AAD 1938 American Academy of Dermatology

Directions in Residency

Summer 2011

Official Publication of the Residents/Fellows Committee, American Academy of Dermatology

Southeast Asian Odyssey

By Jessica Kirk, M.D.

Dr. Kirk spent three weeks in December, 2010, volunteering at a clinic in Cambodia, where she encountered power failures, heat, and language barriers. But she also encountered illuminating cases, an appreciation for teamwork, and a renewed sense purpose and commitment.

Clinic: Day one

My first clinic occurred on a day without electricity.

Twenty-seven medical students, three residents, a Cambodian dermatologist, and me. All crowded into a sweltering exam room at Preah Kossamak Hospital — a government hospital in Phnom Penh that provides partially subsidized medical care — to see a 47-year- old man with mutilating psoriatic arthritis.

The patient had been erythrodermic for over five years. The only therapy that proved effective for him was a short course of fumeric acid, which had been donated by a visiting physician, and that quickly ran out. He left the clinic with refills of methotrexate and a meager supply of

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The leprosy clinic at the National Rehabilitation Center in Cambodia.

Ethical Considerations

Karen Scully, M.D., is a board-certified dermatologist in Canada and the United States, and has an M.A. in ethics from UNC, Charlotte.

Ethical Considerations in Research, Part One

By Karen Scully, M.D.

In this, the first of a two-part article about ethical issues in research, Dr. Scully addresses conflicts of interest between academic medicine and industry relationships, and academic freedom.

As physicians, we belong to a select group, the medical profession. One common characteristic among professions is self-regulation. Society gives us the privilege of diagnosing and treating patients' diseases with little societal regulation. We have moral obligations to maintain the privilege of belonging to the medical profession: we promise to uphold standards of excellence and respect the long tradition of the goals and values of medicine. In a similar manner, engineers have a duty to society to ensure that the buildings and bridges they design and build are safe for people to use. Accountants have a duty to give honest and accurate financial reports. In the field of science, members of society volunteer to be research subjects in return for communication of the clinical findings for the benefit of society.

The established way scientists communicate their research is through publication. Clinical research findings are the basis for most medical treatment decisions, making clinical trials a powerful tool. Public discourse and health care policy are based on these findings as well.[1] Therefore, the process of publication must be trustworthy and objective.

The academic/industry dilemma

Many ethical issues emerge when considering the scientific practice of medicine. One ethical concern involves the academic medicine/industry relationship in clinical trials. Studies have become a multi-million dollar business. Universities are receiving less funding for education and patient care, and are relying more and more on funding from industry. Pharmaceutical companies providing funding are able to exercise considerable power and influence over clinical trials. For example, companies may design the trial, control the data, and may suppress and/or delay publication of unfavor-

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Whitfield's ointment — 30 grams of the attending physician's personal supply scooped into a plastic bag. We hoped the methotrexate would help restore a modicum of dignity and function to his life. The gathered students formed a sort of mass in the small examination room, collectively leaning in and peering forward to learn everything possible from each patient. That was day one.

The path of volunteerism

I had traveled in developing countries before, but this was my first trip as a medical provider. I started my search for an international opportunity at the Volunteer's Abroad Course, which is held before the AAD Annual Meeting. I was surprised to learn about the range of options for dermatologists in the international arena. The course helped me clarify my personal priorities for a meaningful experience: A site to which I could potentially return after residency, a secular volunteer organization successful at facilitating short-term physician placements, an operation geared toward developing lasting medical educational infrastructure, and a local dermatologist familiar with a limited formulary. Among my options were a month-long AAD-sponsored fellowship in Botswana and involvement in an emergency response team to work with refugees of flood-ravaged southeastern Pakistan.

Health Volunteers Overseas (HVO) is a non-governmental organization (NGO) partnered with the American Academy of Dermatology. Their mission is to improve global health through education of local health care practitioners, and they specifically addresss the chronic nature of most dermatologic disorders.

HVO volunteers teach local health care providers about diagnosis and treatment of population-specific conditions. This attention to the intellectual capital of a growing health care system deeply resonated with my goal to partake in lasting partnerships designed to empower providers who would care for patients long after my departure. HVO offers opportunities for dermatology residents in Cambodia, India, Peru, and Uganda. With a handful of excellent opportunities before me, I had let the weather reports guide me: it was winter in southern New England. That's when I began to set my sights on Asia.

