Directions in Residency

Summer 2016

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

Learning how to learn

By Dean Monti

Sharon Jacob, MD, has been a contributor and long-time supporter of the Boards' Fodder study charts from Directions in Residency. *Last year, she and a team of residents updated more than a decade of archived charts, in addition to creating an entirely new chart on contact dermatitis. Recently, she created an educational hub for consumers and dermatologists-in-training as part of a public health outreach campaign on the current epidemic of contact dermatitis in the U.S. She also has a keen interest in how residents learn and how this translates to teaching aptitude.* Directions *talked with her about how she learned to study, how that knowledge helped create learning programs for others, and how her passion fueled the creation of a new dermatology website.*

Where did you do your residency?

My residency was at the University of Miami. I was in residency there from 2001 to 2004 and then stayed on as teaching faculty until 2007. I chose UM because of the strength of the faculty, the opportunities to learn in the inpatient dermatology program, and the wide range of infectious disease cases.

What do you think makes for a strong faculty?

Multiple factors. Focusing on fundamental concepts like learner-centered development and passion for the many aspects of dermatology. Our program was built on this model. Our chairman, Bill Eaglstein, MD, would have every resident self-assign themselves to be an expert in a given area not covered by a faculty member. That person would then be the go-to person for the latest evidence-based literature. This is, in fact, how I ended up focusing on contact dermatitis. I remember looking at the list of opportunities when someone mentioned how they hadn't had someone be the contact dermatitis person in years. Dr. Eaglstein told me "you'd be good at that one" — so here I am today. As I started to learn the material, I realized how detailed it was and how hard it was to memorize, so I created systems, stories, and charts. Once I figured out how to learn it, I used these skills to relay this information to the students and residents. The key, though, is not teaching contact dermatitis the same way to everyone — it has to be tailored to learning style.

What do you mean by 'learning style'?

"How do you learn?" is one of the first questions I ask the incoming residents and students. The ones that don't look at me like a deer in the headlights often recite skill sets they have developed, such as "I read and take notes" or "I make charts". I relate with those, as I also make charts, and have been doing so since the sixth grade when I realized I could easily memorize facts that were systematically grouped and classified. This skill proved quite useful in medical school and in residency when I needed to categorize large amounts of information into succinct, easy review sheets.

How do you relate this to dermatology study?

I found that dermatology lent itself particularly well to charting. It seems like I charted daily between 2001 and 2004, digesting chapters, journals, and archived slides. Around that time, I offered my charts to the AAD's *Resident Round-Up* (now *Directions in Residency*) and had several published. I figured others probably learned by charting as well, and could potentially save precious time if they utilized and built upon the timeless information in those charts. In 2014 (a decade later), I realized the same charts (a.k.a. Boards' Fodders) were still being used by residents, so we set out in teams of resident peer-reviewers to take on the colossal task of updating the archived charts and creating some much needed new ones. The feedback from residents on how useful the Boards' Fodders have been is quite interesting, not only on the organization of the material, but how they're being utilized for study.

What have you discovered about the way people study?

Certainly, having an established knowledge base is fundamental, but there is also an inherent preference for learning modality.

