In the last issue I discussed some ethical concerns in the relationships between dermatologists and pharmaceutical representatives. Studies have shown that physicians' prescribing habits are influenced by visits from pharmaceutical representatives. Is this practice unethical?

**Beneficence**

The ethical issue is not only whether physicians' prescribing habits are influenced by these contacts (as they certainly are), but whether the relationship is beneficial or harmful to patients. Referring to ethical principles, beneficence dictates that it is the physician's duty to act in his/her patients' best interests and avoid potential harms. Pharmaceutical representatives inform physicians about risks and benefits of their company's drugs and products, which is certainly biased. Physicians can take this bias into account and supplement the representatives' information with educational information from other sources. One could argue that dermatology residents have easy access to current scientific information through their faculty and are able to access information technologies to search the medical literature. This suggests that they do not necessarily need interactions with pharmaceutical representatives to obtain information on a new drug or its practical use.

**Assessing samples**

Another means by which industry might influence prescribing habits is through sampling. Providing samples to dermatologists...
Merz Pharmaceuticals, LLC proudly supports the American Academy of Dermatology and the Directions In Residency newsletter.
patients may be helpful in a number of ways. Giving the patients samples may ensure that the drug is well tolerated and is effective in that patient. Samples may be given in bulk to indigent patients to defray the cost of the drug. On one hand, samples being used in these ways would help the patient financially and therapeutically. On the other hand, samples distributed by pharmaceutical representatives are usually of newer, heavily marketed drugs, which may be convenient but not necessarily best for the patient.

In an attempt to limit pharmaceutical bias, physicians may restrict giving samples to patients who cannot afford them in a situation in which no generic alternatives are available.4

Transparency an important element of awareness

It is important that dermatology residents are aware that there are conflicts of interest in relationships with pharmaceutical companies and that representatives are necessarily biased toward their company’s product(s). Some would argue that these relationships should not be a part of medical residency education. Several residency programs prohibit pharmaceutical representatives from visiting hospitals and bar companies from having any interaction with residents. However, dermatology residents have voiced concerns to me that they will not know how to relate to pharmaceutical representatives when they go into practice if they have not interfaced with them during their residency.

There is some evidence that pharmaceutical companies are being accountable and more transparent in their dealings with physicians. To make this process more responsible, the Pharmaceutical Research and Manufacturers of America (PhRMA) revised its own Code on Interactions with Healthcare Professionals in January, 2009.5 This was carried out with the intention of ensuring that pharmaceutical marketing practices maintain high ethical standards. Included among the revisions, are a prohibition of distribution of non-educational items (pens, mugs, articles with company logo); prohibition of providing restaurant meals to healthcare professionals, although occasional lunches in physicians’ offices, provided in conjunction with informal, educational presentations, are permitted; and ensuring that pharmaceutical representatives are trained in industry codes of practice, and regulations which govern interactions with healthcare providers. The PhRMA revisions also provide guidance for speaking and consulting arrangements, specifically for disclosure requirements for physicians with industry relationships. These revisions suggest that pharmaceutical companies are trying to have ethical medical interactions.

There is a new healthcare reform law, the Physician Payment Sunshine Act which will go into effect in January 2012. This law requires pharmaceutical companies and medical device makers to report every monetary transaction with physicians and hospitals to federal authorities for posting on a public website. This law is intended to impose transparency on pharmaceutical marketing activities such as advisory boards, speaker meetings, luncheons, etc. While the new federal law doesn’t ban gifts, it does promise to increase the public’s understanding of how companies interact with physicians and provide transparency in these relationships.6

Finding common ethical ground

There is no question that the mission of the pharmaceutical industry is to sell its products and the mission of the physician is to take care of patients. Although their missions are different, it is my opinion that there is potential for physician/industry relationships to work to the benefit of both.

References
5. www.phrma.org

The AAD is a member of the Council of Medical Specialty Societies (CMSS). The CMSS recommends that physicians assure patients’ access to appropriate medical consultation and avoid contractual or other arrangements that restrict their ability or freedom to do so. CMSS is online at www.cmss.org.