Cambodian pearls and conundrums

When you're volunteering in another part of the world, like Cambodia, you take in a lot of information in a hurry. Among the things I observed very early on during my time there:

- Cambodia has no rheumatologists. Dermatologists are the de facto connective tissue experts, and they manage systemic lupus simply by following the creatinine and ANA.
- Most western medications are priced out of reach for Cambodians. Hydroxychloroquine, however, for which I often complete prior authorization forms in the US, costs only pennies in Cambodian pharmacies. (I later learned this was due to the much higher prevalence of malaria in Cambodia compared to, say, Providence, R.I.)
- Memorizing rare drug reactions for the in-service does pay off! I did not need a translator to tell me that a leprosy patient took clofazamine when I saw the red-brown hyperpigmentation on his or her extremities.
- Skin biopsies could only be interpreted after being delivered first by courier to the German embassy, flown to a Munich dermatopathologist, and the diagnosis emailed to Cambodia. Needless to say, clinical skills are paramount.
- Every teenager, no matter where in the world, is self-conscious about acne. Acne is as common in Cambodia as it is in the US — but far fewer patients seek treatment in Cambodia. Some of this is because of the cost of medication, as I mentioned above.

Resource-poor medical practices are typical in the developing world, and skin conditions are commonly undertreated. In international refugee populations, exposure, parasites, and poor nutrition combine to make skin disease the third most common medical concern. Providers in Cambodia, as in many other parts of the world, lack structured training in the diagnosis and management of common skin diseases.

One day at a time

Midway through that first morning at Preah Kossamak Hospital, the electricity (and air conditioning) came back to life. Sometimes it's the small comforts you take for granted that renew your sense of purpose. I was ready for more.

With linguistic help from one of the junior faculty, I gave a daily lecture to the medical students in a classroom equipped with PowerPoint. Everything ended up being trans-

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The waiting room at Preah Kossamak Hospital in Phnom Penh. There are about 30 dermatologists for 14 million people in Cambodia.

Dr. Kirk, center, with 17 medical students in Cambodia who have never watched Jeopardy.

Jessica Kirk, M.D.

The HVO dermatology program area is sponsored by the American Association of Dermatology (www.aad.org). For more information on Health Volunteers Overseas, visit their website at www.hvousa.org.

Soft Tissue Fillers, Part 2: Non-Biodegradable

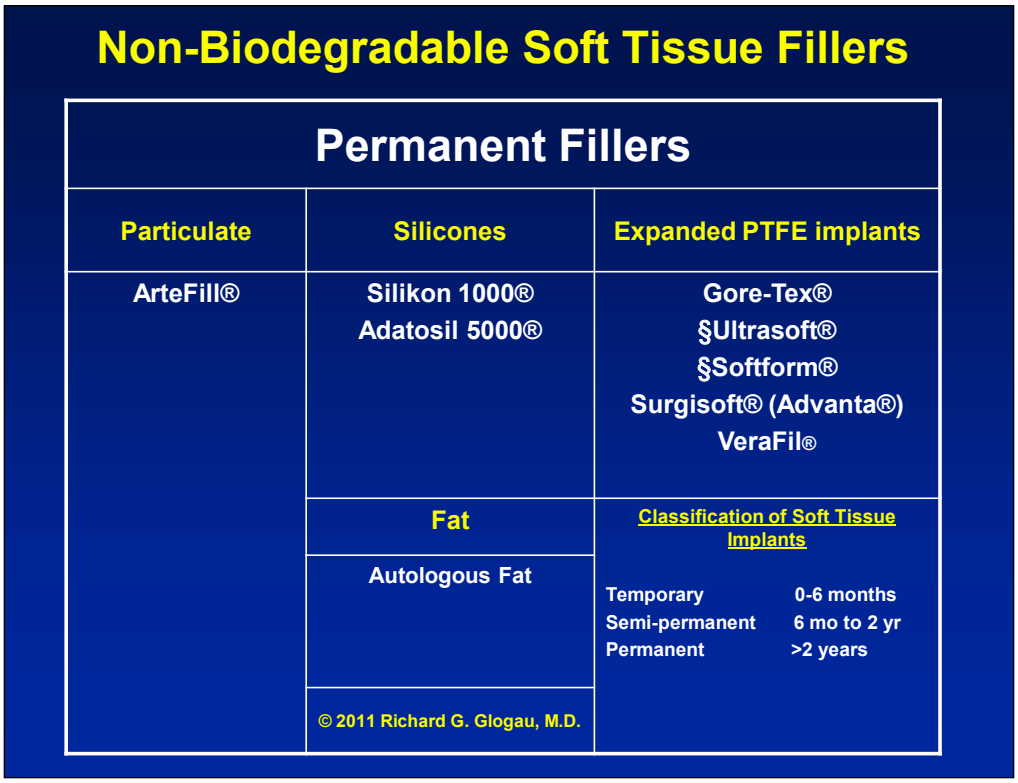
Natalie Curcio, M.D., M.P.H.

