtain vitamin D, without the risks of indoor tanning, and the dose could be measured and adjusted as needed. Furthermore, various, carefully-tested and FDA-approved drugs can be used to control hypertension.

**Indoor Tanning Does Not Prevent or Treat Diabetes**

51. In addition to linking to the Vitamin D Council’s information on diabetes, Total Tan and Portofino claim that indoor tanning treats diabetes. The link between sunlight exposure, vitamin D, and diabetes is not generally accepted in the scientific community. In fact, the majority of randomized controlled trials fail to show impact of vitamin D on insulin resistance or diabetes incidence. The largest randomized controlled trial from the Women’s Health Initiative showed no decrease in diabetes risk over seven years after daily vitamin D

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102 Total Tan website (Exhibit A) links to Sophie Borland, *Tanned Women Live Longer (As Long As You Sunbathe Sensibly)*, MailOnline, http://www.dailymail.co.uk/health/article-1335364/Tanned-women-live-longer-say-scientists-Lund-University-Sweden.html (Dec. 3, 2013). The article is attached as Exhibit J and claims that women who tan live longer because the sun helps protect against diabetes in the colder months, a phenomenon attributed to a lack of vitamin D. See also Vitamin D Council, supra footnote 76; Exhibit B.

supplementation.\textsuperscript{104} Smaller randomized controlled trials involving several hundred subjects did not show glucose or insulin changes after daily vitamin D supplementation.\textsuperscript{105}

\textbf{Indoor Tanning Does Not Prevent Blood Clots}

52. An article linked to on Total Tan’s website titled “Tanned women live longer (as long as you sunbathe sensibly), say scientists” and information from the Vitamin D Council claim the sun helps protect against blood clots in the leg known as deep vein thrombosis.\textsuperscript{106} There is some, but often conflicting and observational data, regarding the benefits of vitamin D for blood clots or thrombosis.\textsuperscript{107} A recent extensive review found that

\begin{quote}
Despite the wide-ranging experimental and epidemiological evidence . . . , a meta-analysis of 51 trials of vitamin D in the prevention of various cardiovascular outcomes showed no overall benefit. At present, it is unclear whether vitamin D supplementation can reduce the risk or consequences of CVD [cardiovascular disease], and it is not recommended for this indication.\textsuperscript{108}
\end{quote}

In short, the data is inconclusive even with respect to sunlight, and it certainly has not been shown or generally accepted in the scientific community that indoor tanning prevents blood clots.

\begin{footnotes}
\item[105] Siobhan Muldowney et al., \textit{Incremental Cholecalciferol Supplementation Up to 15 ug/d Throughout Winter at 51-55 Degrees N Has No Effect on Biomarkers of Cardiovascular Risk in Heathy Young & Older Adults}, 142 J. Nutrition 1519 (2012); Adrian D. Wood et al., \textit{Vitamin D3 Supplementation Has No Effect on Conventional Cardiovascular Risk Factors: A Parallel, Double-blind, Placebo-Controlled RCT}, 97 J. Clinical Endocrinology & Metabolism 3557 (2012).
\item[106] Vitamin D Council, \textit{supra} footnote 76; Exhibit J.
\end{footnotes}
Indoor Tanning Does Not Improve Muscle Efficiency

53. The Total Tan website linked to an article claiming a connection between vitamin D levels and muscle efficiency.\(^{109}\) Likewise, Portofino claims “A recent study showed that vitamin D helps muscle growth & slows age-related muscle deterioration. Are you as strong as you’d like to be?”\(^ {110}\) There is no generally accepted scientific evidence to support this claim.

Indoor Tanning Does Not Help Prevent Alzheimer’s

54. Total Tan links to an article claiming that Vitamin D and omega-3 may help the immune system’s ability to clear the brain of amyloid plaques, which is linked to Alzheimer’s disease.\(^ {111}\) There is no generally accepted scientific evidence to support this claim.

Indoor Tanning Is Not a Safe Way to Avoid UV Risks or Overexposure

55. The Surgeon General’s call to action to prevent skin cancer is clear: “No evidence exists to suggest that indoor tanning is safer than tanning outdoors or confers any substantial protection from future sun exposure.”\(^ {112}\)

56. Total Tan asserts, “Moderate tanning, for individuals who can develop a tan, is the smartest way to maximize the potential benefits of sun exposure while minimizing the potential risks associated with either too much or too little sunlight.”\(^ {113}\) It further asserts that “The risks of UV light exposure, on the other hand, are mainly associated with sunburn and

\(^{109}\) Total Tan’s website (Exhibit A) states “Improve Muscle Efficiency,” and links to *Vitamin D Replacement Improves Muscle Efficiency*, http://www.sciencedaily.com/releases/2013/03/130317221446.htm (Mar. 18, 2013). The article is attached as Exhibit K.


\(^{111}\) Total Tan’s website (Exhibit A) states “Vitamin D may help prevent Alzheimer’s,” and links to *Vitamin D May Help Prevent Alzheimer’s*, http://www.upi.com/Health_News/2013/03/05/Vitamin-D-may-help-prevent-Alzheimers/UPI-75631362465703/ (Mar. 5, 2013). The article is attached as Exhibit M.

\(^{112}\) Surgeon General’s Call to Action, supra footnote 8 at 16.

\(^{113}\) Total Tan, *History of Tanning*, http://www.totaltancorp.com/history-of-tanning (last visited Jun. 11, 2014), attached as Exhibit N.
overexposure (particularly among individuals who are fair-skinned or genetically predisposed to skin damage) and are easily managed by practicing sunburn prevention.”

57. Such assertions are false. First, the UV output of tanning devices is much greater than what is found in natural sunlight. Second, tanning devices have a wide variance in UV output. Third, tanning booth operators typically lack training and knowledge of UV exposures. In fact, according to the Centers for Disease Control and Prevention, in the United States, 1,800 injuries requiring visits to the emergency room are attributed to UV radiation from tanning beds each year.¹¹⁴ Thus, it is very difficult to prevent overexposure when using a tanning device.

58. Whether you get sunburned or not, there is no safe tan. UV radiation exposure increases the risk of skin cancer. Tanning salons often use tanning beds with certain UV wavelengths, such as UVA, to avoid burning, but these tanning beds are still not safe. In fact, the link between UV exposure and cancer is very closely linked to the tanning process itself. Studies show that UV radiation damages the DNA within the nuclei of epidermis cells and produces skin pigment.¹¹⁵ Tanning is thus a response to cellular injury, and if UV irradiation is capable of producing pigmentation, DNA damage has inevitably occurred. Therefore, regardless of whether the skin tans or burns, UV exposure can damage the DNA of the epidermis and increase the risk of skin cancer. Thus, the idea that indoor tanning can provide a “base tan” to protect against outdoor sun exposure is a misconception. As the FDA recently found, “there is no evidence that moderate non-burning UV exposure or attaining a ‘base tan’ provides any protection against premature aging of the skin or reduces the risk of skin cancer.”¹¹⁶

¹¹⁴ Ctrs. for Disease Control & Prevention, supra footnote 13.
Indoor Tanning Does Not Safely Provide Psychological Benefits

59. Total Tan claims that “we know that clients come to facilities for more than just a good tan; they also enjoy the positive psychological and physiological effects of regular exposure to ultraviolet light” and that “there are known physiological and psychological benefits associated with UV light exposure.”117 Portofino claims “Feeling the winter blues or a little post-holiday stress? Nothing perks you up like a little vitamin D.”118

60. Studies have shown that visible light therapy, not UV light therapy, can effectively treat seasonal mood problems, such as seasonal affective disorder (SAD). The light therapy boxes used for visible light therapy filter out UV light. Therefore, sunlamps are ineffective for such treatment.119

61. Indoor tanning also can be addictive as discussed above in “Indoor Tanning Can Be Addictive” in Paragraphs 32-34.

Indoor Tanning Is Not a Safe Way to Treat “Problem Skin”

62. Portofino contends that indoor tanning “can help clear up problem [] skin,”120 but this statement is not accurate. The concept that UV light can benefit certain skin conditions is true, but the optimal way to treat psoriasis, for example, involves exposure to narrow band UVB phototherapy under the direction of a trained physician that minimizes complications, including

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117 Exhibit N.
118 Portofino, https://mobile.twitter.com/PortofinoSun/status/292350910477246464 (posted Jan. 18, 2013, last visited Jun. 12, 2014), attached as Exhibit O.
120 Portofino, https://twitter.com/PortofinoSun/status/303636973548097536 (posted Feb. 18, 2013, last visited Feb. 12, 2015), attached as Exhibit P.
skin cancers.\textsuperscript{121} For managing acne, the American Academy of Dermatology recommends staying out of the sun and away from tanning booths.\textsuperscript{122} In addition, certain acne medications make the skin very sensitive to UV light from tanning beds.\textsuperscript{123} Thus, self-treatment using indoor tanning beds is not a safe way to treat skin conditions, especially given the skin cancer risk.

**Unlimited Packages Encourage Frequent Tanning**

63. Tanning salons, including Total Tan and Portofino, encourage customers to tan more and more frequently—and continually increase their cancer risk—by offering low-priced, “unlimited” monthly tanning memberships.\textsuperscript{124} On average, non-Hispanic Caucasian 17-year-olds tan indoors 24 times per year. By age 18, these high school students tan indoors 30 times per year.\textsuperscript{125} At this rate, only three years of tanning amounts to an estimated 90 sessions, increasing one’s cancer risk significantly.\textsuperscript{126} While no amount of indoor tanning is safe, such “unlimited” packages imply that very frequent indoor tanning is safe. Further, low cost plans encourage more frequent indoor tanning despite the cumulative increase in cancer rates that occur with each salon visit. This practice should be discontinued.


\textsuperscript{123} Id.

\textsuperscript{124} See, e.g., Total Tan, http://www.totaltancorp.com/monthlyspecials (last visited Jun. 11, 2014) (“30% OFF All One Week Unlimited Packages”), attached as Exhibit Q.

\textsuperscript{125} Gery P. Guy et al., *Indoor Tanning Among Young Non-Hispanic White Females*, JAMA Internal Medicine (2013).

\textsuperscript{126} Boniol et al., *supra* footnote 28 (an estimated 1.8% increase in risk of melanoma for each additional session of tanning bed use per year). The 1.8% increase in melanoma risk is the increase solely due to indoor tanning. Natural sun exposure further increases cancer risk.
Conclusions

64. Indoor tanning is carcinogenic. Numerous well-respected scientific organizations have concluded that indoor tanning raises the risk of developing skin cancer, including melanoma, the most commonly fatal type of skin cancer. Melanoma incidence is rising, especially among teenage girls and young women. Melanoma kills, and some of its victims are young people.

65. Indoor tanning can be physically addictive. Studies show that indoor tanning addiction is linked to tanning frequency and endorphin release. Among those addicted, stopping indoor tanning can lead to withdrawal symptoms.

66. Despite the fact that indoor tanning drastically increases skin cancer risk—and also causes premature aging of the skin and eye damage—indoor tanning is common, especially among young women. Salons aggressively market indoor tanning, targeting youth and women and promoting “unlimited” tanning packages.

67. Health claims made by tanning salons are not supported by scientific evidence. Without the need for indoor tanning, vitamin D supplements can more safely, more reliably, and less expensively supply vitamin D and achieve any vitamin D-related benefit. Indeed, most vitamin D-related health claims are unproven or false. In conclusion, indoor tanning causes skin cancer and is, therefore, not safe.

Author Background

Sophie Julia Balk, M.D.

68. Dr. Balk is a general pediatrician at Children’s Hospital at Montefiore and Professor of Clinical Pediatrics at the Albert Einstein College of Medicine. She practices pediatrics and teaches in a community-based health center in the Bronx, New York. For the last
two decades, Dr. Balk’s academic work has focused on educating clinicians about environmental health issues relevant to children. She was Chairperson of the American Academy of Pediatrics Committee on Environmental Health from 1999 to 2003. She is Associate Editor of the 1st, 2nd and 3rd Editions of Pediatric Environmental Health, a manual for clinicians published by the American Academy of Pediatrics. She founded and was Chairperson of the Academic Pediatrics Association Special Interest Group on Environmental Health and is co-chairperson of the National Council on Skin Cancer Prevention. Dr. Balk has published extensively and lectured regionally and nationally on smoking cessation, sun safety, and other environmental health issues. A graduate of Cornell University, Dr. Balk received her M.D. from the Albert Einstein College of Medicine. Dr. Balk’s Curriculum Vitae is attached to the expert report as Exhibit R.

David E. Fisher, M.D., Ph.D.

69. Dr. Fisher is an internationally known researcher, clinician and academic, who currently serves as Chief of the Massachusetts General Hospital Department of Dermatology at Harvard Medical School in Boston, Massachusetts. He also serves as Director of the Massachusetts General Hospital Cutaneous Biology Research Center and Director of the Melanoma Center at Massachusetts General Hospital. A Professor of Dermatology and of Pediatrics at Harvard Medical School, Dr. Fisher came to the Massachusetts General Hospital from the Dana-Farber Cancer Institute, where he previously directed the Melanoma Program. Dr. Fisher’s research has focused on understanding the molecular and genetic events which underlie formation of melanoma as well as skin pigmentation. As a clinician, he has worked to translate these understandings into advances in diagnosis, treatment and prevention of human diseases related to the skin and associated disorders. A graduate of Swarthmore College with a degree in Biology and Chemistry, Dr. Fisher received his Ph.D. under Nobel Laureate Gunter
Blobel at Rockefeller University and his Medical Degree at Cornell University Medical College under Dr. Henry Kunkel. Dr. Fisher’s specialty training in Medicine, Pediatrics, and Oncology were carried out at Harvard Medical School. He recently served for three years as President of the Society for Melanoma Research, the largest international society dedicated to the study of melanoma. Dr. Fisher’s Curriculum Vitae is attached to the expert report as Exhibit S.

Alan C. Geller MPH, RN

70. Professor Geller currently holds the positions of Senior Lecturer in the Department of Social and Behavioral Sciences at the Harvard School of Public Health; Director of Melanoma Epidemiology at Massachusetts General Hospital; and Adjunct Associate Professor (Research) in the Department of Dermatology at the Boston University School of Medicine. Professor Geller has been a Harvard faculty member since 2010. For more than 20 years, he was on staff and faculty at the Boston University School of Medicine and Public Health. In 2009, Professor Geller moved his research from Boston University’s School of Medicine and Public Health to Boston University’s Division of Public Health Practice. Professor Geller’s research is focused on skin cancer screening, prevention, and treatment. Professor Geller has published over 190 manuscripts, 70 abstracts, and 25 book chapters, and holds a Master’s degree in Public Health specializing in Epidemiology from Boston University and undergraduate degrees in Sociology and Nursing from the University of Buffalo and MassBay Community College, respectively. Professor Geller’s Curriculum Vitae is attached to the expert report as Exhibit T.

Martin A. Weinstock, M.D., Ph.D.

71. Dr. Weinstock graduated from Williams College with a Bachelor of Arts Summa Cum Laude with Highest Honors in Mathematics. He earned his Ph.D. degree in Epidemiology at the Graduate School of Arts and Sciences and M.D. degree at the College of Physicians and
Surgeons, both at Columbia University in the City of New York. He completed his internship at the University of Pittsburgh Affiliated Hospitals (Presbyterian-University and Oakland V.A. Hospitals) and his residency in Dermatology at the Harvard University Affiliated Hospitals, followed by the Andrew W. Mellon Foundation fellowship in Clinical Epidemiology at Harvard Medical School. He is board certified in dermatology. His research has been supported by multiple research grants from the National Institutes of Health, the U. S. Department of Veterans Affairs Office of Research and Development, and non-profit foundations. Dr. Weinstock holds a dual appointment at Brown University in both the Department of Dermatology and the Department of Community Health. Dr. Weinstock’s clinical interests include melanoma and nevi, and his research focuses on the epidemiology of cutaneous malignancies and dysplasias. He is author of over 350 publications and has delivered over 200 invited lectures in the United States and other countries on five continents. Dr. Weinstock’s Curriculum Vitae is attached to the expert report as Exhibit U.

Submitted,

Sophie Julia Balk, M.D.  
March 2, 2015

David E. Fisher, M.D., Ph.D.  
March __, 2015

Alan C. Geller MPH, RN  
March __, 2015

33
Surgeons, both at Columbia University in the City of New York. He completed his internship at the University of Pittsburgh Affiliated Hospitals (Presbyterian-University and Oakland V.A. Hospitals) and his residency in Dermatology at the Harvard University Affiliated Hospitals, followed by the Andrew W. Mellon Foundation fellowship in Clinical Epidemiology at Harvard Medical School. He is board certified in dermatology. His research has been supported by multiple research grants from the National Institutes of Health, the U. S. Department of Veterans Affairs Office of Research and Development, and non-profit foundations. Dr. Weinstock holds a dual appointment at Brown University in both the Department of Dermatology and the Department of Community Health. Dr. Weinstock’s clinical interests include melanoma and nevi, and his research focuses on the epidemiology of cutaneous malignancies and dysplasias. He is author of over 350 publications and has delivered over 200 invited lectures in the United States and other countries on five continents. Dr. Weinstock’s Curriculum Vitae is attached to the expert report as Exhibit U.

Submitted,

Sophie Julia Balk, M.D.  
March __, 2015

David E. Fisher, M.D., Ph.D.  
March 5th, 2015

Alan C. Geller MPH, RN  
March __, 2015
Surgeons, both at Columbia University in the City of New York. He completed his internship at
the University of Pittsburgh Affiliated Hospitals (Presbyterian-University and Oakland V.A.
Hospitals) and his residency in Dermatology at the Harvard University Affiliated Hospitals,
followed by the Andrew W. Mellon Foundation fellowship in Clinical Epidemiology at Harvard
Medical School. He is board certified in dermatology. His research has been supported by
multiple research grants from the National Institutes of Health, the U. S. Department of Veterans
Affairs Office of Research and Development, and non-profit foundations. Dr. Weinstock holds a
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the expert report as Exhibit U.

Submitted,

Sophie Julia Balk, M.D.                                        March __, 2015

David E. Fisher, M.D., Ph.D.                                   March __, 2015

Alan C. Geller MPH, RN                                          March __, 2015
Exhibit A
Tanning Industry News

NEW

UK article on sunscreen or as they say suncream

Sunshine and Asthma
Sunshine and BP
SUNSHINE ARTICLE 5-1-13

Pills or Sunshine? You might be surprised... Tanned Women Live Longer New Kidney Function Tied to Vitamin D Status Actual PDF Article from Academy of Pediatrics Research from the Boston University School of Medicine

Improve Muscle Efficiency

UVB Exposure May Boost Low Vitamin D

Vitamin D may help prevent Alzheimer's

Recent Vitamin D News. Supplements or Sunshine? Mineral Oil is not Safe
Exhibit B
**VITAMIN D** is perhaps the single most underrated nutrient in the world. Maybe because it's freely made by your body from sunshine, its health benefits are not widely promoted.

Vitamin D is, in fact, more like a powerful hormone than a vitamin. It controls the activity of over 2,000 of our genes and there are receptor sites for vitamin D in virtually every cell in the human body. The term vitamin D includes a family of several substances, but vitamin D3 (cholecalciferol) is the most active and useful form.

The vitamin is found naturally in only a few foods such as fish liver oils, fatty fish, mushrooms, egg yolks and liver. Food manufacturers now fortify some foods like dairy products with this vitamin. But it is nearly impossible to get enough vitamin D from your diet. For example, an individual would have to drink 10 large glasses of vitamin D-fortified milk each day just to get the minimum recommended amount of vitamin D.

**Vitamin D and the sun**

Mankind's main source of vitamin D comes from sunshine. When the UVB rays of the sun strikes the skin, it converts cholesterol in the epidermal skin cells into vitamin D. Dark skin, old age and the use of sunblock greatly reduces the production of this vitamin from sunshine.

Vitamin D is also available as a safe and inexpensive supplement while providing many benefits for all, particularly women. Sadly, the research indicates that most of us are deficient in vitamin D. Although there is much publicity about the need for vitamin D to protect women's bones against osteoporosis, this vitamin has many other important uses.

Sunlight exposure is the most reliable way to generate vitamin D in your own body. In a one-hour sunbath, the body can manufacture up to 10,000 units of vitamin D. That is more than five times the recently increased recommended daily allowance for the vitamin. This is another example of how wrong 'health authorities' can be about vitamins. It is impossible for your body to generate too much vitamin D from sunlight exposure: your body self-regulates and only produces what it needs.

**Black people need more sunshine**

The darker your skin colour, the more sunshine you need to make vitamin D. People with dark skin pigmentation may need 20 to 30 times as much exposure to sunlight as fair-skinned people to generate the same amount of vitamin D. Because of this, many black persons are vitamin D deficient.

Research shows that over 90 per cent of African Americans are vitamin D deficient. Many Jamaicans also have this deficiency. Almost all of the patients who I have tested have low levels of vitamin D in their blood although they live in sunny Jamaica. Also, the further you live from the equator, the more sunshine you need in order to generate vitamin D.