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.
## Soft Tissue Fillers, Part 1: Biodegradable

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

<table>
<thead>
<tr>
<th>Filler Class</th>
<th>Trade Name</th>
<th>Composition</th>
<th>Skin Test</th>
<th>FDA-approved indication</th>
<th>Depth of injection</th>
<th>Needle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human collagen, bioengineered</td>
<td>§ Cosmoderm I® § Cosmoderm II®</td>
<td>3.5% Human collagen, 6.5% Human collagen (95% Type I, 5% Type III) + 0.3% lidocaine</td>
<td>No</td>
<td>Soft tissue contour deficiencies (fine lines and wrinkles)</td>
<td>Dermal</td>
<td>30 G</td>
</tr>
<tr>
<td></td>
<td>§ Cosmoplast®</td>
<td>3.5% Human collagen, Cross-linked + 0.3% lidocaine</td>
<td>No</td>
<td>Soft tissue contour deficiencies (fine lines and wrinkles)</td>
<td>Dermal</td>
<td>30 G</td>
</tr>
<tr>
<td>Animal collagen</td>
<td>§ Zyderm I® § Zyderm II®</td>
<td>3.5% Bovine collagen, 6.5% Bovine collagen (95% Type I, 5% Type III) + 0.3% lidocaine</td>
<td>Yes</td>
<td>Contour deformities of dermis (fine lines and wrinkles)</td>
<td>Dermal</td>
<td>30 G</td>
</tr>
<tr>
<td></td>
<td>§ Zyplast®</td>
<td>3.5% Bovine collagen, glutaraldehyde cross-linked + 0.3% lidocaine</td>
<td>Yes</td>
<td>Contour deficiencies of soft tissue (fine lines and wrinkles)</td>
<td>Dermal</td>
<td>30 G</td>
</tr>
<tr>
<td></td>
<td>§ Evolence®</td>
<td>3.5% Porcine collagen (Type I collagen), D-ribose cross-linked</td>
<td>No</td>
<td>Moderate to deep facial wrinkles and folds</td>
<td>Dermal</td>
<td>27 G</td>
</tr>
<tr>
<td></td>
<td>§ Fibrel®</td>
<td>Porcine collagen-derived gelatin, aminocaproic acid, + 1% lidocaine; Mix with patient’s plasma</td>
<td>Yes</td>
<td>Distensible scars, including acne scars</td>
<td>Dermal</td>
<td>30 G</td>
</tr>
<tr>
<td>Cadaveric tissue</td>
<td>Alloderm®</td>
<td>Acellular human cadaveric dermis</td>
<td>No</td>
<td>“Banked human tissue” FDA regulated for the “repair or replacement of damaged or inadequate integumental tissue”</td>
<td>Non-injectable; subcutaneous</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Cymetra® (injectable form of Alloderm)</td>
<td>Micronized acellular human cadaveric dermis</td>
<td>No</td>
<td>“Banked human tissue” FDA regulated for soft tissue augmentation</td>
<td>Dermal</td>
<td>26 G</td>
</tr>
<tr>
<td></td>
<td>§ Fascian®</td>
<td>Injectable irradiated human cadaveric preserved particulate fascia lata</td>
<td>No</td>
<td>“Banked human tissue” FDA regulated for facial reconstruction and soft tissue augmentation</td>
<td>Dermal to subdermal</td>
<td>16 G to 26 G</td>
</tr>
<tr>
<td></td>
<td>§ Dermalogen®</td>
<td>Pooled human cadaveric collagen in neutral pH buffer</td>
<td>No</td>
<td>“Banked human tissue” FDA regulated for soft tissue augmentation</td>
<td>Dermal</td>
<td>30 G</td>
</tr>
<tr>
<td>Autologous collagen</td>
<td>§ Autologen®</td>
<td>Autologous collagen (Types I, III, VI) from surgically removed skin</td>
<td>No</td>
<td>Does not require FDA approval; Nasolabial folds, rhytids, lip augmentation</td>
<td>Dermal</td>
<td>30 G</td>
</tr>
<tr>
<td>Hyaluronic acid (HA)</td>
<td>§ Hylaform® § Hylaform Plus®</td>
<td>HA derived from rooster combs</td>
<td>No</td>
<td>Moderate to deep facial wrinkles and folds</td>
<td>Dermal to subdermal</td>
<td>30 G to 27 G</td>
</tr>
<tr>
<td></td>
<td>§ Captique®</td>
<td>HA from Strep. equis</td>
<td>No</td>
<td>Moderate to deep facial wrinkles and folds</td>
<td>Dermal to subdermal</td>
<td>30 G</td>
</tr>
<tr>
<td></td>
<td>Elevess® (formerly Hydrelle)</td>
<td>HA from Strep. equis + 0.3% lidocaine</td>
<td>No</td>
<td>Moderate to deep facial wrinkles and folds</td>
<td>Dermal to subdermal</td>
<td>30 G</td>
</tr>
</tbody>
</table>
### Biodegradable Soft Tissue Fillers