Filler Class	Trade Nme	Composition	Skin Test	FDA-approved indication	Depth of injection	Needle
Particulate	ArteFill®	Polymethylmeth-acrylate beads in bovine collagen gel + 0.3% lidocaine	Yes	Nasolabial folds	Dermal	26 G
Fat	Autologous Fat	Adipocytes harvested by large bore needle or liposuction cannula and washed in saline	No	Does not require FDA approval; Nasolabial folds, melolabial folds, cheek augmentation, lips, hands	Subcutaneous fat	16 G to 19 G
Silicones	Silikon 1000®	Polydimethylsiloxane (silicone oil)	No	Retinal tamponade in select cases of retinal detachments; Off-label use as facial filler	Dermal (microdroplet technique)	25 G to 27 G
	Adatosil 5000®	Polydimethylsiloxane (silicone oil)	No	Retinal tamponade in select cases of retinal detachments	Very thick; infrequently used for skin injection	N/A
ePTFE* lip implants	Gore-tex®	Solid strands of porous Gore-tex®	N/A	Soft tissue augmentation	Non-injectable; Subcutaneous	N/A
	§ Softform®	Tubular form of Gore-tex®	N/A	Lip augmentation	Non-injectable; Subcutaneous	N/A
	§ Ultrasoft®	3x Softer versión of Softform	N/A	Lip augmentation	Non-injectable; Subcutaneous	N/A
	Surgisoft® (formerly Advanta®)	Harder outer shell with a softer inner one; Solid, not tubular	N/A	Lip augmentation	Non-injectable; Subcutaneous	N/A
	VeraFil®	Saline-filled ePTFE balloon	N/A	Lip augmentation	Non-injectable; Subcutaneous	N/A

§No longer commercially available in the US

ePTFE: expanded polytetrafluoroethylene*

Natalie Curcio, M.D., M.P.H., is a dermatologic cosmetic surgery fellow at UC-San Francisco.



Soft Tissue Fillers: Side Effects and Complications

Natalie Curcio, M.D., M.P.H.

Filler	Side Effects or Complications	Injection Tips or Solutions
Zyderm® Zyplast® (Bovine collagens)	• Delayed Hypersensitivity Reaction • Amaurosis fugax (Zyplast >> Zyderm) • Local necrosis (Zyplast) • Contraindicated in glabella • Painful cysts (Zyplast) • Granuloma formation	• Pre-treatment skin tests • Avoid glabellar injection and caution near angular artery • I&D or steroids
Juvéderm® Prevelle Silk® Restylane® Perlane® (Hyaluronic acids)	• Erythematous bumps • Tyndall effect • Hypersensitivity reaction (0.6%) • Granulomatous foreign body reaction reported in lips with Restylane	• Hyaluronidase to dissolve • Avoid too superficial placement of product • Hyaluronidase • Hyaluronidase
Radiesse® (Ca hydroxylapatite)	• Superficial beading • Contraindicated in lips • Radiopaque	• Avoid too superficial placement of product • Excise with #11 blade or surgery
Sculptra® (Poly-L-lactic acid)	• Granuloma Formation • Palpable Nodules 30-40%	• Surgical Excision • Steroids, 5-FU, surgery, Imiquimod
ArteFill® (Polymethylmeth-acrylate)	• Hypersensitivity Reaction • Granuloma Formation in 6-24 mo (0.6%) • Superficial nodules • Contraindicated in lips	• Pre-treatment skin test • IL steroids, allopurinol, IL 5-FU • Avoid too superficial placement
Silikon 1000® (Polydimethylsiloxane)	• Product Migration • Granuloma formation • Beading and Tyndall Effect	• Avoid adulterated silicone • IL steroids, Minocycline, Imiquimod • Avoid too superficial placement • Use Microdroplet technique • Limit quantity per treatment
Any Filler	• Biofilms (cause of 80% infections) are aggregates of microorganisms in which cells are attached to each other and/or to a surface, such as a filler • Present as granulomas, pseudoabscesses, or nodules • Routine cultures often negative	• I&D and Culture for PCR • Quinolone and Macrolide antibiotics for 2 weeks • IL steroids are contraindicated unless antibiotics treatment has been started • Excision or debridement of nodule if possible
Autologous Fat	• Donor site morbidity • Calcification of injected fat • Unpredictable resorption	
ePTFE Implants	• Product Migration/Asymmetry • Capsule formation & contraction • Extrusion • Infection • Rigid or stiff feel to implant	• Removal of lip implant