See ***LEARNING HOW TO LEARN*** on p. 3

Inside *this* issue

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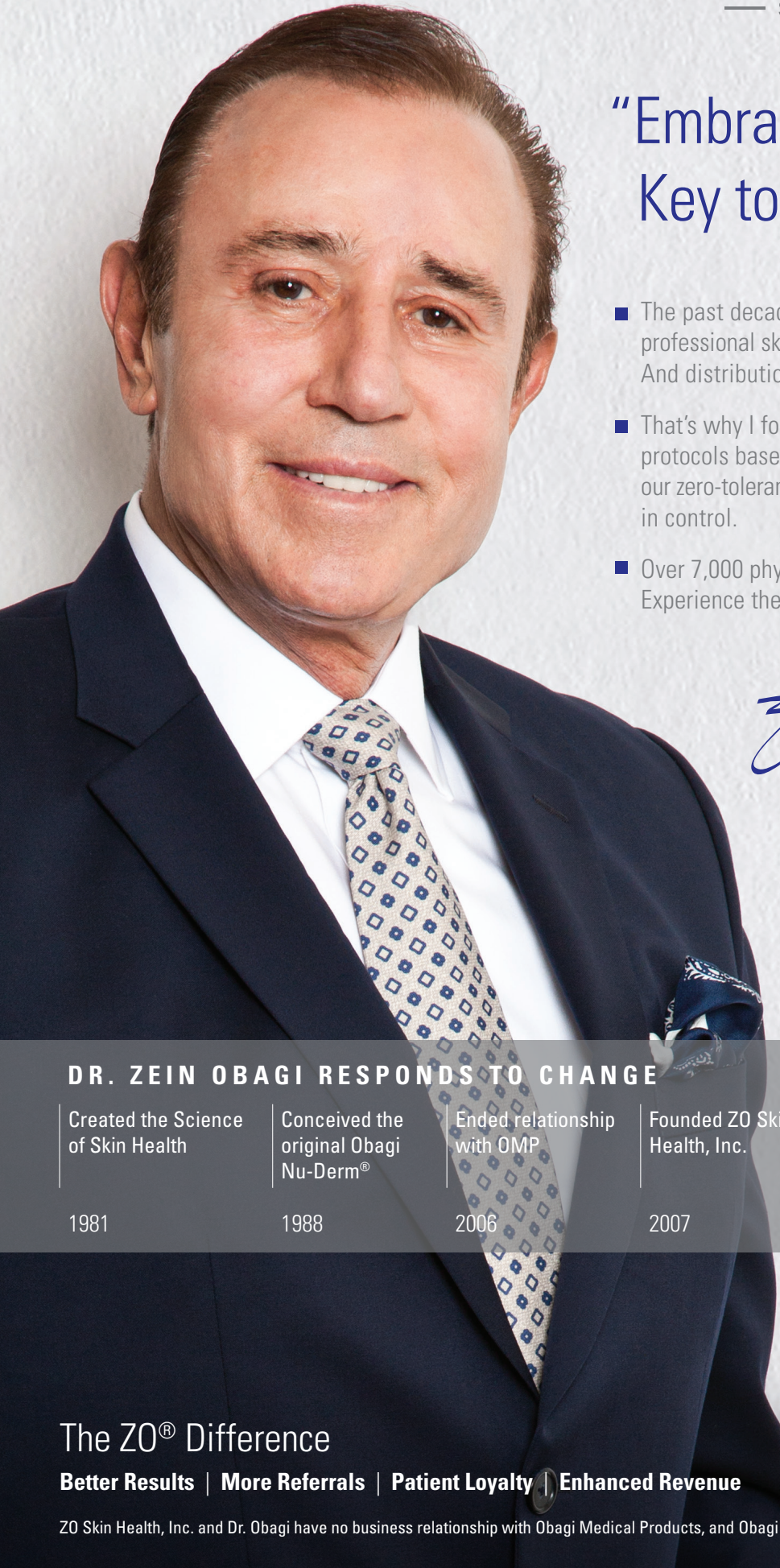

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LEARNING HOW TO LEARN from p. 1

One resource I've found useful and have recommended to colleagues and learners is VARK (an acronym for learning style preferences: Visual, Auditory, Read-write, and Kinesthetic).

Regardless of education, it is often apparent during the developmental years which of these four learning styles people prefer. Those with a high visual preference, for example, are drawn to pictures and graphics; notably, I've seen these learners comprehend the Boards' Fodder material by color coding the charts. Repeatedly, I have also seen learners with a high read-write preference (who learn by reading and summarizing the material in their own words) 're-create' the charts, while those with a high auditory preference (who retain information when it's reinforced through sound) read the charts into a recording device and repetitively listen while they exercise, for instance. As for kinesthetic learners, they study best when learning is combined with physical activity, so they create memory games or teach each other in groups to learn the charts. It really is quite interesting. I encourage all residents to take the questionnaire at the VARK website (**http://vark-learn.com**) to find out about their own learning preferences and strategically utilize the information from there.

Another aspect I have found to be especially interesting is that of classroom reversal (i.e. not beginning with a lecture). In 2006, as part of the University of Miami Dermatology musculoskeletal and skin course, we studied the effects of video on learning. Video works best with visual, auditory, and kinesthetic learners, especially if it is followed with self-processing, group discussion and a presentation. During the first year of the course, the students attended a lecture and then participated in a faculty-led small group discussion; the second year, they received the same lecture without the interactive discussion, and the third year they watched "My Skin's on Fire: Living with Psoriasis" — an independent film by Fred Finklestein — followed by a lecture.

The video had a profound effect on information retention across all three years. Currently, the University of Miami Dermatology course utilizes this well-received reversal method, allowing students to first learn the material according to their learning preferences (readings, video-lectures) followed by interactive discussions and faculty-led breakout sessions. It is clearly a useful educational method and one to be emulated.

When and why did you decide to create an original contact dermatitis Boards' Fodder?

In the last five years of teaching workshops on contact dermatitis to different practitioners (dermatologists, allergists, nurses, physician assistants, residents-in-training), I became very aware of the learning gap that existed on this topic. About a year ago, we looked at the original contact dermatitis Boards' Fodder (created more than a decade ago), and realized it was outdated. This prompted me to create a much more in-depth review based on my own chart that I'd been creating for the last 10 years to help organize the difficult-to-digest information. I love the new contact dermatitis Boards' Fodder that I worked on with Elise M. Herro, MD, and Alina Goldenberg, MD, MAS. They are both phenomenal to work with and are really knowledgeable about learning styles different from my own. These differences allowed us to optimize the chart so that the vast amount of difficult information could be easily accessible in one spot through the *Directions in Residency* Boards' Fodder archives at **www.aad.org/boardsfodder.**.