#### Non-Permanent Fillers

<table>
<thead>
<tr>
<th>Filler Class</th>
<th>Trade Name</th>
<th>Composition</th>
<th>Skin Test</th>
<th>FDA-approved indication</th>
<th>Depth of injection</th>
<th>Needle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hyaluronic acid (HA)</td>
<td>Prevelle Silk®</td>
<td>HA from Strep. equis; + 0.3% lidocaine</td>
<td>No</td>
<td>Moderate to deep facial wrinkles and folds</td>
<td>Dermal to subdermal</td>
<td>30 G</td>
</tr>
<tr>
<td></td>
<td>Restylane®</td>
<td>HA from Strep. equis; + 0.3% lidocaine</td>
<td>No</td>
<td>Moderate to deep facial wrinkles and folds</td>
<td>Dermal to subdermal</td>
<td>30 G</td>
</tr>
<tr>
<td></td>
<td>Perlane®</td>
<td>HA from Strep. equis; + 0.3% lidocaine</td>
<td>No</td>
<td>Moderate to deep facial wrinkles and folds</td>
<td>Dermal to subdermal</td>
<td>27 G</td>
</tr>
<tr>
<td></td>
<td>Juvederm Ultra®</td>
<td>HA from Strep. equis; same + 0.3% lidocaine</td>
<td>No</td>
<td>Moderate to deep facial wrinkles and folds</td>
<td>Dermal to subdermal</td>
<td>30 G</td>
</tr>
<tr>
<td>Synthetics</td>
<td>Sculptra®</td>
<td>Poly-L-lactic acid microspheres; reconstitute with sterile water</td>
<td>No</td>
<td>Facial lipoatrophy in HIV; Moderate to deep facial wrinkles and folds</td>
<td>Subdermal</td>
<td>26 G</td>
</tr>
<tr>
<td></td>
<td>Radiesse®</td>
<td>Ca hydroxylapatite beads in polysaccharide gel</td>
<td>No</td>
<td>Facial lipoatrophy in HIV; Moderate to deep facial wrinkles and folds</td>
<td>Subdermal</td>
<td>27 G</td>
</tr>
</tbody>
</table>

§No longer commercially available in the US

© 2011 Richard G. Glogau, M.D.
A 31-year-old African-American man has a history of “acne” on his chest, shoulders, axillae, medial thighs, neck, and face. The lesions become tender and inflamed “about once a week” and do not respond to topical benzoyl peroxide, topical clindamycin, or oral tetracycline. Incision of a single lesion reveals a yellowish, odorless, oily material. Further work-up reveals no systemic involvement. No other family members have similar signs or symptoms.

1) What is your diagnosis of these lesions?
2) Sporadic cases are not uncommon, but this condition is often familial. In familial cases, what is the most likely associated mutation?
3) What are the dermpath “buzzwords” for the histo-pathology of this specimen?

Respond today to get yourself entered in the drawing for the Starbucks gift card and your photo in the next issue!

Directions in Residency thanks Andrew Krakowski, M.D., for his contributions to the publication; we have appreciated his interesting cases and his wit.

Clinical photos provided by Michelle Jackson, M.D. (3rd year dermatology resident; UCSD).

Triple crowned!

The last Race for the Case offered up a triplet of questions and it seems appropriate the race was won by a trio of rapid-responding residents. Pictured below, from left, Jennifer Gardner, M.D., Campbell Stewart, M.D., and Kari Wanat, M.D. — all resident physicians in the department of dermatology at the Hospital of the University of Pennsylvania — mug for the camera (at the request of the Directions editor).

They were the first to provide the correct answers as follows:
1) Diagnosis - Lichen Nitidus
2) The Dermpath “Boards Buzzwords” - Acanthotic rete ridges forming a “collarette” around the infiltrate forming the “Ball in Claw” or “Ball in Clutch.”
3) In addition to lymphocytes and the occasional giant cell, the other cells typically constitute the inflammatory infiltrate: histiocytes and melanophages

Congrats to our winners! Cover and inside photos by Rosalie Elenitsas, M.D.

Meet the new RFC chair

Directions in Residency welcomes Jeremy A. Brauer, M.D., who became the new chair of the Residents /Fellows Committee in February, assuming the duties from Angela Kyei, M.D., who recently completed her term (see page 8).