**Vitamin D and cancer**

Contrary to the propaganda, sunlight does not cause cancer. In fact, compelling medical evidence indicates that vitamin D could prevent close to 80 per cent of all types of cancer. The research results clearly demonstrate that the lower your vitamin D levels in your blood, the higher your risk of developing several cancers.
Fifteen cancers have been identified as vitamin D sensitive: colon, stomach, oesophagus, gallbladder, rectum, small intestine, bladder, kidney, prostate, breast, endometrium, ovary, Hodgkins and non Hodgkins lymphoma.

The researchers reliably predicted that hundreds of thousands of cancers could be prevented around the world by raising the vitamin D levels in entire populations.

There is very good evidence that vitamin D lowers the risk of breast cancer. Studies of vitamin D levels in women diagnosed with breast cancer show that the risk of breast cancer decreases rapidly as vitamin D levels increase.

Research at Georgetown University Medical Center, Washington, DC, revealed an impressive link between high vitamin D intake and a reduced risk of breast cancer. Their findings reveal that high doses of vitamin D caused a 50 per cent reduction in breast tumours, and a 75 per cent decrease in cancer spread among those who already have the disease.

**Vitamin D and fibroids**

Over two thirds of our women have uterine fibroids. A new study published in the journal *Biology of Reproduction* has found that vitamin D may effectively reduce the size of existing uterine fibroids, and may even help prevent them from forming in the first place.

Dr Louis de Paolo of the National Institutes of Health suggests that this research provides a promising new approach in the search for a non-surgical treatment for fibroids. Rather than waiting to have a surgery, women with fibroids (or who may develop them later) may benefit greatly from simply exposing themselves more regularly to natural sunlight and/or by supplementing with vitamin D3.

**Vitamin D and bones**

Much is made of the need for sufficient dietary calcium to ensure strong bones and to prevent osteoporosis. It should, however, be equally emphasised that vitamin D is critical for calcium to be absorbed in the intestines. Without sufficient vitamin D, your body cannot absorb calcium, rendering calcium supplements useless. Much of the current epidemic of osteoporosis is related to vitamin D deficiency. Optimal vitamin D levels reduce the risk of hip fractures in the elderly by 25 per cent.

**Vitamin D and infections**

Vitamin D improves immune system function, thus providing protection against infections. Influenza outbreaks are seasonal in part due to variations in sunshine levels and vitamin D. Both bacterial diseases like pneumonia, gingivitis, septicaemia and tuberculosis, as well as viral diseases like influenza and the common cold, influenced by vitamin D. The vitamin also had a protective effect against auto-immune disorders, particularly type 1 diabetes and multiple sclerosis.

**Vitamin D and metabolic diseases**

Growing evidence indicates that vitamin D reduces the risk of the common metabolic diseases, including coronary heart disease, type 2 diabetes, hypertension and stroke. This may be part of the reason why these disorders are so prevalent in black populations like African Americans and Caribbean peoples. However, controlled trials have not yet been reported.
Increase your vitamin D level

Chronic vitamin D deficiency cannot be reversed overnight. It takes months of sunlight exposure and vitamin D supplementation to build up the body's levels. I strongly recommend a daily sunbath whenever possible for everyone. Ideally one should try to expose at least 50 per cent of one's skin directly to the sun for at least 30 to 60 minutes. The healing UVB rays of natural sunlight that generate vitamin D in your skin cannot penetrate glass, so you don't make vitamin D when sitting behind the window in your car or home.

Even weak sunscreen blocks your body's ability to generate vitamin D by 95 per cent. Although the sunscreen industry doesn't want you to know, sunscreen products may actually contribute to disease by creating a critical vitamin deficiency in the body.

Vitamin D is 'activated' in your body by your kidneys and liver before it can be used. Therefore, individuals with kidney or liver damage may have decreased ability to activate vitamin D. The skin of the elderly is also less efficient in making vitamin D. These people need more sunshine and would benefit from taking vitamin D supplements.

What about sunburn, skin damage and skin cancer? This is a problem only when your nutrition is poor and your skin is deficient in antioxidants. Antioxidants greatly boost your body's ability to handle sunlight without damage or burning. So, in addition to sunbathing, take enough vitamins A, C and E and eat lots of fresh fruit and vegetables. This is particularly important if you have sensitive skin.

You may email Dr Tony Vendryes at tonyvendryes@gmail.com or listen to 'An Ounce of Prevention' on POWER 106FM on Fridays at 8 p.m. His new book 'An Ounce of Prevention, Especially for Women' is available locally and on the Internet.

Comments for this thread are now closed.

AROUND THE WEB

Women & Co

Hidden Spaces in Your Home: How to Get More Room for Your Stuff

Answers.com

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Red · a year ago
Vitamin d deficiency is a silent epidemic among those with darker skin pigmentation.
http://www.opinionbug.com/7951...
Exhibit C
We Make Sunshine

- People Need Sunlight
- Is UV As Bad As They Say?
- Indoor Tanning Makes Vitamin D
- Why People Tan
- Smart Tanning
- Airbrush Tanning

If you like sunshine, we make it fresh daily. Millions of Americans enjoy indoor tanning as a way to keep a little sunshine in their life.

After just a few minutes in a sunbed they instantly look and feel better. They leave their session relaxed, rejuvenated and with a large dose of Vitamin D – the all important "sunshine vitamin" your skin naturally produces when exposed to sunlight or most indoor tanning lamps.

In many ways it’s just like tanning outdoors with a few additional advantages:

- **Always available:** Year-round, day or night, whatever the weather you can always count on a tanning salon for a bit of sunshine.
- **Controllable:** Unlike the sun, whose intensity changes depending on factors like time of day, season and weather conditions, you know how much exposure you get in an indoor tanning session. Tanning salons can help you build up a tan slowly without burning during timed and tracked tanning sessions.
- **Private:** Your tanning session is totally private so you can get tan all over without having to take off your clothes in public.

People Need Sunlight

This much is undeniable: There would be no life on Earth without sunlight. Humans evolved for a million years spending lots of time daily in the sun. Nature left some strong clues that we were meant to get sun:

- Our bodies make the important hormone Vitamin D when we are exposed to UVB in sunlight
- Our ability to tan is a highly evolved mechanism to help protect skin cells from getting too much UV light during the summer.
- We are naturally attracted to the sun. The body produces endorphins when we are exposed to UV light. Endorphins give us a feeling of wellness.

Yet despite this natural attraction, humans today spend less time outdoors in the sun than at any time in human history. Indoor tanning grew out of the innate desire of people to enjoy sunlight year-round. We use special lamps that create the same components as are in natural sunlight: UVA, UVB, heat and light.

Meanwhile, anti-tanning crusaders promote the illogical notion that the correct amount of sunlight for humans is zero. Current science is strongly refuting that radical and possibly dangerous notion.

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Is UV Really as Bad as They Say?

First of all, life would not exist without sunlight and UV light. So saying that UV light is harmful and should be avoided is as misleading as saying that water causes drowning and therefore we shouldn’t drink water: It’s an inaccurate way to describe the complex and intended relationship we have with sunlight.

While everyone agrees that overexposure needs to be avoided, it should be noted that melanoma is more common in indoor workers and on parts of the body that don’t get regular sun exposure: both of which could not be true if UV exposure was a direct cause of melanoma. What’s more:
• There actually is no clear direct experimental evidence showing a causative mechanism between tanning and melanoma. Even the American Academy of Dermatology admits this.

• According to the World Health Organization’s most recent report on indoor tanning, “Epidemiologic studies to date give no consistent evidence that use of indoor tanning facilities in general is associated with the development of melanoma skin cancer.” This has been widely misrepresented.

• Conflicting data exist questioning the UV-melanoma relationship. Some independent dermatology researchers question whether UV and melanoma are related at all.

The Skin Cancer Cover Up: Dr. Sam Shuster

The Melanoma Myth: Dr. Bernard Ackerman

Are there people who should avoid sunlight? Yes, those with the fairest skin — what are called “Skin Type I” — cannot develop sunburns without burning. Professional tanning facilities are the best at identifying these individuals and counseling them on alternatives, including spray-tanning options.

Responsible tanning salons, like the ones that are part of this effort, conduct a Skin Type analysis on your first visit so we can provide good advice for your particular skin type and tanning history. Click here to complete a questionnaire that will determine your skin type. If you are a Type I we strongly recommend avoiding UV-tanning. Type I’s should use spray tanning only and consult with a doctor regarding Vitamin D supplementation to avoid being deficient.

Meanwhile, anti-tanning crusaders promote over-the-top messages attacking indoor tanning. An example is the recent World Health Organization report stating that indoor tanners have a 75% increased risk of melanoma. A review of the report by Dr. William Grant concluded that when Skin Type I’s are removed there is not significant increased risk for sunbed users.

Dr. Lisa Schwartz, co-author of “Know Your Chances” pointed out that even if you accept this disputed 75% figure, it means your odds of developing melanoma move from 0.2% to 0.3%. This hardly justifies headlines from anti-tanning groups that say “Sunlight and tanning are just like arsenic and mustard gas” or comparisons to smoking which kills roughly half of all lifelong smokers.

One common approach from anti-tanning groups is to say that any tan is a sign of skin damage. Though technically this could be considered true, it’s a natural body function just like “damaging” muscle fibers when we exercise. Tanning, unlike applying chemical sunscreen, is nature’s sunscreen typically resulting in an SPF of 2 to 4 meaning you can spend 2 to 4 times as long in the sun without burning. There are situations where burning is possible when you should supplement your tan with sunscreen. But tanning is natural and in fact is a highly evolved process that demonstrates that we are intended to get sunlight.

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Indoor Tanning Makes Vitamin D

It’s difficult to read health news over the past few years without seeing study after study touting the importance of Vitamin D, the “sunshine vitamin,” to your health. As a primarily cosmetic and recreational service we are unable to make direct therapeutic claims about the health benefits of indoor tanning. We can refer you to www.vitaminncouncil.org for information and recommend doing your own research.

We can say, however, that indoor tanning is an excellent, reliable source of Vitamin D. During a typical tanning session your body naturally creates as much Vitamin D as you would get from drinking 100 glasses of milk or eating 25 servings of salmon. Although the lamps are man-made, this Vitamin D is created the way nature intended, through exposure of your skin to UVB, a narrow band of UV that’s in almost all tanning beds and in sunlight of sufficient strength. Humans typically get more than 90% of their Vitamin D from UVB exposure, very little from diet.

U.S. government statistics state that 77% of Americans have insufficient Vitamin D levels. Studies have shown, on the other hand, that indoor tanners have 90% higher levels of Vitamin D and that the vast majority of tanners have sufficient levels.

Dr. William Grant stated in his study, “There is conclusive evidence that indoor tanning in a non-burning fashion offers a tremendous source of vitamin D. The benefit of regular UV exposure as the body’s only true natural source of sufficient vitamin D production easily outweighs the manageable risks associated with overexposure to sunlight.”
During most of the year in most of the U.S. you can easily get your Vitamin D outdoors. Spending 10-15 minutes in the sun two to three times a week with as much skin as possible exposed from 10am-2pm, March through October has been recommended by many Vitamin D experts. However when the sun is at too low of an angle due to time of day or season almost all UVB is blocked by the atmosphere. Thick clouds and pollution can also block UVB. Here’s a rule of thumb: if your shadow is longer than you are tall there is not enough UVB to create Vitamin D in your skin. In New York, it is basically impossible to make Vitamin D outdoors from November through February no matter how much time you spend outdoors. Also, sunscreen with an SPF of 15 can block as much as 97.5% of vitamin D production.

We should note that most people make Vitamin D so quickly when exposed to UV in a tanning bed that you don’t necessarily need to get tan to get the Vitamin D you need. The participating salons have created “Vitamin D Boost” sessions to provide customers who only want some “D” without tanning to do so at a reduced rate.

Sadly, not only do the anti-sun/anti-tanning forces make misleading statements about indoor tanning, they also continue to ignore the importance of Vitamin D and how their efforts may have added to the epidemic of Vitamin D deficiency. Given the breakthroughs in Vitamin D research we are confident that you will see this message quickly evolve.

**Why People Tan**

There are lots of reasons people visit tanning salons. Some like the way they look with a tan. Many like the way it makes them feel. Increasingly people come to raise their Vitamin D levels. Some come because it’s a great little getaway from their hectic lives. For a few minutes they just get to relax, feel the sunshine on their skin and “chill out.”

Many people come to get a base tan before a sunny vacation or in spring to prepare for the summer sun. Others come before a big event like a wedding, prom or photo shoot.

Whatever the reason for your visit, a professional tanning salon can give you lots of advice that can help you achieve the results you’d like while minimizing the risks of sun burning which should always be avoided.

**Smart Tanning**

There are many steps taken in responsible tanning salons such as ours to reduce your risks that are typically not available to you when you tan outdoors. These include:

- **Skin Type Analysis:** Each new customer is required to complete a questionnaire that identifies their Skin Type. This improves our ability to provide informed recommendations on a tanning program that builds your tan slowly while minimizing your risk of sun burning.

- **Controllable Exposure:** Sunbeds enable you to know how much exposure you will get as opposed to outdoor tanning which varies greatly by geography, weather conditions, time of year and time of day.

- **Maximum Tan Time:** Each of our sunbeds has a maximum tan time set by the FDA to which we strictly adhere. This time ranges from 9 to 20 minutes depending on the type and intensity of the bed. Customers are only allowed to tan once per day.

- **Timed & Tracked Sessions:** Each bed is on a timer which automatically turns off the bed after the selected tan time. These timed sessions are tracked by special software that enables us to see your tanning history and provide ongoing advice on maintaining a non-burning tanning program.

- **Eyewear:** Each of our salons provides special UV-blocking eyewear at no charge to greatly reduce the risk of eye damage. PLEASE, ALWAYS USE APPROVED EYEWEAR WHILE TANNING.

- **Certified Technicians:** Each of our front desk associates completes Smart Tan’s certification program where they learn about skin biology as it relates to tanning and burning. This makes them an excellent resource in educating customers on avoiding burning and other related issues.

You will note that none of these resources are available when you tan outside. No one stands at the entrance to a beach conducting a skin type analysis or making sure you leave after a maximum amount of exposure.

We call indoor tanning Smart Tanning due to the additional information and tools provided to manage your UV exposure.

**Airbrush Tanning**
If you are concerned about UV exposure or are interested in getting immediate results most tanning salons have airbrush tanning available. Some salons have special spray tanning machines, others have technicians who airbrush the solution on by hand.

Whichever method you use, you will be sprayed with a solution whose primary ingredient is DHA (dihydroxyacetone). DHA interacts with amino acids in your skin and oxygen in the air to turn the outermost layer of skin a natural bronze color. The process is similar to when you cut an apple in half and the sugars are oxidized turning the flesh of the apple brown.

Most spray tans last approximately 5-7 days and fade naturally just like a UV tan. To prepare, it’s best to exfoliate evenly before your session and not put any unnecessary lotions on your skin. You will want to wait approximately 5 hours after your session before showering, swimming or exercising to get the best effect of your spray tan.

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Sources:

1. Tangpricha et al. Tanning is associated with optimal vitamin D status (serum 25-hydroxyvitamin D concentration) and higher bone mineral density. Am J Clin Nutr 2004;80:1645-9

2. Sources of Vitamin D Vitamin D Content

"No public Twitter messages." — portofinosun
Exhibit D
Increasing vitamin D level improves immunity and lowers cancer risk

Big News Network (ANI) Thursday 21st March, 2013

Researchers from Boston University School of Medicine (BUSM) have shown that improving vitamin D status by increasing its level in the blood could have a number of non-skeletal health benefits.

The study revealed for the first time that improvement in the vitamin D status of healthy adults significantly impacts genes involved with a number of biologic pathways associated with cancer, cardiovascular disease (CVD), infectious diseases and autoimmune diseases.

While previous studies have shown that vitamin D deficiency is associated with an increased risk for the aforementioned diseases, these results go a step further and provide direct evidence that improvement in vitamin D status plays a large role in improving immunity and lowering the risk for many diseases.

Vitamin D is unique in that it can be both ingested and synthesized by the body with sun exposure.

It is then converted by both the liver and kidneys to a form that the body can use.

An individual's level of vitamin D, or their vitamin D status, is determined by measuring the level of 25-hydroxyvitamin D in the blood.

Vitamin D deficiency, which is defined as a status of less than 20 nanograms per milliliter (ng/mL) of 25-hydroxyvitamin D, can cause a number of health issues, including rickets and other musculoskeletal diseases.

Recently, however, data suggests that vitamin D deficiency (greater than 20 ng/mL) and vitamin D insufficiency (between 21-29 ng/mL) is linked to cancer, autoimmune diseases, infectious diseases, type 2 diabetes and cardiovascular disease.

The study is published online in PLOS ONE. (ANI)
Increasing vitamin D level improves immunity and lowers cancer risk | B... http://www.bignewsnetwork.com/index.php/sid/213377328/scat/a1e025...
Exhibit E
A new study shows that suncream does not stop the skin from producing vitamin D.

After the concerted campaign in recent years warning us to protect ourselves from the sun, questions are being raised about the advisability of the great 'cover-up'.

While suncream prevents burning and so lowers the risk of skin cancer, fears have been voiced that it may stop your skin producing vitamin D.

Cases of the bone condition rickets - caused by a lack of vitamin D - have risen fourfold at the same time as suncream use has increased, and this correlation has been used to support the theory.

Yet a recent study seems to turn this on its head. For it seems you can make vitamin D when you are wearing suncream.
suncream.

Antony Young, a professor of experimental photobiology at St John's Institute of Dermatology, King's College London, recruited 79 men and women who were about to go on a week's holiday in Tenerife.

Their vitamin D levels were checked when they arrived. They then wore suncream from after breakfast until sundown.

'We know that people typically do not apply enough suncream to get the full benefits of it,' says Professor Young. 'You should use 2mg of suncream per centimetre of skin, but most people don't use anything like that much.

'I have calculated that when people apply a factor 30 suncream, the way they put it on means they get the equivalent protection of a factor 4.

'So we showed one group how to apply it and gave them a tube each day [of SPF 15] with the correct amount for them to apply. The other group were allowed to take their own suncream and apply it as they normally would.'

The results showed that even those who were slathered in suncream had a considerable increase in their vitamin D levels one week later.

'The group who applied their own suncream had an increase in vitamin D levels of 28 nanomoles (nml) per litre, but also had substantial sunburn,' says Professor Young, whose study, part-funded by Boots, is due to be published this year.

However, people in the group who had been taught how to apply suncream had an increase of 16 nml per litre of blood but did not burn.

'That is still a significant rise in vitamin D levels,' says Professor Young.

Suncreams filter out UVB - the part of the sun's rays that causes sunburn. However, UVB is also what stimulates our bodies to produce vitamin D.

Professor Young believes his results show that some UV will get through the suncream.

Vitamin D is vital for strong bones and may have many other health benefits. Studies have linked it to heart health, and it may also have a role in preventing certain cancers.

About 90 per cent of our vitamin D comes from sun exposure, and only 10 per cent from what we eat.

'It's said that 15 minutes' sun exposure, without suncream, to your head and arms each day during summer is enough to boost most people's levels,' says Dorothy Bennett, a professor of cellular biology at St George's, University of London.

She contends that creams with a higher SPF might produce different findings. 'However, this does show you can stay safe in the sun and still get enough vitamin D.'

Comments (6)

Share what you think

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- Worst rated

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Ian W, Reading, 1 year ago
So what he actually found was that sunscreen DOES reduce the amount of vitamin D produced but as most people don't put it on properly some vitamin D is still produced. The experiment should have had a control group that did NOT use sunscreen at all. There are lots of us out here that don't fall for the cosmetic companies sales campaigns. The cosmetics companies would have you use industrial strength degreasants (shower gels) developed by the cosmetic companies daily if not more often then use skin creams and sunscreen developed by the cosmetic companies to replace the oils washed off by the degreasants. Strange since people moved to shower gels and sunscreen the incidence of skin cancers has increased. Back in the 50's when people tended to have one bath night with soap and most did not use sunscreen but were careful about slowly increasing sun exposure, the skin cancer rates were lower.

Karen, Bedford, 1 year ago

These people went on holiday to Tenerife but if you are staying in England the reduction in vitamin D production (by almost half) when sunscreen is applied slavishly may be enough to take you into vitamin D deficiency.

patti28, kent, United Kingdom, 1 year ago

So no comment on your story which only weeks ago claimed that sunscreens had caused a 4 year boy’s rickets. A lot more care needs to be taken with these medical related stories as the fallout from incorrect stories can be huge - just look at MMR.

laws, bham, 1 year ago

Who funded the research, the sun lotion companies?

pete444, Merseyside, 1 year ago

The UV index in Tenerife at the moment is 12, in the UK 6 in the South and 3 in North Scotland. Try seeing if you can make vitamin d through sun cream here. The UV index in the UK never gets above 8.

fishbait, Inland NW, 1 year ago

So they say.
Exhibit F
Getting enough vitamin D is linked to reductions in heart disease, diabetes, multiple sclerosis and many forms of cancer—are you getting enough?
Exhibit G
When I moved to Buffalo last year and decided to compete for the title of Miss New York International, I knew I needed to find a tanning salon that was clean and comfortable. The minute I stepped into Total Tan, I knew I had found what I was looking for. Whether I am getting ready for an appearance or preparing for competition, the Total Tan staff is always friendly and knowledgeable, answering all of my questions about bed types and lotions to help me achieve my tanning goals. I try to protect my skin as much as possible, so the Mystic Tan option is FANTASTIC, and after discussing the process with the staff, I was worry-free and so pleased with the results. Total Tan has won me over and I will be a loyal customer for years to come!