References:

Curcio NM, et al. Injectable fillers: An American perspective. G Ital Dermatol Venereol. 2009 Jun; 144(3): 271-9.
Narins RS, et al. Recommendations and treatment options for nodules and other filler complications. Dermatol Surg. 2009 Oct; 35 Suppl 2: 1667-71.
Requena L, et al. Adverse reactions to injectable soft tissue fillers. J Am Acad Dermatol. 2011 Jan; 64(1): 1-34.
Rohrich RJ, et al. Soft-tissue filler complications: The important role of biofilms. Plast Reconstr Surg. 2010 Jun; 125(6): 1250-6.

Do you have an interesting Boards' Fodder? Contact Dean Monti, managing editor, special publications at the AAD, dmonti@aad.org.

*Watch for **Histiocytosis** in the next Boards' Fodder.*

Boards Blitz now available!

Hundreds of residents attended the Boards Blitz session during the 69th Annual Meeting and after rave reviews, it's available on demand! You can now get more than an hour of board prep insight, tips, and resources that you can access for studying. Jennifer Lucas, M.D., and Adam J. Friedman, M.D. take you through concentrated board prep material in rapid-fire progression to help you learn what to expect the day of the exam.

With Boards Blitz Review, you get:

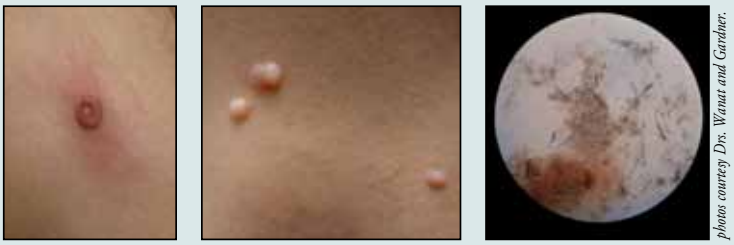
- Sample cases and images with 77 minutes of audio and visual downloads to help you prepare for the digital image portion of the test.
- Additional reference materials for further self-study.
- Unlimited access after initial sign-up (viewable through March 31, 2012).

Order now for only $29.95 at the resident and fellows section of the AAD website:

www.aad.org/member-tools-and-benefits/residents-and-fellows DR

Race for the case

By Karolyn Wanat, M.D. and Jennifer Gardner, M.D.



photos courtesy Drs. Wanat and Gardner.

A five-year-old girl presents to the office with multiple new "warts" on her trunk that have been enlarging over a couple of months and are pruritic and sometimes painful. The eruption started as one large lesion and now is spreading into many more. The photo from the microscope is a KOH prep of the material expressed from the core of a lesion.

1) What is your diagnosis of these lesions?
2) While these lesions often involute spontaneously, especially in immunocompetent patients, there are a number of treatment options. One option is the topical application of cantharadin. Name the organism from which cantharadin is derived. What is the mechanism of action of cantharadin?
3) What are the dermpath "buzzwords" for the histopathology of this specimen? (i.e. what is the name for the characteristic inclusion bodies seen on histology?)

Respond today with the correct diagnosis to Dean Monti, managing editor of special publications at the AAD, at dmonti@aad.org, and be part of our drawing for a Starbucks gift and your photo in *Directions*!

This edition of Race for the Case was submitted by former Race winners, Dr. Wanat and Gardner (see our Spring 2011 issue). If you have an idea for a case, contact dmonti@aad.org. DR

Race for the Case winners

The winner of last issue's Race for the Case (Spring 2011) was another trio of bright residents who responded quickly to the challenge. From left to right, Larisa Speetzen, M.D., PGY-3; James B. MacDonald, M.D., PGY-2, and Christine Cole, M.D., PGY-4; all from Mayo Clinic Scottsdale Dermatology; pictured here working out with their shake weights (actually, they're holding nitrogen canisters, of course, but just making sure you're keeping alert). They supplied the correct responses as:

1. Steatocystoma Multiplex
2. Keratin 17 (missense) mutation
3. Shark's teeth" lining the cyst wall

Congratulations to our winners, who we hope are enjoying their mug of Starbucks, and seeing their mugs in our publication. Also, kudos to the many entrants who supplied the correct response and were oh-so-close to getting to that all-important finish line ahead of the others. So don't delay; get your answers in for the new Race for the Case challenge today! And to the very few that supplied incorrect responses, finish reading *Directions* and get back to studying. DR

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lated for me while I was in Cambodia. I had made an attempt to learn the language before making my journey there; and had downloaded language podcasts and practiced during my commute (all my coworkers at Mohs were very entertained as I told them the 'word of the day'). Unfortunately, I never became fluent. I even practiced "I don't understand what you are saying," but no Cambodians could understand my pronunciation.