Dr. Brauer is currently a chief resident in the Ronald O. Perelman Department of Dermatology at New York University Langone Medical Center. Born and raised in Roslyn, NY, he completed his undergraduate work as a Merrill Presidential Scholar at Cornell University in Ithaca, N.Y. and went on to get his medical degree at the University of Pennsylvania School of Medicine. As a Doris Duke Clinical Research Fellow while at Penn, he was involved in melanoma research, specifically examining risk factors for the development of metastatic melanoma. This work was presented at national and international meetings, and received numerous honors including Outstanding Abstract Presentation and the John Glick Prize for Translational Cancer Research.

In addition to cutaneous oncology, Dr. Brauer’s research and career interests include Mohs micrographic surgery, lasers and phototherapy. Upon completion of his residency training, he plans to pursue a procedural fellowship with Roy G. Geronemus, M.D., at the Laser and Skin Surgery Center of New York.

Dr. Brauer is married to Anate Aelion Brauer, M.D. a reproductive endocrinology and infertility fellow at the Center for Reproductive Medicine and Infertility at Weill Cornell Medical Center in New York City. When they are not busy advancing medical science, they reportedly enjoy spending time with family and friends.
RFC convenes in N’awlins

The Residents/Fellows Committee (RFC) met Feb 3 in New Orleans during the Academy’s 69th Annual Meeting. Among the attendees were, back row, left to right: Rahul Shukla, M.D., Nazanin Saedi, M.D., Karolyn Wanat, M.D., Emily Chu, M.D., and Ahou Meydani, M.D. Front row, left to right, incoming RFC chair Jeremy Brauer, M.D., outgoing RFC chair Angela Kyei, M.D., and former RFC chair Jennifer Lucas, M.D.

Skin Deep

Curly readiness himself for Moe’s surgery.

Naval Medical Center – San Diego new Jeopardy champs

Quick minds and people with superior hand/eye coordination faced off for another exciting, fast-paced round of Resident Jeopardy during the Academy’s 69th Annual Meeting in New Orleans. This year, Kathy Tieu, M.D., and Adam Perry, M.D., dermatology residents representing the Naval Medical Center-San Diego took the prize, and are the 2011 Resident Jeopardy champions. Resident Jeopardy is planned for the Academy’s 70th Annual Meeting in San Diego. Are you up for the challenge? 

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Welcome back from soulful New Orleans! Though the city was a little chilly and some were delayed by the inclement weather, there was no lack of warmth and enthusiasm in the halls of Morial Convention Center. The Residents/Fellows Committee (RFC) kicked off an exciting 69th AAD Annual Meeting with a meeting on Thursday Feb. 3 to discuss our progress over the past year and to set a new agenda for the upcoming year. As we look back over the past year, we are very proud of some of the things we have been able to accomplish:

- **Education**: We set out to create educational opportunities for residents by offering courses they want to attend at the AAD’s Annual Meeting.
  - **Boards Blitz** – This interactive session, which provided key points and tips for identifying and making diagnoses for the digital image portion of the certification or recertification exam, was a huge success attracting close to 400 attendees.
  - **Resident Transitions Session** – This session provided information on the upcoming American Board of Dermatology Examination from Antoinette Hood, M.D., a representative from the ABD and also from a panel of recent test takers. In addition, successful career dermatologists also shared some of the challenges they faced when launching a career in academic and private practice. This session was also well attended.

- **Mentorship**: This year the RFC launched a mentor program where AAD board members and members of the Young Physicians Committee (YPC) mentored RFC members.

- **Resident website**: We are in the process of revamping our website to include useful information on post graduate fellowships for residents.

- **Board study tools**: The RFC continues to work with the Academy to develop study tools for the ABD Board examination. This year, a very bright and enthusiastic leader will be steering the ship. Jeremy Brauer, M.D. (see profile on page 6), promises to build on our successes and also improve the year’s agenda based on your feedback. Please continue communicating your wishes to the RFC for the upcoming year so that we can better serve you.

As I pass on the baton to Dr. Brauer, I would like to thank the entire RFC committee members and all the AAD staff that helped to make this year a success. I would especially like to thank the RFC members whose terms ended this year, namely Jennifer Lucas, M.D., former RFC chair and co-chair of the leadership workgroup whose efforts brought us the very successful “Board Blitz” course and Adam Friedman, M.D., who co-chaired the leadership curriculum for the residents with Dr. Lucas and helped her with Boards Blitz. The RFC has a track record creating future leaders of the AAD and I look forward to seeing your names among them.