Miss NY International™ 2013 Jesse LaDoue

Professional Basketball in Erie, Pa starts and ends with the Erie Bayhawks. The Hawks where once the home to Houston Rocket's star Jeremy Lin who started "Linsanity" when he was called up to the parent New York Knicks.

The Bayhawk's Dance Team look their best with the help of Mystic HD and UV bed and booth tanning from Total Tan. These beauties are community active in Charitable causes and have dance clinics for youth throughout the year.
This story is published to keep you abreast of a current event related to UV light as well as to bring awareness to Kidney Cancer. This information is not intended to be used by any party to make unwarranted health claims to promote sunbed usage. Indoor tanning businesses are obligated to communicate a fair and balanced message to all clients about their products and services including any potential risks associated with indoor tanning.

Cancer survivor Kurt Hollis wrote to Total Tan on February 4th to share a compelling story. A former Marine, Kurt was employed at the Veterans Hospital in Tomah, Wisconsin when it was discovered he had kidney cancer. In the article http://www.tomah.va.gov/features/No_One_Fights_Alone.asp, Mr. Hollis described the cancer as "renal cell cancer, grade 2 and slow moving." Kurt’s right kidney was removed and he is now in the process of constantly monitoring the remaining kidney by following strict dietary and medicinal routines. He recently moved to the Albany area and we wanted to share Kurt’s story as well as raise awareness about kidney cancer.

One’s kidney and Vitamin D go hand in hand. After his kidney surgery, Kurt was prescribed a monthly pill, which was 50,000 unit of a Vitamin D. His level of Vitamin D after the surgery was as low as 13 and with the prescription it got as high as 24, in January of 2012. According to Kurt, the normal level for him should have been 30. When Kurt moved to the Albany area he learned about the benefits of UV light and its relationship to Vitamin D. Kurt began tanning at Total Tan in Malta and Saratoga NY. During his January 2013 check Kurt’s vitamin D level was a 39. The staggering thing was Kurt has just been tanning once or twice per week and NOT taking the 50,000 unit of Vitamin D.

More than 60,900 people this year will be diagnosed with kidney cancer, according to the American Cancer Society. Less than one-fourth
will die from it.

Kidney cancer is among the 10 most common cancers in both men and women, the organization says. Cases have been rising slightly since the 1970s, but death rates have gone down slightly since the late 1990s.

Kurt asked us to post an orange ribbon above this story to research more on Kidney Cancer. March is Kidney Cancer Awareness Month.

Visit http://kureit.org/ to learn more.

Sources:
http://cjASN.asnjournals.org/content/3/5/1555.full
http://www.tomah.va.gov/features/No_One_Fights_Alone.asp
http://lacrossetribune.com/news/local/kidney-cancer-survivor-starts-research-fundraiser/article_89ab867c-adce-11e0-9216-001cc4c002e0.html
http://kureit.org/

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Exhibit H
Sunshine vitamin 'may treat asthma'

By James Gallagher
Health and science reporter, BBC News

The amount of time asthma patients spend soaking up the sun may have an impact on the illness, researchers have suggested.

A team at King's College London said low levels of vitamin D, which is made by the body in sunlight, was linked to a worsening of symptoms.

Its latest research shows the vitamin calms an over-active part of the immune system in asthma.

However, treating patients with vitamin D has not yet been tested.

People with asthma can find it hard to breathe when their airways become inflamed, swollen and narrowed.

Most people are treated with steroids, but the drugs do not work for all.

Sunshine
"We know people with high levels of vitamin D are better able to control their asthma - that connection is quite striking," said researcher Prof Catherine Hawrylowicz.

Her group investigated the impact of the vitamin on a chemical in the body, interleukin-17. It is a vital part of the immune system and helps to fight off infections.

However, it can cause problems when levels get too high and has been strongly implicated in asthma.

In this study, published in the Journal of Allergy and Clinical Immunology, vitamin D was able to lower levels of interleukin-17 when it was added to blood samples taken from 28 patients.

The team is now conducting clinical trials to see if giving the sunshine vitamin to patients could ease their symptoms. They are looking at patients who do not respond to steroids as they produce seven times more interleukin-17 than other patients.

Prof Catherine Hawrylowicz told the BBC: "We think that treating people with vitamin D could make steroid-resistant patients respond to steroids or let those who can control their asthma take less steroids."

She said a culture of covering up in the sun and using sun cream may have increased asthma rates, but "it is a careful message because too much sun is bad for you".

Malayka Rahman, from the charity Asthma UK, said: "For the majority of people with asthma, current available medicines are an effective way of managing the condition but we know that they don't work for everyone, which is why research into new treatments
is vital.

"We also know that many people with asthma have concerns about the side effects of their medicines so if vitamin D is shown to reduce the amount of medicines required, this would have an enormous impact on people's quality of life.

"We look forward to the results of the clinical trial."

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Exhibit I
Blood pressure benefits of sun may outweigh cancer risks

MAY 10, 2013
EDINBURGH, Scotland, Friday May 10, 2013 – The health benefits derived from exposing skin to sunlight may far outweigh the risk of developing skin cancer, according to scientists.

Edinburgh University research suggests sunlight helps reduce blood pressure, lowering heart attack and stroke risks and even prolonging life.

Researchers said that until now vitamin D production had been considered the sole benefit of the sun to human health. But UV rays have been found to release a compound that lowers blood pressure.

Production of the pressure-reducing compound, nitric oxide, is separate from the body's manufacture of vitamin D, which rises after exposure to sunshine.

During the research, dermatologists studied the blood pressure of 24 volunteers under UV and heat lamps.

In one session, the volunteers were exposed to both UV rays and the heat of the lamps. In the other, the UV rays were blocked so that only the heat affected the skin.

The results showed that blood pressure dropped significantly for an hour after exposure to UV rays, but not after the heat-only sessions. Scientists said that this suggested it was the sun’s UV rays that brought health benefits.

The volunteers’ vitamin D levels remained unaffected in both sessions.

Researchers said more studies would be carried out to determine if it is time to reconsider advice on skin exposure to
Blood pressure benefits of sun may outweigh cancer risks: Caribbean360

sunlight.

Dr Richard Weller, a senior lecturer in dermatology at Edinburgh University, said: “We suspect that the benefits to heart health of sunlight will outweigh the risk of skin cancer.” The work we have done provides a mechanism that might account for this, and also explains why dietary vitamin D supplements alone will not be able to compensate for lack of sunlight.

“We now plan to look at the relative risks of heart disease and skin cancer in people who have received different amounts of sun exposure.

“If this confirms that sunlight reduces the death rate from all causes, we will need to reconsider our advice on sun exposure.” (BBC News) Click here (http://caribbean360.list-manage.com/subscribe?u=aaadcd82d2a009c91af77749d&id=350247989a) to receive free news bulletins via email from Caribbean360. (View sample (http://insiteinc.com/newsletter723/newsletter_view.cfm?newsID=1277))

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Alexa Site Ranking
Blood pressure benefits of sun may outweigh cancer risks: Caribbean360 http://www.caribbean360.com/news/blood-pressure-benefits-of-sun-may...
Exhibit J
Women who regularly sunbathe live longer, a leading cancer specialist has claimed.

Hakan Olsson says his research shows the health benefits of exposure to sunlight ‘far outweigh’ the danger of skin cancer.

He said vitamin D produced by the body when tanning gives vital protection against blood clots, diabetes and some tumours.

But the professor’s claims, based on a study of 40,000 women, sharply contradict warnings that sun exposure is behind soaring levels of skin cancer.

Rates of malignant melanoma, the deadliest form of the disease, have quadrupled since 1980. Experts blame the rise on sunbeds and the increasing numbers of Britons going abroad on cheap package holidays.

But Professor Olsson, who works in the oncology unit at Lund University in Sweden, believes the benefits of the sun ‘far outweigh the negatives’.

He said there was overwhelming evidence that exposure to the sun helps protect against blood clots in the leg, which claim the lives of 25,000 Britons a year.

These clots, known as deep vein thromboses, have been shown to be far more prevalent in winter than summer.

Professor Olsson, who was presenting his research at the Swedish Society of Medicine, cited other studies showing that more patients are diagnosed with diabetes in the colder months, a phenomenon attributed to a lack of vitamin D.

For his study, he examined tanning habits and the incidence of illnesses such as heart disease, diabetes or malignant melanoma.

‘Our studies show that women with active sunbathing habits live longer,’ he said.

Professor Olsson also suggested that skin cancer was not caused by sunbathing alone.

‘I and many others believe that there may be factors other than the sun that influence the risk of malignant melanoma,’ he said.

‘The burning of the skin in the sun is not enough to explain this.’

But Ed Yong, of Cancer Research UK, said: ‘While some sunshine is good for us and vitamin D is important, other research suggests that vitamin D protects against other disease such as cancer or heart disease.

‘Not burning is the most important thing people can do to protect themselves against developing skin cancer.'
damaged and increases the risk of the disease.

‘Everyone is different and you’re most at risk from skin cancer if you have fair skin, red hair, lots of freckles, moles, or a family history of the disease. These people should take extra care in the sun.’

Experts warn that most Britons lack vitamin D, which is found in oily fish, eggs and butter. Ninety per cent of our supply of it comes from the action of sunlight on the skin.

Comments (43)
Share what you think

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Nicky, Ipswich, Suffolk, 3 years ago
Look how relaxed that woman is - sunbathing gets you a DOUBLE benefit; all that lovely Vitamin D, plus some pretty solid stress relief. How long until the Northern Hemisphere gets decent amounts of sunshine again? *sigh*

1
14
Click to rate

Vanessa, Nice, France, 3 years ago
Has there ever been any research done on the potentially carcinogenic chemicals contained in sun screens? I have always felt that plastering huge amounts of suntan lotion on one’s skin every two hours couldn’t be completely harmless, considering the list of chemical listed in the contents!!

2
27
Click to rate

S, plombags, Lon, 3 years ago
it’s the Vit D, which studies now show to behave more like a hormone than a vitamin. Cheap to produce which is why the research companies will not invest in more research to understand exactly how it works.

0
19
Click to rate

Claire, USA, 3 years ago
Getting a healthy dose of Vitamin D does NOT equate to tanning. Why would you encourage such harmful behavior with such a headline, DM?

31
9
Click to rate

Dave Sang, Bognor Regis UK, 3 years ago
If you don’t give any data and you don’t mention the source so that we can read more, we cannot make a reasoned judgement of this article and its claims.

6
11
Click to rate

damien trollope, oxford, 3 years ago
Your comments:Tanned women live longer (as long as you sunbathe sensibly), say scientists.........................Does that mean orange ones as well.

22
6
Click to rate

Hari Smith, SOuthampton, 3 years ago
Looks like the old mantra of “everything in moderation” wins again.

1
31
Click to rate
D. L. Smith, Tucson, AZ USA, 3 years ago

We are in the midst of an important evolutionary study being (unintentionally) conducted world-wide. One group "chooses" to avoid UVR exposure while the other group "chooses" to expose their body to UVR year-round and take a 1,000 to 2,000 IU vitamin D supplement daily. One group, i.e., those who choose to expose their body to UVR year-round (and take a 1K-2K IU vitamin D supplement daily) will maintain a blood level of vitamin D (25-OH-D) that is "consistent" with good health and the other group, i.e., the group that avoids UVR exposure will have insufficient/deficient vitamin D levels. Which group has the "best chance" of living a long and healthy life? As the Olsson study indicates, the "UVR exposure" group has the highest probability of avoiding disease. So a question: Why does the dermatology community and the sunscreen industry recommend UVR avoidance? The answer can be found in the old Roman adage - Qui bono? Who profits from this.

John, NY, 3 years ago

Time to go to the tanning salon

Alice P, London, 3 years ago

I believe it. I think it's the Gillian McKeith factor. People who are more relaxed in their attitude to life and don't bother with what experts have to say probably have some kind of overall advantage in regards to life expectancy, as they are probably more likely to enjoy better mental health (less anxiety and illness-inducing stress than the Gillian McKeith types) which trumps risk factors such as sun exposure or poor diet.

The views expressed in the contents above are those of our users and do not necessarily reflect the views of MailOnline.

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Exhibit K
Vitamin D replacement improves muscle efficiency -- ScienceDaily

http://www.sciencedaily.com/releases/2013/03/130317221446.htm

New research shows for the first time a link between vitamin D levels and muscle efficiency. Vitamin D supplementation may also be effective in improving skeletal muscle function. The findings may explain the physical fatigue commonly experienced by patients with vitamin D deficiency, with broad implications for a large section of society.

Vitamin D is a hormone produced in the skin using energy from sunlight, and to a lesser extent derived from dietary sources. Vitamin D deficiency is a significant public health problem as diagnosed cases are on the rise and the hormone is essential for good bone health. Alongside poor bone health, muscle fatigue is a common symptom in vitamin D deficient patients. This fatigue could be due to a problem in the mitochondria: the 'power stations' within each cell of the body. Mitochondria use glucose and oxygen to make energy in a form that can be used to run the cell (an energy-rich molecule called ATP). Muscle cells need large amounts of ATP for movement and they use phosphocreatine as a ready and available energy source to make ATP. The mitochondria also replenish this phosphocreatine store after muscle contraction. Measurement of the time taken to replenish the phosphocreatine store is a measure of mitochondrial efficiency: better mitochondrial function is associated with shorter phosphocreatine recovery times.

Researchers from Newcastle University, led by Dr Akash Sinha who also works within the Newcastle upon Tyne Hospitals NHS Foundation Trust, investigated phosphocreatine recovery times in patients with vitamin D deficiency. They employed a non-invasive magnetic resonance scan to measure phosphocreatine dynamics in response to exercise in the calf muscles of 12 patients with severe vitamin D deficiency before and after treatment with vitamin D. This is the first time a study of this kind has been conducted.

The team found that phosphocreatine recovery significantly improved after the patients took a fixed dose of oral vitamin D for 10–12 weeks (average phosphocreatine recovery half time decreased from 34.4sec to 27.8sec, p<0.001). All patients reported an improvement in symptoms of fatigue following supplementation. In a parallel study, the group demonstrated that low Vitamin D levels were associated with reduced mitochondrial function (r=-0.41, p=0.009).

The research shows for the first time that vitamin D levels are correlated with muscle efficiency, and that muscle aerobic metabolism improves with Vitamin D supplementation. Whilst this is a small study, it establishes clear proof of principle and important recommendations for vitamin D nutrition from an evidence-based perspective on muscle mitochondrial metabolism during exercise: a window into what is really going on in the muscle as it works.
"Patients with vitamin D deficiency often experience symptoms of muscle fatigue. Our findings in a small group of patients with very low vitamin D levels show that muscle efficiency significantly improves when vitamin D status is improved."

"We'll need further research in more patients to work out how this is happening and whether non-deficient patients can benefit from this too."

**Story Source:**
The above story is based on materials provided by Society for Endocrinology. Note: Materials may be edited for content and length.

**Journal Reference:**
1. Akash Sinha, Kieren Hollingsworth, Steve Ball, Tim Cheetham. Improving the vitamin D status of vitamin D deficient adults is associated with improved mitochondrial oxidative function in skeletal muscle. *Endocrine Abstracts*, 2013; DOI: 10.1530/endoabs.31.OC1.6

**Cite This Page:**
MLA  
APA  
Chicago  
Exhibit L
A recent study showed that vitamin D helps muscle growth & slows age-related muscle deterioration. Are you as strong as you’d like to be?
Exhibit M
Vitamin D may help prevent Alzheimer's disease - UPI.com http://www.upi.com/Health_News/2013/03/05/Vitamin-D-may-help-prev...
"Our new study sheds further light on a possible role for substances such as vitamin D3 and omega-3 in boosting immunity to help fight Alzheimer's," Fiala said in a statement.

In Alzheimer's patients and healthy controls, they isolated the critical immune cells macrophages from the blood. Macrophages are responsible for gobbling up amyloid-beta and other waste products in the brain and body.

The study, published in the Journal of Alzheimer's Disease, found both D3 and omega-3 fatty acids improved the ability of the Alzheimer's disease patients' macrophages to gobble-up amyloid-beta, and they inhibited the cell death that is induced by amyloid-beta.

Topics: Alzheimer's Disease, David Geffen
Vitamin D, omega-3 may help prevent Alzheimer's disease - UPI.com

FROM THE WEB

- Warren Buffett Reveals How Anyone With $40 Can Become A Millionaire (The Motley Fool)
- 14 Social Security Benefits You Haven't Been Taking (Newsmax)
- Must-Have Golf Clubs Being Sold for Next to Nothing (Lifefactopia.com)
- Look Great on the Go With This Travel Sized Skin Bronzer (Joyus)
- The #1 WORST Food For Your Digestion (Are You Eating It?) (Toxic Belly Bug Fix)

FROM UPI.COM

- Spinach compound may help people feel 'fuller' and eat less
- Ecstasy causes changes in the brain
- Exercise combats side effects, long-term effects of cancer treatment
- Genomic test can help predict if men's prostate cancer is aggressive
- Grapes may lower blood pressure, aid heart

by Taboola

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  Jun 11
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  Jun 10
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- 'Dumb and Dumber To' releases first trailer
- Lea Michele reportedly dating gigolo Matthew Paetz
Vitamin D, omega-3 may help prevent Alzheimer's disease - UPI.com
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Sun shoots off third solar flare in two days

Senate passes VA bill to let vets seek outside care

Vitamin D, omega-3 may help prevent Alzheimer's disease - UPI.com

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Joni Ernst apologizes after husband calls Hillary Clinton 'hag' on Facebook

Sun shoots off third solar flare in two days

House Dems gather for 'Witness Wednesdays' to push for unemployment

Senate passes VA bill to let vets seek outside care

MOST POPULAR

1. Doctors remove 27-pound tumor from Georgia woman

2. Moles linked to risk of breast cancer

3. Watercress, Chinese cabbage,
4. Women choosing a contraceptive have different priorities than their doctor

5. Pregnant women: eat more fish
Vitamin D, omega-3 may help prevent Alzheimer's disease - UPI.com

http://www.upi.com/Health_News/2013/03/05/Vitamin-D-may-help-prev...
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8 hours ago

RECOMMENDED

Warren Buffett
Spinach
Vitamin D, omega-3 may help prevent Alzheimer's disease - UPI.com

http://www.upi.com/Health_News/2013/03/05/Vitamin-D-may-help-prev...
Exhibit N
Europeans started tanning indoors with sunlamps that emitted ultraviolet (UV) light as a therapeutic exercise to harness the positive psychological and physiological effects of exposure to UV light. This practice became widespread in Europe, particularly in the sun-deprived northern countries by the 1970s—several years before the first indoor tanning facility was established in the United States. Although indoor tanning is considered a cosmetic exercise in the United States, the industry's roots are therapeutic and many Americans do in fact visit tanning facilities for that purpose.

LITTLE KNOWN FACT: 1801 UV light's was discovered

LITTLE KNOWN FACT: 1890 the First Tanning Light was Invented by Niels Ryberg Finsen. He received the Nobel Prize for this invention.

People enjoy sunlight and tanning—outdoors, under the sun, or indoors in a professional tanning facility—for myriad reasons. While tanning facilities in the United States are equipped to deliver cosmetic tans using protocol designed to minimize the risk of sunburn, we know that clients come to facilities for more than just a good tan; they also enjoy the positive psychological and physiological effects of regular exposure to ultraviolet light. The professional indoor tanning industry’s scientifically supported position is summed up in this declaration: Moderate tanning, for individuals who can develop a tan, is the smartest way to maximize the potential benefits of sun exposure while minimizing the potential risks associated with either too much or too little sunlight.

FACT: 2011
The professional indoor tanning industry’s scientifically supported position is summed up in this declaration: Moderate tanning, for individuals who can develop a tan, is the smartest way to maximize the potential benefits of sun exposure while minimizing the potential risks associated with either too much or too little sunlight.

The professional indoor tanning industry teaches sunburn prevention—both indoors in the salon, and outdoors under the sun—and evidence suggests that we teach this message more effectively than those who promote complete sun avoidance. According to tanning industry research, non-tanners sunburn more often than people who tan indoors.

Since the mid-1980s, there has been considerable public health concern and attention focused on the risks of overexposure to ultraviolet light. The indoor tanning industry shares this concern. However, in the course of this public debate, we believe that the risks associated with UV light have been overstated and the benefits ignored.

Fortunately, public awareness of the facts has increased in recent years. Indeed, there are known physiological and psychological benefits associated with UV light exposure, and many other potential benefits appear likely, pending further research. The risks of UV light exposure, on the other hand, are mainly associated with sunburn and overexposure (particularly among individuals who are fair-skinned or genetically predisposed to skin damage) and are easily managed by practicing sunburn prevention.

The professional indoor tanning salon industry seeks to be part of the solution in the ongoing battle against sunburn by teaching people how to identify an appropriate and practical lifelong skin care regimen.
Exhibit O
Feeling the winter blues or a little post-holiday stress? Nothing perks you up like a little vitamin D: bit.ly/S9F8Wu
Exhibit P
Skyla Ormond @skylaormond · 18 Feb 2013
My skin is SO bad right now that I honestly look like a meth head who has been picking their skin.