With Kodachromes, repetition and a Jeopardy-type quiz game (no student had actually seen the television show), most students were able to discuss steroid atrophy, recognize superficial fungal infections, and come up with treatment plans for pediatric eczema patients. In a country with about 30 dermatologists for 14 million people, it was my hope that these budding generalists, with a little help from their American guest, would be able to provide high quality skin care for their patients.

Battling against the odds

One of the more illuminating aspects of my experience was discovering how differently health care is managed in Cambodia and seeing the impact of conditions that are easily manageable in the United States. We had multiple patients with psoriatic arthritis — husbands whose wives carried them in their arms because they have immobilized joints and no wheelchairs, families that were impoverished without the income by debilitated breadwinners — who would have been easily managed in the United States.

However, seeing the dilemma also underscored the real need for dermatology volunteerism, and that it can actually make a difference. Dermatologists can have a uniquely positive impact in patients' lives. Partnering with HVO provided a rare opportunity to share my passion for dermatology in a setting deeply receptive to my contribution. Practicing dermatology with providers dedicated to making the most out of their scarce resources, and teaching an extremely dedicated group of medical students made for one of the most important personal and professional experiences of my training.

Jessica Kirk, M.D., is a dermatology resident at Roger Williams Medical Center in Providence, RI. This October, she will be a dermatologist at Dermatology Professionals, East Greenwich, R.I. DR

Opportunities

Submit your case for Dermatology Grand Rounds!

The Academy is accepting case submissions for selection and discussion at Dermatology Grand Rounds: A Discussion of Case-Based Dilemmas, a new symposium being presented at the Summer Academy Meeting 2011 in New York on Saturday, Aug. 6, from 9 a.m. to 12 p.m.

All members of the Academy, including research fellows, residents and medical students, are invited to submit case presentations and attend the symposium.

Deadline for receipt of applications is June 30, 2011 at 5 p.m. (CST), and must be submitted online. For more information, go to www.aad.org/SummerAcademyGrandRounds Symposium.

Nominees sought for research excellence award

Each year the Academy recognizes outstanding basic and clinical research by dermatologists-in-training through the AAD Awards for Young Investigators in Dermatology. The purpose of the award is to acknowledge significant research advances in the science and practice of dermatology by those beginning their research careers.

Two young investigators will be selected as the recipients of a $6,000 award that will be shared equally with the mentoring institution supporting these research efforts. Eligible candidates include individuals in accredited U.S. and Canadian dermatology residency programs, or those who have completed their residencies within the preceding two years. Nominations will be accepted from either the chair of a dermatology department or the nominee's faculty advisor.

Nominations for the 2012 awards are being accepted until Sept. 30, 2011. Detailed online submission information is available at www.aad.org/young-investigators-award. For more information contact Allen McMillen, research manager, at amcmillen@aad.org.

Academy offers grants for development of innovative CME

The Academy supports the development of innovative continuing medical education through its Program for Innovative Continuing Medical Education in Dermatology (PICMED). Supported by a contribution from the Elsevier Foundation and the Skin Disease Education Foundation, PICMED's endowment fund is used to support excellence in dermatology through the development of CME that includes:

- Creative needs assessment mechanisms,
- Innovative uses of technology,
- Unique approaches to specific subject matter,
- Novel presentation techniques, and/or
- Utilization of existing educational paradigms in new environments.

Requests for grants for 2011 are due Aug. 31. Successful applicants will be notified by Dec. 15. To learn more and apply for a grant, visit www.aad.org/forms/picmed/default.aspx

International travel grant deadlines

- Resident International Grant
  Location: Botswana
  Application deadline: Sept. 30

- Native American Health Service Resident Rotation
  Location: Chinle, Ariz.
  Application deadline: Aug. 31

- International Society Meeting Travel Grants
  Applications deadline: Sept. 30

For more information, go to http://www.aad.org/education-and-quality-care/awards-grants-and-scholarships, or contact Coura Badiane, Coura Badiane, International Affairs Specialist at the AAD, at cbadiane@aad.org,

Resident applications invited for HVO

Interested in global health? Want to learn more about what it takes to design and sustain educational programs in an international setting? The Dermatology Steering Committee of Health Volunteers Overseas (HVO) invites applications from dermatology residents in the US and Canada who are interested in serving on the Steering Committee.