Portofino Sun Center @PortofinoSun
@skylaormond A little #vitaminD can help clear up problem #skin! Have you tried tanning?

2:47 PM · 18 Feb 2013

Don’t miss any updates from Portofino Sun Center

Sign up for Twitter
Exhibit Q
June Specials

6 Mystic HD Spray Tan Sessions

$62.00

35% off
(Sessions expire 1 year from purchase date)

30% OFF All One Week Unlimited Packages

Level Six .................. $40.95
Level Five .................. $31.95
Level Four .................. $27.95
Level Three .................. $20.95
Level Two .................. $16.95
Level One .................. $9.95

June Lotion Sales

Love Hurts..............
Sale $41.00  was $52.00

Jeweled.................
Sale $72.00  was $90.00

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Exhibit R
CURRICULUM VITAE
Sophie Julia Balk M.D.

March 2015

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              Bronx, New York, 10461
              718 405 – 8090
              718 405 – 8091 (fax)
              sbalk@montefiore.org

EDUCATION
1971-1974  Albert Einstein College of Medicine, Bronx, NY, M.D. 1974

POSTDOCTORAL TRAINING
1974-1975  Pediatric Internship, Montefiore Medical Center, Bronx, NY
1975-1977  Pediatric Residency, Montefiore Medical Center, Bronx, NY

ACADEMIC APPOINTMENTS
1977-1979  Clinical Instructor, Department of Pediatrics, Mount Sinai School of
          Medicine, New York, NY
1979-1981  Instructor in Pediatrics, Albert Einstein College of Medicine, Bronx, NY
1981-1996  Assistant Professor of Pediatrics, Albert Einstein College of Medicine,
          Bronx, NY
1996-2005  Associate Professor of Pediatrics, Albert Einstein College of Medicine,
          Bronx, NY
2005 -     Professor of Clinical Pediatrics, Albert Einstein College of Medicine,
          Bronx, NY

HOSPITAL APPOINTMENTS
1977-1979  Assistant Attending Pediatrician, Metropolitan Hospital, New York, NY
1977-1979  Assistant Attending Pediatrician, Mount Sinai Hospital, New York, NY
1977-1979  Assistant Attending Pediatrician, New York Hospital New York, NY
1979-1998  Attending Pediatrician, Jacobi Medical Center (formerly Bronx Municipal
          Hospital Center), Bronx, NY
1998-      Attending Pediatrician, Pediatric Academic Associates, Children’s Hospital
          at Montefiore Bronx, NY

EMPLOYMENT
1977-1979  Pediatrician, National Health Service Corps, Settlement Health and Medical
          Practice, New York, NY
1979-1998  Pediatrician, Pediatric Ambulatory Care Division, Jacobi Medical
          Center/Albert Einstein College of Medicine, Bronx NY
1998-      Pediatrician, Pediatric Academic Associates, Children’s Hospital at
          Montefiore, Bronx NY

BOARD CERTIFICATION
1979       Diplomate, American Board of Pediatrics
2010       American Board of Pediatrics Maintenance of Certification Exam Passed
PROFESSIONAL SOCIETY MEMBERSHIP
1979- Fellow, American Academy of Pediatrics
1980- Member, Academic Pediatric Association
1979-1989 American Public Health Association
1985-1989 Society for Adolescent Medicine
2009- Fellow, New York Academy of Medicine

AWARDS/HONORS
1986 Award for best paper presented at the plenary session of the 1986 Ambulatory Pediatric Association for “Pediatricians’ Attitudes Towards Motherhood during Residency”.


2002 American Academy of Pediatrics District II Chapter 3 Award for Excellence

PROFESSIONAL ACTIVITIES
Journal Reviewer
Pediatrics
Journal of Pediatrics
Archives of Pediatrics and Adolescent Medicine
Case Studies in Environmental Medicine (Agency for Toxic Substances and Disease Registry, DHHS)
Academic Pediatrics
Journal of Cutaneous Medicine and Surgery
Archives of Diseases in Childhood
Journal of Perinatal Medicine
American Journal of Preventive Medicine

Editorial Appointments


1999 Associate Editor, American Academy of Pediatrics Pediatric Environmental Health, American Academy of Pediatrics, Elk Grove Village, IL, 1999
Sophie Julia Balk, M.D.


Service on professional committees
Regional Professional Committees
American Academy of Pediatrics
1985-89   Chairperson, Committee on Women in Pediatrics, District II, Chapter 3
1991-2003  Member, Executive Council, District II, Chapter 3
1989-     Member, Committee on Environmental Health, District II, Chapter 3
1991-1995  Chairperson, Committee on Environmental Health, District II, Chapter 3
1992-1995  Member, Task Force on Lead Poisoning, District II
2002-2011  Representative of AAP District II to the Medical Society of the State of New York Task Force on Tobacco.

Other committees
2003-2004  Member, Project to Investigate Lead Poisoning in Pregnant Women. A project of the Mount Sinai Center for Children’s Health and the Environment and the New York City Department of Health and Mental Hygiene Lead Poisoning Prevention Program
2008-2009  Consultant, NYC Department of Health and Mental Hygiene Clinical Guidelines for Children and Adolescents Exposed to the World Trade Center Disaster
2011      Consultant, NYC Department of Health and Mental Hygiene Wave 3 Survey of Children and Adolescents Exposed to the World Trade Center Disaster
Sophie Julia Balk, M.D.

National Professional Committees
American Academy of Pediatrics
1995-1999 Member, Committee on Environmental Health
1999-2003 Chairperson, Committee on Environmental Health
2012 - Member of Executive Committee and Membership Chair, AAP Provisional Section on Tobacco Control

Academic Pediatric Association (formerly Ambulatory Pediatric Association)
1992-2000 Founder and Chairperson, Special Interest Group on Environmental Health
2000 - Member, Special Interest Group on Environmental Health
2002 - Member, Special Interest Group on Pediatric Tobacco Issues
2005-2009 Co-Chairperson, Special Interest Group on Pediatric Tobacco Issues

Other National Professional Committees
1997 Member, Expert Panel Workshop on Pediatric Environmental Medicine. Agency for Toxic Substances and Disease Registry, DHHS
1998 Member, Environmental and Occupational Medicine Working Group National Board of Medical Examiners, Philadelphia, PA
2000-2001 Member, Advisory Committee on Genetically Modified Organisms, Gerber Foods
2000-2002 Member, Science and Research Work Group, Office of Children’s Health Protection Advisory Committee, US Environmental Protection Agency
2000 Member, Workshop on Issues Associated with Selecting Age Groups for Assessing Exposure in Children, U.S. Environmental Protection Agency
2006-2007 Member, Center for the Evaluation of Risks to Human Reproduction (CERHR) Hydroxyurea Expert Panel
2007  Reviewer for projects funded by the Pennsylvania Department of Health
       Master Tobacco Settlement

2008  Member, Science Advisory Panel, US Environmental
       Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
       Scientific Advisory Panel (FIFRA SAP) to consider and review the
       Agency’s Evaluation of the Toxicity Profile of Chlorpyrifos

2009  Member, US Environmental Protection Agency Federal Insecticide,
       Fungicide and Rodenticide Act Scientific Advisory Panel (FIFRA SAP) on
       the Evaluation of Updated Standard Operating Procedures for Residential
       Exposure Assessment.

2010  Member, Education and Communication Workgroup of the National
       Conversation on Public Health and Chemical Exposures. US Centers for
       Disease Control and Prevention and Agency for Toxic Substances and
       Disease Registry

Other professional activities

Local
1980-91, 1994-98  Director, Adolescent Clinics, Jacobi Medical Center
1985-1998  Director, Teenage Mothers (TAM) Program, Jacobi Medical Center
1988-1992  Director, Teenage Mothers (TAM) Grandmothers’ Program, Jacobi Medical Center
1999-2003  Medical Director, Pediatric Resource Center, Pediatric Academic Associates.
2009 -  Member, Montefiore Adolescent Primary Care Initiative (MAPCI)

Regional
1983-1991  Member, Bronx Task Force on Child Abuse and Neglect

National
1987-1989  Co-Chair, Pediatric Environmental Section, American Public Health Association
1987-1989  Academic Pediatric Association Liaison Representative to the Women’s
           Committee of the Association of American Medical Colleges (AAMC)
1992-1999  Academic Pediatric Association Liaison Representative to the Children’s
           Environmental Health Network
1995-1999  American Academy of Pediatrics Liaison Representative to the Education
           Subcommittee of the Children’s Environmental Health Network
2000 -  American Academy of Pediatrics Liaison Representative to the National
          Council on Skin Cancer Prevention
2001  Moderator, Legislative Briefing on Pediatric Environmental Health hosted
2004-2014 Member, American Academy of Pediatrics Julius B Richmond Center of Excellence Tobacco Consortium
2007-2008 Fellow, Teaching and Learning Fellowship, Department of Medical Education, University of Southern California, Los Angeles CA.
2014 Peer Reviewer, US Centers for Disease Control and Prevention National Center for Chronic Diseases Prevention and Health Promotion and the Prevention Research Centers. Special Interest Project Applications Panels on Tobacco Cessation and Cancer Care Networks, June 2014
2015 - Co-chairperson, National Council on Skin Cancer Prevention

**International**
2001-2009 Member, Board of Directors, World Information Transfer, New York, NY

**TEACHING EXPERIENCE**
1981-1985 Director, 4th year Medical Student Clerkship in Ambulatory Pediatrics, Jacobi Medical Center
1982-1998 Faculty preceptor, 3rd year Clerkship in Pediatrics, Jacobi Medical Center.
1979-1998 Faculty preceptor, Residency Program in Pediatrics, Jacobi Medical Center Albert Einstein College of Medicine
1996-2001 Faculty Preceptor, Generalist Mentorship Program, Albert Einstein College of Medicine
1998 - Faculty, Residency Program in Pediatrics, Children’s Hospital at Montefiore
2000-2003 Organizer and PI, “Promoting Environmental Health Education Among Pediatric Chief Residents”, AAP Committee on Environmental Health workshops held for chief residents at annual meetings of Pediatric Academic Societies. Funded by US Environmental Protection Agency
Committee Appointments

AECOM Committees
1983-1992  Committee on Admissions
1985-1991  Member, Social and Behavioral Sciences Subcommittee, Human Values Committee, Educational Policy and Planning Committee
1997-2000  Committee on Appointments and Promotions to Associate Professor
1998-2001  Preconception Counseling Work Group
1998-2001  Breastfeeding Promotion Committee
2012 -  Perinatal Smoking Work Group

Jacobi Medical Center Committees
1982-1985  Admitting, Emergency and OPD Committee
1982-1985  Member, Medical Student Education Committee
1987-1989  Credentials Committee
1991-1995  Committee on Safety Management

Department Committees
1985-1987  Committee on Breastfeeding Employees
2011 -  Member, Montefiore Adolescent Primary Care Initiative (MAPCI)

Research/clinical program/educational program grant support
Previous
1984-1989  Office of Adolescent Pregnancy Programs, HHS.
PI: Steven Rosser, PhD, University of Texas Sciences Center, Dallas, Texas
Role: Site Director
Title: A National Demonstration of an Adolescent Family Life Program.

Title: The Teenage Mothers (TAM) Grandmothers’ Program.

1993-1995  Department of Pediatrics, MMC/AECOM.
Title: Pediatricians’ Attitudes Towards Lead Poisoning, $10K direct costs

1999-2000  Ambulatory Pediatric Association Region II
Title: A Survey of Pediatric Program Directors Regarding Teaching and Counseling about Smoking Cessation and Smoking Prevention.
Total direct costs: $500

2001-2002  The Medical and Health Research Association of New York (MHRA)
Role: Co-PI with Danielle Laraque MD
Title: The Training of Pediatric Clinicians in Smoking Cessation Counseling.
Total Direct costs: $15K funding granted to the American Academy of Pediatrics, District II, Chapter 3.
Role: PI
Title: Promoting Environmental Health Education Among Pediatric Chief Residents.
Total direct costs: $375K funding granted to the American Academy of Pediatrics for workshops to be conducted by the American Academy of Pediatrics Committee on Environmental Health at the 2001, 2002 and 2003 meetings of the Pediatric Academic Societies

1999-2004  Agency for Toxic Substances and Disease Registry, HHS. Cooperative Agreement 650/CCU587529-01 granted to the American Academy of Pediatrics
Title: A Partnership to Establish an Environmental “Safety Net” for Children.
Role: PI
Total direct costs: $280K granted to the American Academy of Pediatrics

2004-2005  Agency for Toxic Substances and Disease Registry, DHHS
Title: Mini-course in Pediatric Environmental Health
Role: PI
Total direct costs: $25K granted to the American Academy of Pediatrics

2003-2006  US Environmental Protection Agency.
Title: Smoke Free Homes: Pediatric Clinicians Making Children’s Homes Smoke Free. PI – Dana Best MD, MPH, CNMC, Washington DC
Role: Curriculum Director
Total Direct Costs. 10% salary support and fringe

2004-2010  New York State Department of Health Tobacco Control Program.
Title: Bronx BREATHEs
PI – AH Strelnick MD, Department of Family Medicine, MMC
Role: Co-Investigator
Total Direct Costs. 10% salary support and fringe
INVITED PRESENTATIONS


Sophie Julia Balk, M.D.


57. Balk SJ. Spotlights on Careers in Public Health Presentation given to Pediatric Environmental Health Fellows, Mt Sinai Medical Center, January 10, 2012.


60. Balk SJ. Ultraviolet Radiation: What Pediatricians Need to Know. Pediatric Grand Rounds at Norwalk Hospital, Norwalk CT. January 22, 2013.

62. Why Children Often are More Susceptible to Environmental Toxicants Compared to Adults. Presented at the Blue Mountain Conference on Toxic Chemicals, Blue Mountain Lake NY, June 13, 2013.

63. Balk SJ. Endocrine Disruptors: How Can We Protect Our Children? Pediatric Grand Rounds, Bronx Lebanon Hospital, September 17, 2013.

64 Balk SJ. Update on Tobacco Issues. Pediatric Grand Rounds, Norwalk Hospital, Norwalk CT, May 27, 2014.

65. Sun Protection and Indoor Tanning: What Pediatricians Need to Know. Pediatric Grand Rounds presented at Queens Hospital Center, Queens NY, June 12, 2014.

INVITED PRESENTATIONS (SELECTED INTERNAL)


ORIGINAL PUBLICATIONS IN REVIEWED JOURNALS


**STATEMENTS OF THE AMERICAN ACADEMY OF PEDIATRICS COUNCIL (FORMERLY COMMITTEE) ON ENVIRONMENTAL HEALTH**


BOOKS


INVITED CHAPTERS IN BOOKS


OTHER PUBLICATIONS


 INVITED POWERPOINT PRESENTATIONS
1. Balk SJ. Taking an Environmental Health History. Prepared for the Children’s Environmental Health Faculty Champions Workshop sponsored by the National Environmental Education & Training Foundation (NEETF), July 2006


 INVITED AAP PREP AUDIO
ABSTRACTS PRESENTED


WORKSHOPS PRESENTED AT NATIONAL MEETINGS


Exhibit S
Curriculum Vitae

Part I. General Information

NAME: David E. Fisher
TITLE: Chief, Dermatology Department
Director, Melanoma Program MGH Cancer Center
Director, Cutaneous Biology Research Center
OFFICE ADDRESS: Massachusetts General Hospital
Bartlett Hall, Room 604
55 Fruit Street
Boston, MA 02114
617-643-5428   fax: 617-653-6588
HOME ADDRESS: 510 Ward St. Newton, MA 02459
(617) 969-0713
EMAIL: dfisher3@partners.org
PLACE OF BIRTH: Perth Amboy, New Jersey

EDUCATION:

1975-79  BA, Swarthmore College (Chemistry & Biology)
1975-79  Diploma in Cello, Curtis Institute of Music
1979-84  Ph.D., Rockefeller University, (Profs. Henry Kunkel & Gunter Blobel)
1979-85  M.D., Cornell University Medical College

POSTDOCTORAL TRAINING:

Internship and Residency:

1985-86  Intern in Internal Medicine, Massachusetts General Hospital,
         Boston, MA
1986-88  Resident in Internal Medicine, Massachusetts General Hospital,
         Boston, MA

Subspecialty Training:

1989-93  Fellow in Pediatric Hematology and Oncology,
The Children's Hospital and Dana Farber Cancer Institute, Boston, MA
1989-93  Fellow in Medical Oncology, Dana Farber Cancer Institute,
         Boston, MA
Research:

1990-93  Postdoctoral Research Fellow, with Professor Phillip Sharp, Center for Cancer Research, Massachusetts Institute of Technology, Cambridge, MA

LICENSURE AND CERTIFICATION:

1987  Massachusetts Medical License # 57683
1989  Board Certified in Internal Medicine by American Board of Internal Medicine
1991  Board Certified in Clinical Oncology by American Board of Internal Medicine

ACADEMIC APPOINTMENTS:

1993-  Assistant Professor, Harvard Medical School
1993-  Faculty member of Biological and Biomedical Sciences graduate program, Harvard Medical School, Boston, MA
1998-  Associate Professor of Pediatrics, Harvard Medical School
2005-  Professor of Pediatrics, Harvard Medical School
2008  Edward Wigglesworth Professor of Dermatology, Harvard Medical School

HOSPITAL APPOINTMENTS:

1993-2007  Attending Physician, Department of Hematology/Oncology, The Children's Hospital and Dana Farber Cancer Institute, Harvard Medical School, Boston, MA
2004-2007  Director, Melanoma Program in Medical Oncology, Dana Farber Cancer Institute
2008-  Chief, Department of Dermatology, Massachusetts General Hospital
        Director, Melanoma Program, Massachusetts General Hospital Cancer Center
        Director, Cutaneous Biology Research Center, Massachusetts General Hospital

MAJOR VISITING APPOINTMENTS:

1997  Visiting Professor in Cancer Biology, Univ. of Nebraska
1999  Visiting Professor of Cancer Biology, University of Florida at Gainesville

HOSPITAL SERVICE RESPONSIBILITIES:
1993-2007 Attending Physician, Pediatric Oncology inpatient service, Children’s Hospital
1993-2007 Attending Physician, Pediatric Oncology outpatient service, Jimmy Fund Clinic, Dana Farber Cancer Institute

MAJOR ADMINISTRATIVE RESPONSIBILITIES:

1993-95 Scientific Advisory Board, Physiologica
1994 Consultant, BASF
1995- Consultant, Novartis Pharmaceuticals
1996-2006 Scientific Review Board, The Medical Foundation, Young Investigator’s Awards
1998 Consultant, Boston Scientific
2001-2014 Scientific Advisory Board, William Guy Forbeck Cancer Research Foundation
2002-03 Scientific Advisory Board, Triton Biosystems Inc.
2003- Scientific Advisory Committee, Melanoma Research Foundation
2004-07 Director, Melanoma Program in Medical Oncology, Dana Farber Cancer Institute
2006-09 Chair, Scientific Advisory Board, Magen BioSciences
2007-10 President, Society for Melanoma Research
2008- Director, Melanoma Program, MGH Cancer Center
2008- Director, Cutaneous Biology Research Center, MGH
2010-13 Co-Chair, Scientific Advisory Committee, Melanoma Research Foundation

MAJOR COMMITTEE ASSIGNMENTS:

International:

1997, 99 Israel Science Foundation, Grants reviews
2002-03 Swiss Cancer League, Grants reviews
2008- US-Israel Binational Science Foundation, Grants reviews
2003 European Commission's 6th Framework Programme for Research and Demonstration Activities, Cancer Research Grants reviews
2003-13 Scientific Advisory Committee, Melanoma Research Foundation

National:

1996 Committee on Neoplasia, member, American Society of Hematology
1996 National Institutes of Health Study Section, Human Embryology and Development 2, Ad hoc member
1996 Site visit team member for Intramural review at National Cancer Institute
1996 National Institutes of Health Study Section, Human Embryology
and Development 2, Ad hoc member
1998 Grant reviewer, March of Dimes Birth Defects Foundation
2000 Grant reviewer, March of Dimes Birth Defects Foundation
2001- Scientific Advisory Board, William Guy Forbeck Cancer Research Foundation
2001-04 Member NIH Study Section: Development 2 (formerly Cell Development and Function-5)
2003 Member Cellular, Molecular, and Tumor Biology section of 2003 AACR Annual Meeting Program Committee
2004-06 Elected Councilor, American Society for Clinical Investigation
2014 AACR Annual Meeting Program Committee
2014 Melanoma Research Alliance Grant Review Committee

Regional:

Harvard Medical School:

1996-04 Admissions Committee, Harvard Medical School BBS Graduate Program
1996-05 Qualifying Exam Steering Committee, BBS Graduate Program, Harvard Medical School
1996 Pediatric Oncology Protocol Scientific Review Committee, Dana Farber Cancer Institute
Tutorial Program Steering Committee, BBS Graduate Program, Harvard Medical School
Pediatric Patient/Family Education & Support Committee,
Dana Farber Cancer Institute
1996-98 Medical Ethics Advisory Committee, Dana Farber Cancer Institute
2000- Clinical Investigations Policy & Oversight Committee, Dana Farber Cancer Institute
2001 Chair, Task force on Physician Impairment, Dana Farber Cancer Institute
2003- Committee on Awards and Honors, Harvard Medical School
2003-05 Chair, ad hoc faculty search committee, Dept of Pediatric Hematology/Oncology, Children’s Hospital and Dana Farber Cancer Institute
2003- Chair, Pediatric Oncology Scientific Review Committee (branch of IRB), Dana Farber Cancer Institute
2003- Clinical and Translational Research Leadership Committee, Dana Farber Cancer Institute
2004- External Advisory Committee- MGH Cancer Center Program Project on “Genetic Models of Cellular Proliferation”
2004- Director, Melanoma Disease Program, Dept of Medical Oncology, Dana Farber Cancer Inst.
2005- Student Awards Committee, Harvard Medical School
2005- Member, MD-PhD Admissions Committee, Harvard Medical School
2006- Scientific Advisory Board- MGH Cancer Center
2008- Office or Research Development Advisory Board, Mass General Hospital
2008- Executive Committee on Research, Mass General Hospital

Harvard School of Dental Medicine:

2001- Admissions Committee, PhD Program in Biological Sciences, Harvard School of Dental Medicine
2001- Junior faculty search committee
2001- Standing Committee on Higher Degrees in Dental Medicine, Harvard University
2002- Advisory Committee, Harvard School of Dental Medicine Research Academy

Harvard School of Public Health:

1999 Department of Toxicology (formerly), Junior faculty search committee

PROFESSIONAL SOCIETIES:

1995- American Society of Hematology member
1996- American Association for Cancer Research member
1998- American Society for Clinical Investigation
2000- American Society for Bone and Mineral Research member
2001- Society for Investigative Dermatology member
2008- Society for Melanoma Research member, President, 2008-2010
2007- Melanoma Research Alliance, member; Co-Chair of the Grant Review Committee, 2007-2010
2008- Dr. Miriam and Sheldon G. Adelson Medical Research Foundation
2008- American Academy of Dermatology adjunct member
2008- Association of Professors of Dermatology member

EDITORIAL BOARDS:

1996-99 Section Editor Leukemia
1998- Editorial Board Member Molecular Cancer Research (formerly Cell Growth & Differentiation)
2001- Editorial Board Member Cell Cycle
2007- Editorial Board Member The Cancer Journal
2007- Editorial Board Member Pigment Cell and Melanoma Research
2007- Associate Editor Journal of Investigative Dermatology

AWARDS AND HONORS:

1979  Phi Beta Kappa
1979  Sigma Xi
1979  Swarthmore College, B.A. with Distinction
1975-79  Full Scholarship, Curtis Institute of Music
1979-85  Medical Scientist Training Program Fellowship (MD-PhD scholarship)
1983  First Prize, Artists International Music Competition (solo cello debut at Carnegie Recital Hall, New York)
1984  Steinkraus Chamber Music Award
1985  First Prize, Artists International Chamber Music Competition, as member of the Lang Piano Trio, Carnegie Recital Hall and other performances
1985  First Prize, Biomedical Research Award from Association of New York State Medical Schools
1985  Franklyn Ellenbogen Prize in Hematology/Oncology, Cornell University
1990-93  Howard Hughes Medical Institute Fellowship for Physicians
1991  William Guy Forbeck Cancer Research Foundation Scholar-in-Residence Award
1993-95  American Society of Hematology Scholar Award
1995  Pew Foundation Scholars Award
1995  McDonnell Foundation Research Scholar
1995  Charlotte Geyer Foundation Research Award
1998  Election to American Society for Clinical Investigation
1998  Gertrude B. Elion Award for Cancer Research, American Association for Cancer Research
1999  Fannie E. Rippel Foundation Research Award
1999  Faculty Award for Teaching, Biological and Biomedical Sciences Graduate Program, Harvard Medical School
2000  Nirenberg Fellowship Endowment, Dana Farber Cancer Institute
2000  Endowed Investigatorship, Dana Farber Cancer Institute
2001  Scientific Advisory Board, William Guy Forbeck Cancer Research Foundation
2002-  Member NIH Study Section: Cell Development and Function-5 (DEV2)
2002  Sidney Kimmel Symposium for Cancer Research Scholar Award, American Association for Cancer Research
2003  Elected Councilor, American Society for Clinical Investigation
2004  Scientific Advisory Committee, Melanoma Research Foundation
2004  Doris Duke Distinguished Clinical Scientist Award, Doris Duke Foundation
2006  Nominee, Harvard Medical School Prize for Excellence in
Teaching (Years 1 & 2)

2006  Teich Award for Translational Research in Cancer
2007  American Skin Association Research Achievement Award
2007  President, Society for Melanoma Research
2007  American Society of Dermatopathology Pincus Lectureship
2008  Gange Lectureship in Dermatology, Harvard Medical School
2010  Samuel Moschella Lectureship, Lahey Clinic
2011  American Academy of Dermatology, Presidential Citation
2011  Lifetime Achievement Award, Society for Melanoma Research
2013  Honoree, MGH Cancer Center “the one hundred” Skin Cancer & Melanoma Research Achievement Award, American Skin Association, Aaron B. Lerner Special Lecture Award, Pan-American Society for Pigment Cell Research Sterling Lectureship, Dept of Biological Chemistry and Molecular Pharmacology, Harvard Medical School
2014  Eva Stahl Memorial Lectureship

Report of Teaching

1. Local Contributions

a. Harvard Medical School courses

1993  Pharmacology
discussion group leader, ~12 first year HMS medical students
effort: ~15 hours

1994  Biochem/Cell Biol 201, lecturer and discussion leader in core course for BBS first year graduate students (~80 students + ~15 auditors). 7 lectures
effort:  ~10 hrs per lecture.

1994-  Micro-201 (currently called BCMP200)
lector and discussion leader, in BBS Graduate core course in molecular biology, (~80 students + ~15 auditors, 8 TA's
effort:  ~50 hrs per semester

1995  Ethics in Research, training course for research fellows and Graduate students, Children's Hospital, ~20 fellows/students, 5 sessions of ~2 hours each, minimal preparation

1995-  Lectures on Apoptosis and Cancer Therapy for Fellows in Pediatric Oncology (DFCI), Adult Oncology (DFCI), and Radiation Oncology (Mass. General and Joint Center Programs)
5-15 fellows, ~4 hours per semester
2001-04 Pathophysiology of Lymphoid Malignancies for 2nd year Medical Students, Harvard Medical School (whole class), 1 lecture per year~3 hours effort

b. Harvard University-

1995- Undergraduate Advisor for Biochemistry majors ("Board of Tutors"), Harvard College. 3 undergraduate advisees, meet biweekly for 1 hour throughout the year.

1996- Advisor to Pediatric Oncology Clinical Fellows at Children's Hospital/Dana Farber Cancer Institute

1996- Advisor to PhD students (in my lab), currently 5 thesis students; Weekly individual meetings plus lab/group meetings, floor meeting presentations, career advice, etc.

c. Advisees and Trainees:

Past Trainees:

Postdoctoral Fellows:

Dr. Stephan Bodis, (1993-1995) Lab head and Staff Physician, Department of Radiation Oncology, University of Zurich, Switzerland, President-elect, European Society for Therapeutic Radiation Oncology (ESTRO)

Dr. Patricia Harrigan, Staff Radiation Oncologist, (1995-97) Department of Radiation Oncology, Duke University Medical School, NC

Dr. Timothy Hemesath, (1993-1998) Division Head, Decode Genetics, Business School


Dr. Clifford Takemoto, (1995-2000) Associate Professor & lab head, Division of Pediatric Hematology, Johns Hopkins Medical School

Dr. Katherine Weilbaecher, (1997-2001) Tenured Professor & Lab Head, Division of Medical Oncology, Washington U School of Medicine, St. Louis, MO


Dr. Martin Horstmann, (1998-2001) Faculty of Medicine & lab head, Univ. Hamburg, Germany

Dr. Han-Fei Ding, Tenured Professor and lab head, Department of Biochemistry, University of Georgia

Dr. Junqing Cui, (1999-2001) Wyeth Pharmaceuticals


Dr. Yi-Ling Lin, DMD, DSc, (1999-2003) Univ. of Kentucky School of Dentistry, Assistant Professor and lab head

Dr. John D’Orazio, MD, PLD (2001-2004) University of Kentucky Medical School, Assistant Professor and Lab Head
Dr. Emi Nishimura (2002-2005) Full Professor and PI, Hokkaido Univ, Japan
Dr. Andrew Wagner (2004-2006) Instructor (Indep Lab) Dana-Farber Cancer Inst
Dr. Ian Davis (2001-2006) Assistant Professor, Univ North Carolina
Dr. Erez Feige (2004-2006) Vice President of Business Operations, VBL Therapeutics, Israel
Dr. Tetsuji Nobuhisa (2003-2006) Assistant Professor, Surgical Faculty, Kyoto, Japan
Dr. Hans Widlund (2001-2008) Instructor of Dermatology and PI, Brigham and Women’s Hospital, Harvard Skin Disease Research Center
Dr. John Goldberg, Faculty, University of Miami, Pediatric Oncology
Dr. Jennifer Lin, (2004-2010) Faculty Dept of Dermatology Brigham and Women’s Hospital
Dr. Eiichi Makino, MD, PhD (2006-2010), Chief Surgeon and Head Physician, Dept. of Derm, Kawasaki Medical School, Japan
Dr. Su-Jean Seo, MD, PhD (2009-2010), Faculty and Medical Director, Department of Dermatology, Beth Israel Deaconess Medical Center
Dr. Xiansi Zhao, MD, PhD (1998-2010), Millenium Corporation
Dr. Peter Gordon MD, PhD (2007-2010) Pediatric Oncology Fellow, Dana Farber Cancer Institute
Dr. Carmit Levy, PhD (2005-2010), Assistant Professor, Tel-Aviv University, Israel
Dr. Satoru Yokoyama, PhD (1998-2010), Assistant Professor at Tohoku University, Japan
Dr. Nancy Salma, PhD (2006-2011) Independent Researcher
Dr. Juying Li, PhD, (2008-2012) Boston Biomedical, Inc.
Dr. Mehdi Khaled, PhD (2005-2012) Postdoctoral Fellow, DFCI
Dr. Daguang Wang, MD, PhD (2/13 – 8/13)
Dr. Ryo Murakami, PhD (3/12 – 3/14) Researcher, Daiichi Sankyo Company, Tokyo, Japan
Dr. HongXiang Chen MD, PhD (3/12 – 3/14)

Past Students:

Gabriella Motyckova (BBS and HST; MD/PhD), Oncology Fellow, MGH/DFCI
Gael McGill, PhD, President and CEO Digizyme, Inc., Faculty Harvard Medical School
Jinyan Du (BBS; PhD); Senior Scientist – Merrimack Pharmaceuticals
Arlo Miller (BBS; MD/PhD) Dermatologist, Miller Family Dermatology, Seattle
Richard Lin (Harvard-MIT; HST Medical Student) (HST thesis), Physician, Faculty, Cornell Medical School
Christine Hershey (BBS; PhD) Malaria Monitoring and Evaluation Intern at US Agency for International Development
Laura Poling (BBS; PhD) Scientist II, Aave Pharmaceuticals
Fatih Ozsolak (BBS; PhD) Scientist, Helicos BioSciences
Gillian Fell (Harvard BBS, HMS- MD/PhD) Surgical Resident Brigham and Women’s Hospital
Rosa Vegulla (Harvard FAS- PhD), Preceptor Life Sciences, Harvard University
Devarati Mitra (Harvard BBS, HMS- MD/PhD), Medical Student, Harvard
Medical School

Current Trainees:

Graduate students:

- Jennifer Hsaio (Harvard BBS-PhD)
- Jennifer Lo (Harvard BBS-MD/PhD)
- Whitney Silkworth (Harvard BBS-PhD)
- Nisma Mujahid (BU School of Med MD/Phd)

Postdoctoral Fellows:

- Akinori Kawakami, MD, PhD (Dermatologist, Postdoc)
- Rizwan Haq MD, PhD (Medical Oncologist, Postdoc)
- Thanh-Nga Tran, MD, PhD (Dermatologist, Postdoc)
- Ju-Hee Lee MD, PhD (Dermatologist, Postdoc)
- Pedro Andreu-Perez, PhD (Postdoc)
- Adam Friedman, MD, PhD (Postdoc)
- Chong Hyun Won, MD, PhD (Dermatologist, Postdoc)
- Jun Dai, PhD (Postdoc)
- Elisabeth Roider, MD (Dermatologist, Postdoc)
- Yeon Sook Choi, PhD (Postdoc)
- Xunwei Wu, PhD (Postdoc)
- Katherine Robinson, PhD (Postdoc)
- Jue Judy Liu, PhD (Postdoc)

2. Regional, National, or International Contributions

a. Invited Speaking Engagements (selected)

1995: Invited speaker, American Society of Hematology Scientific Committee on Neoplasia
       Invited speaker, Gordon Conference on Cell Proliferation
       Invited speaker, Leukemia Society of America Symposium
       Invited speaker, Columbia University College of Physicians and Surgeons

1996: Invited speaker and session Chair, American Association for Cancer Research, Apoptosis in Cancer
       Invited speaker, Gordon Conference on Cancer
       Invited speaker, Cancer Drug Discovery: Gene Expression as a Drug Target, Ireland
       Invited speaker, International Conference on Osteosarcoma, Bologna, Italy
       Invited speaker, Boston Cancer Research Assoc.

1997: Invited speaker, International Workshop on Melanocyte Biology, Marie Curie Research Institute, England
       Invited speaker, University of Virginia Medical College
Invited speaker, University of Nebraska Medical College
Invited speaker, American Society of Clinical Oncology
Invited speaker, Radiation Research Society, Providence, R.I.
Invited speaker, Intl. Symposium on Gene Targets for Cancer Treatment, Capri, Italy
Invited speaker, General Motors Cancer Research Foundation, Symposium on Skin Cancer, Washington D.C.
Invited speaker, Univ. of Pennsylvania
Invited speaker, Harvard Medical School Joint Center for Radiation Therapy, Cambridge, MA
Invited speaker, New York State Oncology Association

1998: Invited speaker, Yale University
Invited speaker, Wolfsberg International Conference on Radiation Biology, Lake Constance, Switzerland
Invited speaker, Grand Rounds at Beth Israel Deaconess Medical Center
Invited speaker, International Union Against Cancer, Bermuda
Invited speaker, Workshop on Carcinogenic pathways: apoptosis and senescence. Harvard Medical School, Boston
Invited speaker, Stanford University School of Medicine

1999: Invited speaker, Gordon Conference on Radiobiology
Invited speaker, Grand Rounds, Dept of Medicine, Children’s Hospital, Boston
Invited speaker, St. Jude’s Hospital, Memphis
Invited speaker, Wistar Institute, Philadelphia
Invited speaker and session chair, International Pigmentation Meeting, Nagoya, Japan
Invited speaker, Osaka Medical School, Osaka, Japan

2000: Invited speaker, Rockefeller University, New York City
Invited Speaker, Symposium on Apoptosis, Harvard Medical School, Boston, MA
Invited speaker & session co-chair, Pan-American Society of Pigment Cell Research, Houston, TX
Invited speaker, Hematology/Oncology Grand Rounds, Tufts Medical School, Boston, MA
Invited speaker, Blood Club, Society for Pediatric Research
Invited speaker, Melanoma Symposium, Harvard Medical School
Invited speaker, Boston University Dental School
Invited speaker and session chair, Workshop on Melanoma, National Cancer Institute, Bethesda, MD

2001: Invited speaker, Heme/Onc Seminar Series, Mass. General Hospital, Boston, MA
Invited speaker, Cutaneous Biology Research Center, Harvard Medical School, Boston, MA
Invited speaker, Grand Rounds, Memorial Sloan Kettering Cancer Center, NY
Invited speaker, Workshop on tanning response, Nice, France
Invited speaker, Melanocyte Developmental Biology Symposium, NIH
Invited speaker, Mount Sinai School of Medicine, NY

2002: Invited speaker, American Association for Cancer Research, Sidney Kimmel Symposium for Cancer Research Scholars
Invited speaker and session chair, Banbury Conference on Melanoma, Cold Spring Harbor Labs
Invited speaker, Genetics and Molecular Biology of Skeletal Development, Lucca, Italy
Invited speaker, Univ. of Rochester, NY
Invited speaker, Melanoma Research Foundation Workshop, Williamsburg, VA
Invited speaker, Claudia Adams Barr Program in Innovative Cancer Research 15th Anniversary Symposium, Dana Farber Cancer Institute

2003: Invited speaker, Department of Biology, Boston University
Invited speaker, Archibald MacCallum Lecture, Department of Biochemistry, McGill University School of Medicine, Montreal
Invited speaker and session chair, First International Congress on Melanoma, Philadelphia, PA
Invited speaker, Department of Biochemistry, Tufts Univ. Medical School, Boston, MA
Invited speaker, Department of Dermatology, Boston Univ, School of Medicine, Boston, MA
Invited keynote speaker, Pan-American Society for Pigment Cell Research, Cape Cod, MA
Invited speaker, American Association for Cancer Research, Symposium on Melanoma, Washington, D.C.

2004: Invited speaker, 2nd International Melanoma Congress, Tucson, AZ
Invited speaker, Grand Rounds, Univ. Cincinnati, OH
Invited speaker, Forbeck Foundation Symposium on Targeted Therapies of Cancer, Hilton Head, SC
Session chair: Cell decisions in response to DNA damage: survival vs. apoptosis, NCI-sponsored ThinkTank, Bethesda, MD
Invited Participant: NCI ThinkTank on Sarcoma biology

2005: Invited speaker, American Society for Clinical Oncology, Melanoma Disease session, Orlando, FL
Invited speaker, American Association for Cancer Research, Progress in Melanoma session, Los Angeles, CA
Invited speaker, University of Michigan Medical School, Ann Arbor, MI
Invited speaker, International Pigment Cell Conference, Reston, MD
Invited speaker, World Congress on Melanoma, Vancouver, Canada
Invited speaker, International Conference on Melanoma, Tampa, Florida
Conference Chair, Forbeck Foundation Scholars Scientific Symposium, Lake Geneva, Wisconsin
Meeting co-chair, Melanoma Research Foundation Scientific Advances Conference, Hilton Head, SC

2006:
Session chair, Melanoma New Developments, AACR, Washington DC
Invited Keynote speaker and Session chair, Perspectives in Melanoma, Nijmegen, Netherlands
Invited speaker, Mass General Hospital Cancer Center, Boston, MA
Congressional Briefing, US Congressional Biotechnology Caucus, Capital Bldg, Washington, DC
Invited speaker, Doris Duke Clinical Sciences workshop
Invited speaker, Sarcoma Biology Workshop, Milan, Italy
Invited speaker, Medical Grand Rounds – Fink Lecture, Sloan-Kettering Cancer Center
Invited speaker, International Society for Stem Cells, Boston
Invited speaker, Univ of Pennsylvania
Invited speaker, Pathology Seminar Series, Harvard Medical School

2007:
Session chair, NCI Melanoma Workshop
Invited speaker, Brandeis University Seminar Series
Invited speaker, NCI Cancer Stem Cells Workshop
Invited speaker and session chair, Epigenomics in Medicine, Boston, MA
Invited speaker, Boston Gene Expression Club
Invited speaker, CIMET biotechnology series, Mass General Hosp
Invited speaker, Tufts University Medical School, Boston, MA
Invited speaker, Cancer Center, Johns Hopkins Medical School
Invited speaker, Weizmann Institute, Rehovot, Israel
Invited speaker, Washington University Medical School, St. Louis
Invited speaker, National Council on Skin, Washington DC
Invited speaker, American Society of Dermatopathology - Pincus Lecture, Baltimore, MD

2008:
Invited speaker, Gange Lectureship, Harvard Medical School
Invited speaker, Grand Rounds, Yale Cancer Center, New Haven, CT
Invited speaker, Beth Israel Deaconess Medical Center, Harvard Medical School, Cancer Center
Invited speaker, Lymphangiomyomatosis Society Meeting, Boston
Invited speaker and meeting organizer, International Melanoma Research Congress, Sapporo Japan
Invited speaker, Melanoma Grand Rounds, MGH/Harvard Medical School
Invited speaker and meeting organizer, Forbeck Foundation Junior Scholars Retreat
Invited speaker, Univ of Pennsylvania Medical School
Invited speaker, Jack Little Symposium on Radiobiology, Harvard School of Public Health
Invited participant, Roundtable Discussion, National Institutes of Health
Invited speaker, Status of Dermatology to the Board of Trustees, MGH
Invited speaker, Cell Biology of Disease Seminar, Harvard Medical School

2009: Invited speaker, Rockefeller University, New York, NY
Invited speaker, American Academy of Dermatology Annual Meeting, San Francisco, CA
Invited speaker, Northwestern University, IL
Invited speaker, Melanoma Research Alliance Annual Scientific Meeting, D.C
Invited speaker, University of Colorado, Denver, CO
Invited speaker, World Congress on Cancers of the Skin, Tel Aviv, Israel
Invited speaker, Society for Investigative Dermatology Annual Meeting, Montreal, Canada
Invited speaker, University of Virginia, VA
Session chair, American Society of Clinical Oncology Annual Meeting, Orlando, FL
Invited speaker; Keynote Address, Harvard University Dermatology Resident Graduation, Boston, MA
Invited speaker, National Academy of Sciences; Nuclear Radiation and Studies Board, D.C
Invited speaker, American Academy of Dermatology Summer Meeting, Boston, MA
President and Congress Co-Chair, Society for Melanoma Research Annual Conference, Boston, MA