Anyone interested in applying should contact HVO via email at n.kelly@hvousa.org for more information. All applications are due by close of business Aug. 31, 2011. Final selection will be made by Sept. 30, 2011.

For more information on Health Volunteers Overseas, visit their website at www.hvousa.org DR

2011 AADA Legislative Conference registration now open! Interested in advocacy? A limited number of resident scholarships are available for you to attend cost free. Contact Blake McDonald, bmcdonald@aad.org, for more information.

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able results. The academic medical center may have little control of trial design and may not have access to all the data. Ghost writers may be hired by the sponsoring company to write the manuscript, rather than the investigating scientists. The industry sponsor may be setting the research agenda. Marcia Angell authored an in-depth article on the topic, and posited, "…the academic medical centers have become supplicants to drug companies, deferring to them in ways unheard of just a few short years ago."[2]

Academic freedom is paramount

These practices threaten the safety and well-being of trial subjects and the integrity of the research process. Medical scientists have an obligation to society to carry out research in a professional manner for the benefit of society. It is the duty of the researcher to be the advocate of the trial subjects and watch outfor their safety. Investigators must be free to examine data independently, and should personally write the manuscript for publication without requiring the consent of the sponsor.[3] Industry should not have the power to block publication of a study's data, regardless of whether it is unfavorable to the drug being investigated. Academic freedom should be protected as much as possible. DR

References

1. Davidoff F, DeAngelis CD, Drazen JM et al. Sponsorship, Authorship, and Accountability. Editorial. New Engl J Med 2001;345(11):825-827
2. Angell, Marcia. The Clinical Trials Business. Who Gains? in Stein, Donald G. Buying In or Selling Out? The Commercialization of the American Research University. 2004. Rutgers University Press, Piscataway, NJ. p127
3. Davidoff et al..

Message from the Chair

Jeremy Brauer, M.D.

On behalf of the Residents/Fellows Committee, I would like to welcome the new first year residents and to congratulate the graduating third year residents and fellows!

In my first message, I would like to give everyone a little insight into what the RFC is all about and how you can become an active participant in shaping your residency and fellowship experience.

You can make the most of your experience by simply volunteering in your own community! Consider participating in a skin cancer screening or giving a talk on the dangers of indoor tanning. The Academy offers you the resources on how to get started. You can also contribute at the national level and if you are interested in politics, the Academy has experienced friendly staff in Washington, DC always looking for support and participation.

Currently our committee consists of those individuals listed at the bottom right corner of this page. They represent all years of residents and fellows within the United States and Canada, as well as liaisons from the AAD Board of Directors and Young Physicians Committee.

The committee meets in person twice yearly at the Annual and Summer Academy meetings, as well as hold conference calls throughout the year. Within the committee there are several workgroups tasked to provide the membership with a first-rate training experience. Our focus over the last few years has been on expanding upon available, resources for education and leadership development, as well as creating new ones. We have been intimately involved in the re-design of the resident webpage for the re-launch of the Academy's website, and are all excited to see what you think.

As always, the Residents/Fellows Committee is your representative and is open to your comments and questions. Send us an email at residents@aad.org and let us know how you're doing, what's happening in your program, and if you want to get involved! DR

American Academy of Dermatology Association
P.O. Box 4014
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August 3-7, 2011
New York, N.Y.

SUMMER ACADEMY MEETING
AMERICAN ACADEMY OF DERMATOLOGY

SAVE THE DATE(S)!

Important dates for residents for Summer Academy Meeting 2011 in New York City

(all events taking place at the Hilton New York)

- Residents' Reception, Friday, Aug. 5, from 5:30 to 7 p.m. in the Sutton South Room, supported by Johnson & Johnson consumer products company, Neutrogena, and Ortho Dermatologics.
- Dermatology Grand Rounds: A Discussion of Case-based Dilemmas, Saturday, Aug. 6, from 9 a.m. to 12 p.m. (see page 7 and submit your case!).

Get more Summer Academy Meeting 2011 news and information at http://www.aadmeetingnews.org.

AAD Directions in Residency

Summer 2011