2010: Invited speaker, L’Oreal Paris, Paris, France
Invited speaker, National Human Genome Research Institute, Bethesda, MD
Invited speaker, University College Dublin, Dublin, Ireland
Invited speaker, 63rd Annual Scientific Advisory Committee, MGH, Boston, MA
Invited speaker, FDA Hearing on Indoor Tanning Regulations, Washington, D.C
Invited speaker, American Association for Cancer Research Annual Meeting, Washington, D.C
Invited speaker, National Cancer Institute Grand Rounds, Bethesda, MD
Invited speaker, Samuel Moschella Lecture in Dermatology, Boston, MA
Invited speaker, Grand Rounds, MGH/Harvard Medical School
Invited speaker, Grand Rounds, Boston University, Boston, MA
Invited speaker, Hong Kong Society of Physicians, Hong Kong
Invited speaker, Laser Skin Therapy Course, Boston, MA
Invited speaker, Society for Melanoma Research Annual Conference, Sydney, Australia

2011: Invited speaker, Melanoma Research Alliance, Washington, D.C
Invited speaker, Sanford-Burnham Medical Research Institute Cancer Center Seminar Series, San Diego, CA
Invited speaker, Banbury Center of Cold Spring Harbor Laboratory, Cold Spring Harbor NY
Melanoma discussant, American Society for Clinical Oncology, Chicago, IL
Invited speaker, Advanced Melanoma: Biology and Treatment Symposium, Cambridge, MA
Invited speaker, “The Sun and Our Skin”, Harvard Medical School, Boston, MA
Invited speaker, Melanoma Genetics, Genomics and Molecular Biology, CancerNet LLC & A. Webb Roberts Center for CME of Baylor Health Care System, Boston, MA
Invited speaker, International Pigment Cell Conference, Bordeaux, France
Invited speaker, Grand Rounds, Department of Dermatology, Katie Rodan and Kathy Fields Lecturer, Stanford University, Stanford, CA
Invited speaker, Chabner Colloquium “Collaboration in Cancer Drug Trials”, Cambridge, MA
Invited speaker and session chair, International Melanoma Congress, Tampa, FL
Invited speaker, Grand Rounds, Yale University, New Haven, CT

2012: Invited speaker, Dermatology Grand Rounds, UCLA, Los Angeles, CA
Invited speaker and discussant, 23rd Annual Cancer Progress Conference, New York, NY
Invited participant, Dr. Miriam and Sheldon G. Adelson Medical Research Foundation, Adelson Program in Cancer Research, Las Vegas, NV
Invited speaker, Huntsman Cancer Institute Seminar Series, University of Utah, Salt Lake City, UT
Invited participant, Melanoma Research Foundation Board Meeting, Washington, D.C.
Invited speaker, Pelotonia Fellowship Program Symposium, Ohio State University, Columbus, OH
Invited speaker, Department of Cancer Biology Seminar Series, University of Massachusetts Medical School, Worcester, MA
Invited participant, 2012 MGH Center for Cancer Research Annual Retreat and Scientific Advisory Board Meeting, Cape Cod, MA
Invited participant, William Guy Forbeck Research Foundation Forum, Hilton Head, SC
Invited speaker and Session Chair, Society for Melanoma Research Congress, Hollywood, CA

2013: Invited speaker, Melanoma Research Alliance 5th Annual Scientific Retreat, Washington, DC
Invited participant, Dr. Miriam and Sheldon G. Adelson Medical Research Foundation, Adelson Program in Cancer Research, Las Vegas, NV (March and October)
Invited speaker and participant, Melanoma Research Center Advisory Meeting and Symposium, Wistar Institute, Philadelphia, PA
Invited Keynote speaker, International Melanoma Workshop, School of Biomolecular and Biomedical Science, University College Dublin, Dublin, Ireland
Invited speaker, Huashan Hospital Department of Dermatology, Shanghai, People’s Republic of China
Invited speaker and panelist, 9th Asian Dermatological Congress, Hong Kong
Invited speaker, Aaron B. Lerner Award Lecture, PanAmerican Society for Pigment Cell Research 18th Annual Meeting, Madison, WI
Invited speaker and session chair, 2013 Montagna Symposium on the Biology of Skin, Stevenson, Washington
Invited Keynote speaker and award Lecturer, Sterling Lectureship, Dept of Biological Chemistry and Molecular Pharmacology, HMS, North Conway, NH
Invited speaker and moderator, 2013 Chabner Colloquium, Collaboration in Cancer Drug Trials, Boston, MA
Invited speaker, Grand Rounds, Division of Cancer Medicine, University of Texas MD Anderson Cancer Center, Houston, TX
Invited speaker/Kay Lecturer, Grand Rounds, Department of Dermatology, Johns Hopkins School of Medicine, Baltimore, MD
2014: Invited speaker, NYU Cancer Institute Seminar Series, New York, New York
Invited panelist, Skin Care/Skin Cure ~ Eliminating the Melanoma Epidemic panel, MGH Cancer Center, Naples, FL
BIBLIOGRAPHY

Original Articles:


on mucosal, acral and chronically sun damaged skin.  

**J Clin Oncology.** 2013 Sep 10;31(26):3182-90. PMCID: PMC Journal: In Process


**Oncoimmunology.** 2013 Oct 1;2(10):e26615. PMCID: PMC3827093


**Cell.** 2013 Nov 21;155(5):1022-33. PMCID: PMC3873608


**J Invest Dermatol.** 2013 Dec;133(12):2809-12. PMCID: PMC3806899


**Exp Dermatol.** 2014 Feb;23(2):125-9. PMCID: PMC3977999


**Clin Cancer Res.** 2014 April 9. Epub before print.


**Clin Cancer Res.** 2014 Apr 10. (Epub ahead of print)


**Cell Rep.** 2014 Apr 16


**Reviews and Book Chapters:**


Book Editor:


CURRICULUM VITAE (MUSIC)
David Fisher

Address: 510 Ward St.
Newton, MA 02159

Birth: August 28, 1957

Instrument: violoncello

Education: Curtis Institute of Music (1979)

Teachers:
  Cello- George Ricci, Orlando Cole
  Chamber Felix Galimir, Isadore Cohen, Mischa Schneider, Jaime Laredo,
  Music- Jascha Brodsky, Max Aranoff, Menachem Pressler, Victor Rosenbaum

Orchestral: performances under Ormandy, Mehta, Muti, Schneider, Paray,
Fruhbeck de Burgos, Levine, Abbado, including Carnegie Hall,
Washington Kennedy Center, Philadelphia Academy of Music-
with Curtis Symphony; freelance with Handle and Haydn Society,
Boston and Hatchshell Orchestra.

Awards: 1st Prize New Jersey State Talent Competition (age 14), 1st Prize
Artists International Music Competition (1983-Carnegie Recital Hall
solo debut), winner of Steinkraus Chamber Music Award (1984)

Solo: New York debut at Carnegie Recital Hall 1983, numerous concerto
performances including Columbia Chamber Players, Boston Summer Orchestra,
Curtis Symphony, Swarthmore College Orchestra, Longwood Symphony, Faneuil
Hall, Boston

Chamber music: Member of Lang Trio (1983-86), performances include Carnegie
Recital Hall, Phillips Collection, Cosmos Club (Washington),
Philadelphia, Symphony Space (New York, Ives Festival),
Westport Conn., many others; Guest Artist with Curtis String
University, Tufts University, Dana Hall School Wellesley; Benefit performances
for Viet Nam Pediatric Vascular Anomalies Center (2010-present)

Radio performances: National Public Radio, WQXR (New York- Young Artists
Showcase), "Concerts from Curtis"- NPR, Philadelphia; WGBH, Boston
Morning Pro Musica (Boston)
Exhibit T
CURRICULUM VITAE

NAME:
Alan C. Geller MPH, RN

ADDRESS:
11 Randy Road
Framingham Massachusetts 01701

DATE & PLACE OF BIRTH:
July 25, 1951, Mineola, New York

EDUCATION:
1973 Sociology, BA University of Buffalo
1984 RN, Mass Bay Community College
1990 Epidemiology, MPH, Boston University

ACADEMIC APPOINTMENTS:
2010 – present Senior Lecturer, Department of Social and Behavioral Sciences, Harvard School of Public Health
2010 – present Director, Melanoma Epidemiology, Massachusetts General Hospital, Department of Dermatology
2009 – present Adjunct Associate Professor (Research), Department of Dermatology, School of Medicine, Boston University
2009 -2010 Senior Research Scientist, Harvard School of Public Health
2009 – 2010 Deputy Director, Division of Public Health Practice, Harvard School of Public Health
2001 – 2009 Associate Professor of Dermatology (Research), Boston University School of Medicine
2001 – 2009 Associate Professor of Epidemiology (Research), Boston University School of Public Health
2001 – 2009 Co-Director, Cancer Prevention and Control Center, Boston University Medical Campus
1997 – 2001 Research Assistant Professor, Department of Dermatology (School of Medicine), Boston University
1997 – 2001 Research Assistant Professor, Epidemiology and Biostatistics (School of Public Health), Boston University
1997 – 2001 Associate Director, Cancer Prevention and Control Center, Boston University
1994 – 1997 Research Instructor, Department of Dermatology (School of Medicine), Boston University

HONORS AND DISTINCTIONS:
2011 American Academy of Dermatology-President Citation
2010 National Council on Skin Cancer Prevention-Executive Citation
2009 Astellas Award-Public Health and Dermatology
2007 Environmental Protection Agency Stratospheric Ozone Protection Award
2006 Visiting Professor, Mayo Clinic Department of Dermatology
2005 Visiting Professor, Arizona Cancer Center
2001 American Academy of Dermatology Education Award for Pool Cool Project
2000 South Boston Public Health Initiative-for tobacco work in community
1998-2013 NCI Summer Fellow Speaker
1998 American Association of Health Education (Keynote Address)-Reston VA, Sun protection strategies in the United States

**MAJOR PROFESSIONAL SERVICE:**

2012- Board of Trustees: MetroWest Community Health Foundation
2011- Dana-Farber/Harvard Cancer Center (DF/HCC): Cutaneous Oncology and Melanoma
2010-2012 Massachusetts Health Council
2009-2010 NIH Study Section-Healthcare Delivery and Methodologies IRG
2009- Co-Chair, International Skin Cancer Prevention and Detection Trial (Germany)
2009-2010 Faculty for Dana-Farber Cancer Institute Symposium on Teaching Early Detection for Non-Dermatologist Physicians
2009-2010 Faculty for MGH Symposium on Teaching Early Melanoma Detection form non-Dermatologist Physicians
2009-2009 American Academy of Pediatrics Committee on Environmental Health, Reviewer Policy
2009-2010 Harvard School of Public Health, Student Advisory Committee (Division of Public Health Practice
2006- Chair, Medical Research Committee, Melanoma Foundation of New England
2004 – 2007 Executive Committee, Curt and Shonda Schilling/Dana Farber Skin Cancer Foundation
2004 – 2007 National Co-Chair, National Council on Skin Cancer Prevention
2004 – 2006 BUSM Student Oncology Committee (Advisor)
2003 – 2004 Chair, Research Committee, National Council on Skin Cancer Prevention
2003 – 2004 Chair, Massachusetts Skin Cancer Collaborative
2002 - Member, Melanoma Prevention Working Group
2001 – 2003 Education Committee, Association of Teachers of Preventive Medicine
2000- Board of Directors, Massachusetts Melanoma Foundation

**PROFESSIONAL SOCIETIES:**
American Association of Cancer Education
American Public Health Association

**EDITORIAL BOARDS AND REVIEWER:**

2007 Journal of Cancer Education
2005 Preventive Medicine

Reviewer (2002 – 2013)
American Journal of Preventive Medicine
Annals of Internal Medicine
Archives of Dermatology
Archives of Pediatrics and Adolescent Medicine
British Journal of Dermatology
CA-A Cancer Journal for Clinicians
Cancer
Cancer Causes and Control
Cancer Detection and Prevention
Families, Systems, and Health
Health Education Research
Journal of the American Medical Association
Journal of the American Academy of Dermatology
Journal of Ambulatory Pediatrics
Journal of Clinical Oncology
Journal of Cutaneous Medicine and Surgery
Journal of Health Care for the Poor and Underserved
Journal of Health Communication
Journal of Investigative Dermatology
Journal of School Health
Lancet Oncology
Medical Letter
Melanoma Research
New England Journal of Medicine
Nicotine and Tobacco Research
Pediatrics
Preventive Medicine
Public Health Reports
Teaching and Learning in Medicine
New Zealand Cancer Society Grant Reviews
Women’s Health
World Health Organization School Health Guidelines

MAJOR RESEARCH INTERESTS:

Cancer Disparities
Melanoma
Tobacco use in low-SES populations
Obesity
Community Interventions
RESEARCH SUPPORT:

Past Funding:

1) Years: 2/1/08-1/31/13
Funding Source: NIH/MCMHD Harvard School of Public Health (Rees)
Co-PI
Grant Title: Promoting Smoke-Free Homes

The major goal of this project is to design an intervention to protect high-risk children from involuntary secondhand smoke (SHS) exposure in domestic environments.

2) Years: 5/19/08-4/30/13
1 UL1 RR 025758-01 (Nadler, L.)
Funding Source: NIH/NCI
Co-PI
Grant Title: Harvard Clinical and Translational Science Center

Harvard CTSC (Catalyst) will provide enriched resources to educate and develop the next generation of researchers trained in the complexities of translating research discoveries into clinical trials and ultimately into practice. HSPH Division of Public Health Practice (Alan Geller) will work with ICH in the development and evaluation of the community engagement core.

3) Years: 01/01/10-12/31/12
Funding Source: Melanoma Research Alliance
Co-PI
Grant Title: Development of a Web-Based Module for Teaching of the Skin Cancer Examination
Funding: $1 million

The major goal of this study is to develop and test a novel educational platform for the teaching of the skin cancer examination to primary care faculty in two large HMO's.

4) Years: 07/01/07-06/30/12
Funding Source: FAMRI-Flight Attendants Medical Research Institute
PI
Grant Title: Second Hand Smoke Counseling Interventions for Parents of Hospitalized Smokers

The purpose of this grant is to determine pediatric hospital practices with respect to second-hand smoke counseling and to develop new hospital cessation policies after conduct of a randomized trial
Funding: $325,000

5) Years: 9/1/06-8/31/12
Funding Source: Schering Plough
Co-PI with Stanford University (Swetter)
Grant Title: Behavioral Antecedents for Early and Late Melanoma
Funding: $500,000

The major purpose of this study was to investigate via case interviews, multiple factors distinguishing a diagnosis of early versus late melanoma

6) Years: 3/1/09-12-31-11
Geller A
PI
Astellas Grant from the American Academy of Dermatology-
The purpose of this grant is to develop novel educational methods for the teaching of the skin cancer examination.

7) Years: 01/01/06-12/31/11
Funding Source: MetroWest Community Health Foundation
PI
Grant Title: Reducing Obesity in Framingham, MA
The purpose of this grant is to develop and implement an obesity prevention program at schools in Framingham MA
Funding: $150,000

7) Years: 01/01/06-12/31/11
Funding Source: NIH/NCI
PI
Grant Title: Tobacco Cessation and Prevention Education in US Medical Schools
The purpose of this grant is to develop and incorporate new tobacco prevention curriculum at 12 medical schools in the United States.
Funding: $1.5 million

8) Years: 01/07-9/30/09
Funding Source: CDC Prevention Research Center (Horsburgh)
Project Leader with Boston University School of Public Health
Grant Title: Resident Health Advocates on the Move
Funding: $150,000

The major purpose of this grant was to develop a patient navigator model for improving access to the Mayor’s Health Van.

9) Years: 01/05-12/31/08
Funding Source: SHADE Foundation
Co-PI with Dana-Farber Cancer Institute (Emmons)
Grant Title: Skin Cancer Prevention in US Schools
Funding: $250,000
The major purpose of this award was to develop new policies for sun protection programs and policies in US schools and to conduct a randomized study to improve sun protection and early detection practices at New England beaches.

10) Years: 04/01/06 – 06/30/08
Funding Source: Harry J. Lloyd Charitable Trust
PI
Grant Title: Sun Protection Communication Practices Among High-Risk Families

The purpose of this grant was to determine differences in early detection of skin cancer practices among families with different risk profiles
Funding: $98,000

11) Years: 1999-2007
Funding Source: Environmental Protection Agency
PI
Grant Title: Evaluation of the SunWise School Health Programs

The major goal of this project is to evaluate the EPA’s national skin cancer educational programs.
Funding: $600,000

11b) Grant Title: Evaluation of the National Weather Service, EPA Ultraviolet Index.
Funding: $45,000

12) Years: 04/01/04 – 05/01/06
Funding Source: Harry J. Lloyd Charitable Trust (Swetter)
Co-PI
Grant Title: Reaching Out to Middle Aged and Older Men to Improve Melanoma Awareness and Early Detection. Survey of middle-aged men regarding melanoma discovery
Funding: $162,000

13) Years: 10/01/03 – 9/30/05
Funding Source: Boston University School of Public Health Dean’s Award (Brooks)
Co-PI
Grant Title: A Pilot Smoking Cessation Program for High-Risk Smokers in A Public Housing Development in Boston
Funding: $50,000

14) Years: 1995-2005
Funding Source: National Cancer Institute (Prout)
Co-PI
Grant Title: Cancer Control and Prevention Education for Medical Students
Funding: $2.5 million

The major purpose of this study was to develop, implement, and sustain a new cancer control curriculum for Boston University medical students
15) Years: 1/1/05-12/31/05  
Funding Source: Lichoulas Family Foundation  
PI  
Funding: $5,000

16) Years: 2003-2004  
Funding Source: American Academy of Dermatology  
PI  
Grant Title: Evaluation of AAD Skin Cancer Screening Programs  
The purpose of this grant was to analyze screening results from more than 250,000 American screened for skin cancer  
Funding: $45,000

17) Years: 2003-2004  
Funding Source: American Skin Association  
PI  
Grant Title: Skin Cancer Examination Teaching in Medical Education  
Funding: $10,000

18) Years: 2003-2004  
Funding Source: SPORE Grant, Harvard University  
PI  
Grant Title: Intergenerational Analysis of Parental Influences on Children’s Sun Protection Behavior  
Funding: $50,000

19) Years: 1998-2003  
Funding Source: National Institutes of Health (Gilchrest)  
Co-PI  
Grant Title: Promoting Melanoma Control in Melanoma Siblings  
Funding: $1.5 million  
The purpose of this study was to test various educational models for increasing melanoma control in high-risk siblings.

20) Years: 2002-2003  
Funding Source: National Melanoma Foundation  
PI  
Grant Title: Pilot Framingham Schools Natural History of Nevi Project  
Funding: $10,000

21) Year: 2002  
Funding Source: Massachusetts Melanoma Foundation  
PI  
Grant Title: Strategic Plan for Melanoma Detection  
Funding: $18,000
The purpose of this award was to develop a manuscript detailing a new melanoma screening plan for the US

22) Years: 1997-2001
Funding Source: Centers for Disease Control and Prevention
PI
Grant Title: Psychosocial Research in Skin Cancer Prevention
Funding: $343,000

23) Year: 2000
Funding Source: Massachusetts Department of Public Health
PI
Grant Title: Evaluation of Boston-area physicians practices of prostate cancer screening
Funding: $21,000

24) Years: 1997-1999
Funding Source: Centers for Disease Control and Prevention
PI
Grant Title: Technical Assistance in Skin Cancer Prevention
Funding: $125,000

25) Years: 1997-1999
Funding Source: Robert Wood Johnson Foundation
PI
Grant Title: Creating Statewide Tobacco Control Programs After Passage of a Tobacco Tax
Funding: $190,000

26) Years: 1995-1998
Funding Source: Massachusetts Department of Public Health
PI
Grant Title: Evaluation and Program Development for the Falmouth (MA) Safe Skin Program
Funding: $100,000

The purpose of this award was to identify barriers for skin cancer prevention counseling across a high-risk Massachusetts town

27) Year: 1995
Funding Source: American Academy of Dermatology
PI
Grant Title: Pediatric Practices for Sun Protection Counseling
Funding: $14,000

Current Funding:

1) Halpern, A  

9/1/09-8/31/14
National Institutes of Health/NIAMS
The Framingham Schools Natural History of Nevi Study
Project Director
The purpose of this grant is to develop predictors of the evolution of moles in a population-based cohort of schoolchildren in Framingham, MA.

2) Garg A, Geller AC 7/1/11-6/30/14
Harry Lloyd Charitable Foundation
Co-PI
The integrated skin exam: A randomized study at 7 US medical schools
The purpose of this grant is to test three different methods for teaching the integrated skin examination to US medical students.

3) Geller A, Frazier AL 1/1/12-12/31/13
SPORE Pilot (Kupper PI)
Behavioral and Biological Factors Associated with Tanning Bed Use
The purpose of this pilot grant is to conduct qualitative interviews with current and former tanning bed users ages 22-26 to examine differences in uptake and cessation.

4) 1R01CA141587-01 (Brooks, D.) 9/1/09-8/31/14
Co-PI
National Institutes of Health/Boston University
Health Advocates as a Vehicle to Improve Treatment for Smokers in Public Housing
The purpose of this grant is to increase smoking cessation services in Boston public housing developments.

5) R24MD02772-01 Rees V 2/1/08-1/31/14
Co-PI
NIH/MCMHD
MASS CONECT 4 Kids: Promoting Smoke-Free Homes
The major goal of this project is to design an intervention to protect high-risk children from involuntary secondhand smoke (SHS) exposure in domestic environments. Using community-based participatory research (CBPR), this initiative will evaluate the effectiveness of motivational intervention (MI) compared with usual best practices (UBP) by having parents voluntarily adopt smoke-free home policies to protect children from SHS.

6) Ockene J 9/1/09-8/31/14
National Institutes of Health/University of Massachusetts
Randomized Clinical Trial to Improve Tobacco Cessation Skills in Medical Schools
The purpose of this grant is to test and evaluate new educational models for smoking cessation in U.S. medical schools.

7) 1 R01 CA175231 Geller 6/1/13-05/31/18
PI
National Cancer Institute
Reducing Skin Cancer Risk in Childhood Cancer Survivors
The purpose of this grant is to develop and evaluate an innovative web-based and teledermatology intervention for childhood cancer patients.

8) American Legacy Foundation (Geller) 5/1/13-12/31/14
PI Evaluation of the ABCD Boston Head Start initiative to reduce tobacco use

The purpose of this grant is to evaluate ongoing efforts to reduce tobacco use among Boston Head Start parents.

INVITED PRESENTATIONS

February 2001
Targeting strategies for skin cancer detection in the United States.
World Congress on Melanoma, Venice, Italy
Does mass skin cancer screening in the United States substitute for melanoma case finding in primary care?

September 2001
Skin cancer screening in the United States
Centers for Disease Control and Prevention Cancer Conference

Sunscreen use, adverse sun exposures, and tanning bed use in a cohort of US children and adolescents Centers for Disease Control and Prevention Cancer Conference

The Environmental Protection Agency’s National SunWise School Program
Centers for Disease Control and Prevention Cancer Conference

July 2002
Skin cancer prevention and detection strategies
National Cancer Institute, Bethesda MD

October 2002
Smoking prevention education during the pediatric clerkship
American Association of Cancer Education(AACE) Toronto CA

November 2002
Preliminary results from the Framingham Schools Natural History of Nevi Project
International DermEpi Association

Identifying current pathways for detection of late-stage melanoma
Melanoma Prevention Working Group, Miami Beach, Florida
Identifying current pathways for detection of late-stage melanoma
Eastern Cooperative Oncology Group, Miami Beach, Florida

January 2003
Current status of skin cancer prevention programs in the US
SHADE Foundation Scottsdale Arizona

April 2003
Can an hour or two a year keep the sunburn away?
Sun Safety Workshop for Nurses, Norwell, MA

Evaluation of the EPA SunWise School Program
EPA, Washington DC

Screening strategies for high-risk families
Department of Epidemiology Grand Rounds, Boston University, Boston MA

May 2003
Skin cancer in the family-concerns and protection for family members

July 2003
Skin cancer prevention and detection strategies
NCI Cancer Prevention Fellows, Bethesda MD

September 2003
The EPA’s National SunWise Program
CDC Cancer Meeting, Atlanta GA

Magazine Advertising of Sunscreen
CDC Cancer Meeting, Atlanta GA,

Sun Protection Strategies
CDC Cancer Meeting, Atlanta GA

October 2003
Introduction to Tobacco Teaching at US Medical Schools
National Cancer Institute Tobacco meeting, Waltham MA

November 2003
Current status of tobacco teaching at US Medical Schools,
AACE meeting, Little Rock, AK

January 2004
Skin cancer teaching at US medical schools
Society for Investigative Dermatology meetings, Providence RI
February 2004
The Framingham School’s Natural History of Nevi Project: Townwide PTO, School nurses, Principals Framingham MA

Identifying current pathways for early detection of melanoma
Perspectives in Melanoma Meeting, Miami Beach, Florida

April 2004
Strategies for Sun Protection in the US
Massachusetts School Nurses Association, Hanover, MA

June 2004
Strategies for Sun Protection in the US
Statewide School Nurses Meeting, Hyannis MA

September 2004
Tobacco Teaching at US Medical Schools
Harvard Tobacco Group, Boston, MA

Framingham Schools Nevus Study
Boston University Cancer Prevention and Control Grand Rounds, Boston, MA

October 2004
Sun protection strategies
Quest Diagnostics, Cambridge, MA

November 2004
Status of SunWise programs
EPA, Washington DC

January 2005
Framingham Schools Nevus Study
Framingham School Committee, Framingham MA

February 2005
Natural history of melanoma, Cambridge MA

March 2005
Skin cancer prevention strategies, Boston, MA

April 2005
National Skin Cancer Screening Plan, Orlando FL

May 2005
International Skin Cancer Screening Plan
EuroSkin Conference, Lyon, France
Cancer screening, Boston, MA

Smoking cessation during ob-gyn clerkships
NCI Tobacco Meeting, Waltham MA

**September 2005**
World Congress on Melanoma, Vancouver BC

National Council on Skin Cancer Prevention Sun Safety Summit, Bethesda MD

**November 2005**
Tanning Bed Media Group sponsored by Mass Melanoma Foundation, New York City

National Council on Skin Cancer Prevention, Washington DC

**December 2005**
National Skin Cancer Screening and Prevention Plan, Visiting Professor
Arizona Cancer Center, Tucson AZ

**January 2006**
Epidemiology of tanning bed use
State House presentation, Boston MA

**February 2006**
National Skin Cancer Screening and Prevention Plan, Visiting Professor
Mayo Clinic Dermatology, Rochester MN

Combating obesity in Framingham
Framingham School Committee

**April 2006**
The PACE Study
Asian Pacific Islander Medical Student Association, Boston, MA

Strategies for Reducing Melanoma Deaths
Melanoma Research Foundation, Bethesda MD

**July 2006**
EPA’ SunWise Program
World Cancer Congress, Washington DC

Rationale for Tanning Bed Legislation in Massachusetts
Massachusetts State House, Boston, MA.

PACE Study
University of Alabama at Birmingham Tobacco Rounds, Birmingham AL

Skin Cancer Detection in Transplant Patients
AT-RISC meeting, World Transplant Meetings, Boston MA

**September 2006**
Strategies for Nutritional Change in Framingham
Framingham School Committee, Framingham MA

**October 2006**
Early Detection and Melanoma Control
Cancer Prevention and Control Grand Rounds, Boston MA

Tobacco Competencies for Medical Students
American Association of Cancer Education, San Diego CA

**November 2006**
Melanoma Epidemiology, Eastern Cooperative Oncology Network, Fort Lauderdale FL

Advances in Early Detection Strategies
National Council on Skin Cancer Prevention, Washington DC

**December 2006**
Early Detection of Melanoma
Boston University Dermatology Interest Group, Boston MA

**January 2007**
Obesity Prevention Strategies in MetroWest
MetroWest Community Health Care Foundation, Framingham MA

**February 2007**
The role of host factors in predicting total back nevus count in adolescents: Results from the Framingham SONIC Study

**March 2007**
Sun Protection Strategies
Boston University Wellness Center, Boston MA

Medical Student Education for Tobacco Control
Mass General Hospital Tobacco Research Center, Boston MA

Sun Protection Strategies
Mass College of Pharmacy
June 2007
Melanoma Detection, Obesity Control
Enhanced School Health Nurse Meeting, Framingham MA

Community Initiatives for Melanoma Control
MassCONNECT, Worcester MA

September 2007
Prescription Drug Abuse Epidemiology, NIDA presentation, Worcester MA,

Trends in melanoma incidence and mortality
Presented at the International Society for Environmental Epidemiology annual meeting in Mexico City

October 2007
Predictors of Late-Stage Melanoma
SWOG meeting, Huntington Beach, California.

November 2007
CHEER Study
American Institute for Cancer Research. Bethesda MD.

Melanoma screening, New England CME meeting, Cambridge MA.

December 2007
Obesity prevention in schools
Framingham School Committee. Framingham, MA

February 2008
Tanning Bed Strategies in the US
Tufts/NEMC Dermatology Grand Rounds, Boston, MA.

March 2008
Obesity prevention in schools, Framingham MA,

May 2008
SunWise Schools Cost-Effectiveness
National Council on Skin Cancer Prevention, Washington DC,

Behavioral antecedents for late-stage melanoma
ASCO meeting, Chicago IL

The Framingham Schools CHEER Study
MetroWest Community Health Care Foundation, Framingham MA.
June 2008
Research agenda for early melanoma detection
MGH Melanoma Lecture, Boston MA.

SunWise Schools Study

March 2009
Early Detection of Melanoma
Melanoma Prevention Working Group, Fort Lauderdale Florida

May 2009
Melanoma survivorship
World Congress on Melanoma, Vienna Austria.

Reducing Melanoma Deaths
World Congress on Melanoma, Vienna Austria

July 2009
Skin cancer prevention and control
NCI Summer Fellows, Bethesda MD

September 2009
Melanoma screening in the US
International Task Force on Melanoma Screening, Hamburg, Germany

Cervical cancer as a model for melanoma screening
International Task Force on Melanoma Screening, Hamburg, Germany

October 2009
Tobacco cessation strategies at US medical schools, Chicago IL

Melanoma early detection
Dana-Farber Cancer Institute, Boston, MA

December 2009
Melanoma early detection
Mass General Hospital, Boston, MA

March 2010
Melanoma early detection, MGH CME

Melanoma early detection CME New York City
June 2010
Melanoma early detection, Melanoma prevention
Melanoma (German screening trial), Athens Greece

July 2010
Status of skin cancer, NCI, Bethesda MD

November 2010
Melanoma early detection MGH
Melanoma SEER registry data Fort Lauderdale FL
Melanoma advocacy campaigns, Washington DC

December 2010
Status of skin cancer, HSPH

Tanning bed epidemic, Boston University

March 2011
Reducing deaths from melanoma: a national strategy, Mass General Hospital CME

May 2011
Call for action from melanoma survivors. Melanoma Foundation of New England, Dedham MA

June 2011
Melanoma early detection. European Association of Dermatology, Venereology, and Oncology, Nantes, France

July 21, 2011
Call for a National Fitline, Health Dialog, Boston MA

July 26, 2011
Reducing Deaths from Melanoma: National Cancer Institute Cancer Prevention Fellows: Bethesda MD

September 7, 2011
2nd Annual Howard Koh Visiting Professor Lecture, Boston University.

October 4, 2011
Plan for a National Tanning Bed Campaign. American Cancer Society, Atlanta GA..

October 7, 2011
Reducing Overweight in Framingham MA. Keynote Address, MetroWest Community Health Care Foundation. Framingham MA
October 20, 2011
Reducing Deaths from Melanoma:. New Hampshire Dermatology Society. Concord NH

January 2012
Mass General Hospital: Reducing Deaths from Melanoma
Fort Lauderdale Florida: Professional Education for Melanoma

March 2012
Society of Behavioral Medicine, New Orleans
Early Detection of Skin Cancer

June 2012
Mass General Hospital
The MS-Quit Study
Brigham and Women’s Hospital
Strategies for Early Detection of Skin Cancer

July 2012
National Cancer Institute
Prevention and Detection of Melanoma

August 2012
Centers for Disease Control National Meeting, Washington DC
The tanning bed epidemic

September 2012
Euromelanoma Meeting, Prague, Czechoslovakia
Tanning Bed Epidemic
Melanoma Mortality International Strategic Plan
European Association of Dermatologists, Veneraeologists, and Oncologists

November 2012
Mass General Hospital: The German Skin Cancer Screening Experience
Eastern Cooperative Oncology Group meeting, Ft. Lauderdale Florida
Tanning Bed Epidemic and Development of a National Strategic Plan

**January 18, 2013**
University Pittsburgh Medical Center, Pittsburgh PA. Launch of a skin cancer screening study at UPMC.

**January 25, 2013**
Quantitative Sciences Group, Cambridge MA. The national skin cancer screening trial in Germany.

**February 12, 2013**
DFCI Cancer Grand Rounds, Boston MA. The national skin cancer screening trial in Germany.

**March 1, 2013**

**March 15, 2013**
St Jude Hospital-Memphis, TN. Reducing Risk of Skin Cancer among Childhood Cancer Survivors

**April 24, 2013**
MGH Dermatology. Boston MA Germany screening trial.

**May 8, 2013**
CDC Cancer Control Rounds-Atlanta GA-National plan for skin cancer screening

**May 13, 2013**
St Jude Hospital-Memphis, TN. Reducing Risk of Skin Cancer among Childhood Cancer Survivors-National Meeting

**July 20, 2013**
World Congress on Melanoma, Hamburg, Germany. Plans for melanoma screening in the US

**July 23, 2013**
National Cancer Institute-Bethesda MD-Prevention and Detection of Melanoma

**July 25, 2013**
MetroWest Community Health Foundation, Framingham MA. Plans for a national Fitline.

**September 27, 2013**
MD Anderson Cancer Center Rounds, Houston Texas. National comprehensive plan for reduction of melanoma deaths.

**October 1, 2013**
HVMA Watertown MA. Fitline Analysis at HVMA.
October 5, 2013
BWH professional education program, Boston MA. National comprehensive plan for reduction of melanoma deaths.

October 19, 2013
MGH professional education program, Boston MA. National comprehensive plan for reduction of melanoma deaths.

November 17, 2013
SWOG, Philadelphia PA- German screening trial.

November 17, 2013
SWOG Philadelphia PA-Plan for melanoma reduction in Oregon

TEACHING EXPERIENCE -Current

2012-2013 Social and Behavioral Sciences 259-Research Practicum Culminating Experience-Masters of Sciences students, Harvard School of Public Health (18 students)

2012-2013 Social and Behavioral Sciences 508-Successes and Challenges in Health Behavior Change, -Masters of Sciences and Masters of Public Health students, Harvard School of Public Health (18 students per each academic year)

(1998-2009)
Boston University Schools of Medicine (BUSM) and Public Health (BUSPH)

1998 – 2007 BUSM 1-Public Health-Cancer Prevention as a Public Health Problem
1994 – 2008 BUSM 2-Introduction to Clinical Medicine-Cancer Prevention Skill Laboratories,
Ambulatory Medicine
2001 – 2008 BUSM 3-Ambulatory Medicine-Cancer Skills and Communication Labs,
Ambulatory Medicine
1998 - 2006 BUSM 3-Pediatric Clerkship-Pediatric Counseling for Tobacco Cessation-
1998 - 2006 BUSM IV Home Medical Service-Cancer Screening and Prevention for Elderly Patients
1998 – 2007 BUSPH Cancer Epidemiology Course
1998 – 2009 BUSPH Cancer Prevention as a Public Health Problem
BIBLIOGRAPHY:

Peer-reviewed journals


71) Geller AC, O’Riordian DL, Oliveria SA, Valvo S, Teich M, Halpern AC. Overcoming obstacles to skin cancer examinations and prevention counseling for high-risk patients:


85) O'Riordan DL. Field AE. Geller AC. Brooks DR. Aweh G. Colditz GA. Frazier AL. Frequent tanning bed use, weight concerns, and other health risk behaviors in adolescent females (United States). Cancer Causes & Control 2006; 17:679-86.


92) Geller AC. Miller DR. Swetter SM. Demierre MF. Gilchrest BA. A call for the development and implementation of a targeted national melanoma screening program.[see comment]. [Editorial] Archives of Dermatology 2006;142:504-7.


Other-Book Chapters


EDUCATIONAL MATERIALS:

1) Developer of teachtobacco.com website for tobacco cessation training of medical students
2) Developer of CDs for pediatric counseling for second-hand smoke reduction
3) Developer of CDs for general medicine counseling for tobacco cessation
4) Developer of materials on family history of melanoma education for high-risk skin cancer families
5) Developer of materials for skin cancer prevention counseling in newborn nurseries
6) Developer of ‘scripts’ for MI smoking cessation counseling for parents of hospitalized children
7) Developer of the Integrated Skin Exam Video for Medical Students, Association of Professors of Dermatology, October 8, 2010

GOVERNMENT REPORTS:

Docket No. FDA 2009-0606 Written testimony before FDA (3/25/10) describing epidemiologic evidence in support of tanning bed ban for minors
Exhibit U
CURRICULUM VITAE

Martin A. Weinstock, M.D., Ph.D.

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FAX:  401-457-3332
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Education:

1977 B.A.  Williams College (Mathematics)
1981 M.Phil. Columbia University Graduate School of Arts and Sciences (Epidemiology)
1982 Ph.D. Columbia University Graduate School of Arts and Sciences (Epidemiology)
1983 M.D. Columbia University College of Physicians and Surgeons

Postgraduate Training:

1983-1984 Resident in Internal Medicine, University of Pittsburgh Affiliated Hospitals (Presbyterian-University and Oakland V.A. Hospitals)
1984-1987 Resident in Dermatology, Harvard University Affiliated Hospitals (Massachusetts General, Brigham and Women's, Beth Israel, Children's, HCHP, and West Roxbury V.A. Hospitals, Dana-Farber Cancer Institute, and Lahey Clinic)
1987 Research Fellow in Dermatology, Massachusetts General Hospital
1987-1988 Andrew W. Mellon Foundation Fellow in Clinical Epidemiology, Harvard Medical School

Awards and Honors:

1974 Benedict Award--First Prize in Mathematics
1976 Phi Beta Kappa
1977 Sigma Xi
1977 Baccalaureate Summa Cum Laude with Highest Honors in Mathematics
1990 Department of Veteran's Affairs Special Contribution Award
1993  Disabled American Veterans Department of Rhode Island Annual Outstanding Physician Award
1993  Federal Employee of the Year, Professional Category (awarded by the Rhode Island Federal Executive Council)
1995  Master of Arts (honorary), Brown University
2001  Dean’s Teaching Excellence Award
2003  Dean’s Teaching Excellence Award
2004  Dean’s Teaching Excellence Award
2007  American Academy of Dermatology Astellas Award (for contributions to public health in dermatology through scientific research, first to win this award)
2007  Medical All-Star (chosen by Boston Red Sox to honor medical research)
2010  American Academy of Dermatology Presidential Citation
2010  American Skin Association Achievement Award

**Licensure and Board Certification:**

- 1983-1984  Commonwealth of Pennsylvania (as intern)
- 1984-     Commonwealth of Massachusetts
- 1987-     Diplomate, American Board of Dermatology
- 1988-     State of Rhode Island and Providence Plantations

**Academic Appointments:**

- 1988-1994  Assistant Professor of Medicine (Dermatology), Brown University
- 1994-1996  Associate Professor of Medicine (Dermatology), Brown University
- 1995-1996  Director of Research, Division of Dermatology, Brown University
- 1996-1998  Associate Professor of Dermatology, Brown University
- 1996-     Director of Research, Department of Dermatology, Brown University
- 1998-2003  Professor of Dermatology, Brown University
- 2003-     Professor of Dermatology and Community Health, Brown University

**Hospital Appointments:**

- 1985-1986  Staff Physician, Massachusetts General Hospital Chelsea Health Center, Boston, Massachusetts
- 1986-1988  Staff Physician, South Boston Community Health Center, Boston, Massachusetts
- 1987-1988  Staff Physician, Department of Medicine, Children's Hospital, Boston, Massachusetts
- 1988-     Chief of Dermatology and Staff Physician, Department of Veterans' Affairs Medical Center, Providence, Rhode Island
- 1988-1997  Director of the Rhode Island Pigmented Lesion Unit and
Director of Photomedicine, Roger Williams Medical Center, Providence, Rhode Island
1988-1998
Staff Physician, Roger Williams Medical Center, Providence, Rhode Island
1994-2002
Staff Physician, Miriam Hospital, Providence, Rhode Island
1994-
Staff Physician, Rhode Island Hospital, Providence, Rhode Island
1997-
Director of the Rhode Island Pigmented Lesion Unit and Director of Photomedicine, Rhode Island Hospital, Providence, Rhode Island

Grant Review Groups (Study Sections):

1989
Ad hoc member, Biometry and Epidemiology Contract Review Committee, National Institutes of Health
1990
Ad hoc reviewer, Health Care Technology Study Section, Agency for Health Care Policy and Research
1991
Ad hoc reviewer, Epidemiology and Disease Control Study Section 1, National Institutes of Health
1991,92,96
External referee, British Columbia Health Research Foundation
1992
Ad hoc member, Epidemiology and Disease Control Study Section 2, National Institutes of Health
1992
Member, Dermatology Core Committee (ad hoc Study Section), National Institutes of Arthritis, Musculoskeletal, and Skin Diseases
1992
Member, Program Project Site Visit Committee (ad hoc Study Section), National Cancer Institute
1993
Member, Special Review Committee (ad hoc Study Section), National Institute of Environmental Health Science and National Cancer Institute
1993
Member, Ad hoc Contracts Technical Review Group, National Cancer Institute
1995-1996
Ad hoc reviewer, Department of Veterans Affairs Health Services Research and Development Merit Review Board
1996
External referee, Israel Science Foundation
1996
Ad hoc member, ad hoc Study Section, National Institutes of Arthritis, Musculoskeletal, and Skin Diseases
1997
Member, Site Visit Scientific Review Panel, National Cancer Institute
1997
Ad hoc member, Prevention and Control Subcommittee, Initial Review Group, National Cancer Institute
1997,98,99
External reviewer, National Cancer Institute of Canada
1999
Member, Program Project Review, National Institute of Arthritis, Musculoskeletal, and Skin Disease
1999
Member, Grant Review Panel, National Institute of Arthritis, Musculoskeletal, and Skin Disease
2000
Member, Program Project Review, National Cancer Institute
2000
Ad hoc member, Epidemiology and Disease Control 2 (EDC-2) Study Section, National Institutes of Health
2001
External reviewer, National Cancer Institute of Canada
2001 Member, National Cancer Institute Special Emphasis Panel
2001 Member, National Institute of Arthritis, Musculoskeletal, and Skin Disease Clinical Research Training Special Emphasis Panel
2001 Member, Special Emphasis Panel, National Institutes of Health
2001 Member, Social Sciences, Nursing, Epidemiology and Methods Integrated Review Group (SNEM-5) study section
2002-2003 Member, Social Sciences, Nursing, Epidemiology and Methods Integrated Review Group (SNEM-1) study section
2003 Reviewer, Epidemiology of Clinical Disorders and Aging (ECDA) study section
2004 External Reviewer, Genetic Epidemiology Branch, National Cancer Institute
2004 Member, Department of Veterans Affairs Health Services Research and Development Quality, Measurement, and Effectiveness Scientific Review Group
2005 Ad hoc reviewer, Health Services Organization and Delivery (HSOD) study section
2007 Reviewer, Arthritis, Connective Tissue and Skin (ACTS) Study section
2008 Reviewer, Science Foundation Arizona
2008 Member, Community Level Health Promotion (CLHP) Study Section, National Institutes of Health
2009-2010 Reviewer, National (UK) Institute for Health Research (NIHR) Research for Patient Benefit (RfPB) Programme

Other Positions: Local and Regional:
1989-1992 Coordinator, Brown University Melanoma Interest Group
1991 Co-chair, Dermatology II, Eastern Regional Meeting, Society for Investigative Dermatology
1988-1994 Member, Roger Williams Clinical Cancer Research Center
1989-1995 State Coordinator, American Academy of Dermatology - American Cancer Society, Free Melanoma/Skin Cancer Screening Clinics for Rhode Island
1992-1997 Board of Directors, American Cancer Society, Rhode Island Division
1994-1997 Executive Committee, Board of Directors, American Cancer Society, Rhode Island Division
1995-1998 Disease-Site Committee (Melanoma), Brown University Cancer Center - Clinical Oncology Group of Rhode Island
1999-2003 Commission on Detection, Rhode Island Cancer Council
2002-2005 Clinical Oncology Round Table, Rhode Island Cancer Council
2006-2007 Chairman, Detection and Screening Workgroup, Comprehensive Cancer Control Plan, Rhode Island
2007-2008 Chairman, Detection and Screening Implementation Task Force, Comprehensive Cancer Control Plan, Rhode Island

Other Positions (Past): National and International:

(4)
1991 Chairperson, Session on Melanocytic Nevi, Second
International Symposium on the Epidemiology of
Malignant Melanoma, Vancouver, British Columbia

1991, 1994 Consulting Editor, Sun and Skin News

1992 Chairperson, Session on Clinical Research/Epidemiology,
Annual Meeting, Society for Investigative Dermatology

1992-1993 Member, National Institute of Arthritis, Musculoskeletal and
Skin Diseases Scientific Workshop on the Epidemiology
of Skin Diseases Planning Group

1992-1993 Member, Expert Working Group on the International Health,
Solar Ultraviolet Radiation and Environmental Change
(INTERSUN), International Agency for Research on
Cancer (a component of the World Health Organization),
Lyon, France

1993 Chairperson, Closing session, Scientific Workshop on the
Epidemiology of Skin Diseases, National Institute of
Arthritis, Musculoskeletal and Skin Diseases

1993 Doctoral thesis examiner, Australian National University,
Canberra, Australia

1993-1998 Editorial Board, Journal of the American Academy of
Dermatology

1994 Co-chairperson, Dermatology session, American Federation for
Clinical Research annual meeting

1994-1995 Scientific Board, International Conference on Epidemiology,
Causes and Prevention of Skin Diseases, Marseille, France


1994-1996 Planning Committee, National Institute of Arthritis,
Musculoskeletal and Skin Diseases Scientific Workshop
on Patient Outcome Studies in Nonmelanoma Skin Cancer

1994-2004 Advisory Committee, National Registry for Ichthyosis and
Related Disorders

1994-2005 National Skin Diseases Data Workgroup, National Institute of
Arthritis, Musculoskeletal and Skin Diseases

1995 Facilitator, UV Exposure Reduction Panel at Skin Cancer:
Education and Prevention, I. Agenda Setting, a
national conference sponsored by the American Academy
of Dermatology and the Centers for Disease Control,
Washington, DC

1995 Session Chair (Dermatologic Needs in UV Monitoring),
International Symposium on UV Measurement and Effects:
A Cooperative Approach, Boulder, Colorado

1995 Session Chair (Prevention of Skin Cancers), International
Conference on Epidemiology, Causes and Prevention of
Skin Diseases, Marseille, France

1995-1996 Field Advisory Group in Dermatology, V A Central Office

Guidelines for Skin Cancer Prevention, University of
Alabama and Centers for Disease Control and Prevention

1996 Minisymposium Chair (Clinical Research), Annual Meeting of
1996 Symposium Chair (Dermatologic Epidemiology), Clinical Dermatology in the Year 2000, Vancouver, British Columbia

1996 Chair, Screening II session, International Conference on Skin Cancer and UV Radiation, Ruhr University, Bochum, Germany

1996 Panelist, Workshop on Patient Outcomes in Basal Cell and Squamous Cell Skin Cancer, National Institute of Arthritis, Musculoskeletal, and Skin Disease, Bethesda, Maryland

1996-2001 Comité Editorial Internacional (Editorial Board), Dermatología & Cosmética (Madrid)


1997 Symposium Co-chair, Annual Meeting of the Society for Investigative Dermatology, Washington, DC

1997 Course Co-chair (Dermatoepidemiology), 19th World Congress of Dermatology, Sydney, Australia

1997-1998 Doctoral thesis examiner, University of Queensland, Brisbane, Australia

1997-1999 Prevention Committee, American Cancer Society, Atlanta, Georgia

1998 Co-chair, session on Analytic Dermato-Epidemiology, EDEN Congress: 2nd International Meeting on Epidemiology and Prevention of Skin Diseases, Bamberg, Germany

1998 Guest Editorial Board, Health Education and Behavior

1998-2004 Assistant Editor, Journal of the American Academy of Dermatology

1999 Moderator, session on Screening for Melanoma, Perspectives on Melanoma symposium, New Orleans, Louisiana


1999 Chair, Networking Session of Skin Cancer Prevention and Early Detection, Second World Conference for Cancer Organizations, Atlanta, Georgia

1999 Facilitator, Skin Cancer Workshop, American Cancer Society Cancer Control Conference, Atlanta, Georgia

1999-2001 Organizing Committee, EDEN - IDEA Congress: 3rd International Meeting on Epidemiology and Prevention of Skin Diseases, Noordwijkerhout, Netherlands

1999-2000 National Cancer Control Operations Committee, American Cancer Society

2000 Visiting Professor, Skin Diseases Research Center, Case Western Reserve University

2000 Co-Chair, Working Group on Epidemiological and Mechanistic Evidence on Skin Cancer, 8th U.S.-Japan Workshop on Global Climate Change
2000  Mentor, American Academy of Dermatology Minority Mentorship Program (FN)
2000  Doctoral Thesis Examiner, University of Newcastle, New South Wales, Australia
2001  Co-Chair, Skin Cancers and Precursors, EDEN – IDEA Congress: 3rd International Meeting on Epidemiology and Prevention of Skin Diseases, Noordwijkerhout, Netherlands
2002  Co-chair, Symposium on Epidemiology of Skin Disorders, 20th World Congress of Dermatology, Paris, France
2002  Planning Committee for the National Institute of Arthritis and Musculoskeletal and Skin Diseases Workshop on the Burden of Skin Diseases
1997-2003  National Steering Committee, National Epidermolysis Bullosa Registry
2003  Mentor, American Academy of Dermatology Minority Mentorship Program (MM)
2003  National Dialogue on Cancer Primary Prevention and Early Detection Summit
2003  Mentor, American Dermatological Association Medical Student Fellowship (KL)
2003-2004  Editorial Board, Dermatology Lexicon Project
2003-2004  Guest Editor, Burden of Disease Issue, Journal of Investigative Dermatology
2004  Planning Committee, AADA Conference on Sunlight, Tanning Booths, and Vitamin D, Washington DC
2004  Breakout session leader, UV exposure and vitamin D risk/benefit, AADA Conference on Sunlight, Tanning Booths, and Vitamin D, Washington DC
2004  Organizing Committee, 4th International Congress on Epidemiology, Causes, and Prevention of Skin Diseases: the EDEN-IDEA Congress, Venice, Italy
2004  Chairman, Session on Clinical Trials and Systematic Reviews, 4th International Congress on Epidemiology, Causes, and Prevention of Skin Diseases: the EDEN-IDEA Congress, Venice, Italy
2002-2005  External Advisory Board, Specialized Program of Research Excellence in Cutaneous Cancer (SPORE), Harvard Dana Farber Cancer Center and Brigham and Women's Hospital, Boston, Massachusetts
2005  Co-chairman, Joint Session of the Society for Investigative Dermatology and the International DermatoEpidemiology Association on Epidemiology/Health Services Research at the 66th annual meeting of the Society for Investigative Dermatology, St. Louis, Missouri
2005  Chairman, Session on Prevention and Detection of Early Melanoma, 41st annual meeting of the American Society of Clinical Oncology, Orlando, Florida
2005  Chairman, Plenary Session on determinants of sunscreen impact on public health, EDEN Workshop on Sunscreens, Photoprotection, and Public Health, Marseille, France
2005 International Agency for Research on Cancer Working Group on risk of skin cancer and exposure to artificial ultraviolet light, Lyon, France
2005 Co-chairman, Plenary Session on “Are we overdoing the emphasis on sun protection” at the 6th World Congress on Melanoma, Vancouver, British Columbia, Canada
2006 Co-chairman, Joint Session of the Society for Investigative Dermatology and the American DermatoEpidemiology Network on Epidemiology/Health Services Research at the 67th annual meeting of the Society for Investigative Dermatology, Philadelphia, Pennsylvania
2006 Doctoral Thesis Examiner (Outside Reader), Boston University
2007 Session co-chair, Epidemiology of Skin Diseases Symposium, 21st World Congress of Dermatology, Buenos Aires, Argentina
2007 Session co-chair and panelist, Burden of Skin Disease Symposium, 21st World Congress of Dermatology, Buenos Aires, Argentina
2008 Invited participant, V A Teledermatology Strategic Planning Session, Minneapolis, Minnesota
2008 Chair, Session on New Strategies, 4th European Academy of Dermato-Oncology Congress/7th International Conference of Adjuvant Therapy on Malignant Melanoma, Marseille, France
2008 Director, Melanoma Forum (#517), American Academy of Dermatology Summer Meeting, Chicago, Illinois
2008 Chair, Session on “Moving to Epidemiology”, 5th International DermatoEpidemiology Association (IDEA) Congress, Nottingham, England
2008 Moderator, Workshop on Cutaneous-Cardiovascular Disease, Society for Investigative Dermatology Co-morbidity Conference, Bethesda, Maryland
2008 Doctoral Dissertation Examination Committee, Harvard University, Boston, Massachusetts
2004–2009 Assistant Section Editor, Archives of Dermatology
2009 Director, Melanoma Forum (#F028), American Academy of Dermatology Summer Meeting, Boston, Massachusetts

Other Positions (Current): National and International:

1985– Contributing Editor, Year Book of Dermatology
1995– Skin Cancer Advisory Group, American Cancer Society (National), Atlanta, Georgia
1997– Chairman
2000– Medical and Scientific Advisory Board, Mycosis Fungoides Foundation
2002– Journal of Investigative Dermatology
2002–2007 Associate Editor
2007– Section Editor (Epidemiology)
2002- Melanoma Prevention Working Group, Intergroup/Eastern Cooperative Oncology Group
2006- Chairman, Dermatology Field Advisory Committee, Department of Veterans Affairs, Washington, DC
2009- Scientific Advisory Board, Euroskin Skin Cancer Screening, Germany
2009- World Health Organization, Technical Working Group on Policy Options for Artificial Tanning Sunbeds, Gevena, Switzerland
2010- Director, Director, Melanoma Forum (#F019), American Academy of Dermatology Summer Meeting, Chicago, Illinois
2010- Chairman, International Task Force on Skin Cancer Screening and Prevention, Euroskin

Hospital Committees:
1989-1990 Surgical Case Review Committee, Department of Veterans' Affairs Medical Center, Providence, Rhode Island
1990-1993 Medical Library Advisory Subcommittee, Department of Veteran's Affairs Medical Center, Providence, Rhode Island
1991-1992 Medication Action Profile Task Force, Department of Veteran's Affairs Medical Center, Providence, Rhode Island
1992-1993 Medical Records User Task Force, Department of Veteran's Affairs Medical Center, Providence, Rhode Island
1993-1997 Advisory Committee, Clinical Oncology Research Training Program, Roger Williams Medical Center, Providence
1995 Search Committee, Chief of Pathology and Laboratory Service, Department of Veteran's Affairs Medical Center, Providence, Rhode Island
1997-2002 Patient Education Committee, Department of Veteran's Affairs Medical Center, Providence, Rhode Island
1998 Clinical Executive Board, Department of Veteran's Affairs Medical Center, Providence, Rhode Island
1999- Research Advisory Committee, Lifespan, Providence, Rhode Island
2000-2005 Vista Imaging Committee, V A Medical Center, Providence, Rhode Island
2006-2007 Vista Imaging Functional Change Control Board, Veterans Health Administration

Brown University Committees:
1989- NRMP Residency Review Committee, Department of Dermatology

(9)
Faculty Search Committee, Division of Dermatology, Department of Medicine
1990-1991

Faculty Associate, Center for Gerontology and Health Care Research, Brown University
1991-

Faculty Search Committee, Division of Oncology, Department of Medicine
1992-1993

Faculty Search Committee, Department of Community Health
1993

Faculty Search Committees, Division of Dermatology, Department of Medicine
1993-1994

Faculty Search Committees, Division of Dermatology, Department of Medicine
1995-1996

Chair, Faculty Search Committee, Department of Dermatology (initially the Department of Medicine)
1995-1999

Promotions Committee, Department of Dermatology
1996-

Faculty Search Committee, Department of Community Health
1997

Executive Committee, Center for Gerontology and Health Care Research
1998-

Faculty Search Committee, Center for Alcohol and Addiction Studies
1999-2000

Clinical Department Strategic Planning Working Group
1999-2000

Faculty Search Committee, Department of Community Health
2000

Faculty Search Committees, Department of Dermatology
2000-2001

Cancer Center Director Search Committee
2001

Conflict of Interest/Conflict of Commitment Committee
2001-

Medical Faculty Executive Committee
2001-2

Vice-chair
2002-3

Chair
2003-4

Past chair
2002-2003

Planning and Evaluation Committee, Center for Gerontology and Health Care Research
2002-2003

Executive Committee, Brown University
2002-2003

Member, Biomedical Faculty Council
2002-2003

Task Force on the Committee on Medical Faculty Appointments
2003

Faculty Search Committee, Department of Community Health
2003

Faculty Search Committee, Department of Dermatology
2003-

Liaison Committee on Medical Education, Subcommittee on Faculty
2004-2007

Faculty Search Committee, Department of Community Health
2007-

Faculty Search Committee, Department of Community Health

Memberships and Positions in Professional Societies:

1980-

Society for Epidemiologic Research
1983-1984

Pennsylvania Medical Society
1985-1988

Massachusetts Medical Society
1985-1988

Middlesex South District Medical Society
1987-1995

American Federation for Clinical Research
1988-

New England Dermatological Society
<table>
<thead>
<tr>
<th>Year(s)</th>
<th>Position/Role</th>
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<tbody>
<tr>
<td>1993-1996</td>
<td>Nominating Committee</td>
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<tr>
<td>1995-1996</td>
<td>Chair, Nominating Committee</td>
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<td>1988-</td>
<td>American Academy of Dermatology</td>
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<tr>
<td>1996-2000</td>
<td>Epidemiology Committee</td>
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<td>1995-1998</td>
<td>Environment Council</td>
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<td>1996-2000</td>
<td>Computer Technology / Computer and Informatics Committee</td>
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<td>2002-2006</td>
<td>Melanoma/Skin Cancer Committee</td>
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<td>2006-2007</td>
<td>Vitamin D and Skin Cancer Workgroup</td>
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<td>2006-2007</td>
<td>Ad hoc Task Force for Science and Research</td>
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<td>2007-2009</td>
<td>Council on Science and Research</td>
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<td>2007-2008</td>
<td>Basic Science Core Curriculum Subcommittee</td>
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<td>2008-2010</td>
<td>InterSociety Liaison Committee</td>
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<tr>
<td>1991-1992</td>
<td>President</td>
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<tr>
<td>1992-1993</td>
<td>Vice-President</td>
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<tr>
<td>1993-1997</td>
<td>Nominating Committee</td>
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<tr>
<td>1996-1997</td>
<td>Chair, Nominating Committee</td>
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<tr>
<td>1989-</td>
<td>Society for Investigative Dermatology</td>
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<tr>
<td>1993-</td>
<td>Committee on Scientific Programs, Abstract Reviewer</td>
</tr>
<tr>
<td>1994-1995</td>
<td>Chair, ad hoc Committee to review NIH guidelines</td>
</tr>
<tr>
<td>1994-1999</td>
<td>Committee on Government and Public Relations</td>
</tr>
<tr>
<td>1995-1996</td>
<td>Chair, ad hoc Committee on the Quantification of the Impact of Skin Diseases</td>
</tr>
<tr>
<td>1996-1997</td>
<td>Steering Committee to Update Research Needs Documents</td>
</tr>
<tr>
<td>2002-2007</td>
<td>Committee on Long-Range Planning and Priorities</td>
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<td>2003-2006</td>
<td>Burden of Disease Task Group</td>
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<tr>
<td>2007-2008</td>
<td>Project Advisory Committee on Burden of Skin Disease Co-Morbidities</td>
</tr>
<tr>
<td>1989-</td>
<td>Rhode Island Dermatological Society</td>
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<tr>
<td>1991-2007</td>
<td>American Public Health Association</td>
</tr>
<tr>
<td>1991-1996</td>
<td>Founder and Coordinator, Dermatopepidemiology Interest Group (this group became the International Dermatopepidemiology Association in 1996)</td>
</tr>
<tr>
<td>1992-2005</td>
<td>International Society for Cutaneous Lymphomas</td>
</tr>
<tr>
<td>1994-</td>
<td>Rhode Island Medical Society</td>
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<tr>
<td>1995-2001</td>
<td>Colegio Ibero-Latinoamericano de Dermatologia</td>
</tr>
<tr>
<td>1996-</td>
<td>Founder and Charter Member, International Dermatopepidemiology Association</td>
</tr>
<tr>
<td>1996-1998</td>
<td>President</td>
</tr>
<tr>
<td>1998-2000</td>
<td>Membership and Nominations Committee</td>
</tr>
<tr>
<td>1999-</td>
<td>Association of Professors of Dermatology</td>
</tr>
<tr>
<td>2001-</td>
<td>American Dermatological Association</td>
</tr>
<tr>
<td>2002-</td>
<td>Founder, American Dermatopepidemiology Network, formerly the Americas chapter, International</td>
</tr>
</tbody>
</table>
Primary Research Interest:

Epidemiology of Cutaneous Malignancies and Dysplasias

Bibliography:

A. Original Research in Peer Reviewed Journals:


61. Carli P, de Giorgi V, Chiarugi A, Nardini P, Weinstock MA, Stantel M,


B. Reviews, Editorials, and Other Articles in Peer Reviewed Journals:


(21)


38. Weinstock MA. Don’t drop the slop! Photodermatol Photoimmunol Photomed 2001;17:238-239.


49. Lim HW, Gilchrest BA, Cooper KD, Bischoff-Ferrari HA, Rigel DS, Cyr WH, Miller S, DeLeo VA, Lee TK, Demko CA, Weinstock MA, Young A, Edwards LS,


54. Weinstock MA. ABCD, ABCDE, and ABCDDEEEFNU. Arch Dermatol 2006;142:528.


64. Weinstock MA. Evaluation of in-person dermatology vs. teledermatology


C. Books:


D. Chapters and Other Publications:


(25)


37. Weinstock MA. Cases of nonmelanoma skin cancer reach an all-time high [adapted from #34]. Primary Care & Cancer 1996;16:8.


(29)


E. Curricula:


F. Abstracts:


* Abstracts presented at the Society for Investigative Dermatology Annual Meetings were published both in the Journal of Investigative Dermatology and in Clinical Research during 1989-1992.


48. Weinstock MA, Mikkilineni R. Sun sensitivity, sunscreen use, and the