I understand you've also created additional study tools for residents on your new website?

Yes. Building on what we learned from utilizing videos, we have created a dedicated webinar series on contact dermatitis from brilliant thought leaders that are free to anyone who wants to learn about contact dermatitis. To fully engage our learners and complement the AAD's *Directions in Residency* Boards' Fodder charts, we are also launching a free Board review series. We have lectures geared on everything from contact dermatitis to dermatologic surgery (including flaps), and more. Residents can learn about the new series at **http://dermatitisacademy.com/boards**. DR

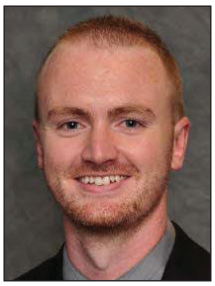
Sharon Jacob, MD is professor of dermatology, Loma Linda University, and founder-CEO of the Dermatitis Academy™

Do you have a story to tell about residency or a specific item of interest? Study tips, work life balance, unique images, iconoclastic views? ***We're now accepting submissions for 2016!*** *Email dmonti@aad.org to submit your story or get more info.*

Flaps

by Lance Chapman, MD, MBA, Dorota Korta, MD, PhD, and Patrick Lee, MD

Table 1: Nomenclature	Description
Flap	Movement of adjacent skin and subcutaneous tissue with an intact vascular supply into a defect
Primary Defect	Initial or original wound to be closed (*yellow circumscribed area in drawings below)*
Secondary Defect	Wound created by elevation/mobilization of flap from adjacent tissue
Primary Motion	Movement of flap toward the primary defect to close it, creating stress or tension on flap
Secondary Motion	Movement of the tissue surrounding the secondary defect to close it, with resultant stress or tension placed on this tissue
Random Flap	Flaps with abundant collateral circulation with no named blood supply
Axial Flap	Flaps supplied by a named artery and vein



Lance Chapman, MD, MBA is a PGY-2 at UC Irvine

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Patrick Lee, MD, is director of dermatologic surgery at UC Irvine

Table 2: Advancement flap: Movement of adjacent tissue along unidirectional vector

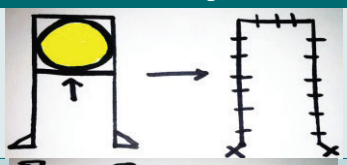
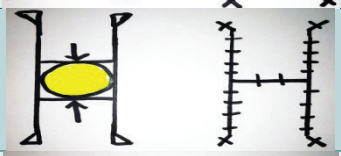
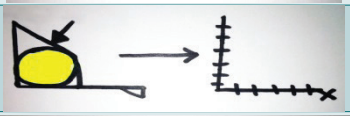
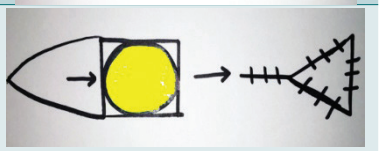
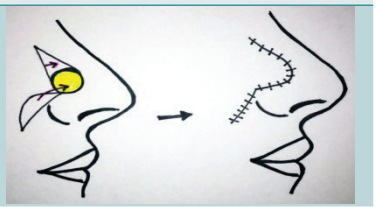
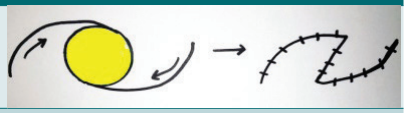
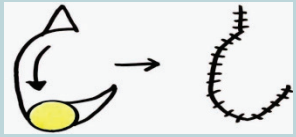
Type	Description	Ideal Locations	Drawing
U-plasty (unilateral advancement flap)	Simplest advancement flap. Parallel incisions tangentially made on defect with subsequent advancement of flap.	Forehead in horizontal direction so incision lines can run parallel to relaxed skin tension lines (RSTLs). Not commonly used.	
H-plasty (bilateral advancement flap)	Essentially a "bilateral" U-plasty. Two sets of parallel incisions made in symmetric distribution on BOTH edges of defect.	Forehead and upper lip (in order to hide incision lines along RSTL and cosmetic unit junctions).	
T-plasty (O-to-T or A-to-T plasty)	Standing cone removed from one end of defect (converting the "O" into an "A") with subsequent single incisions extending beyond BOTH sides of base of defect.	Ideal for locations with broad base along free margin or cosmetic unit junction.	
L-plasty (O-to-L plasty)	Incision at base of defect made only on ONE end and extends outwards (1/2 of T-plasty).	Ideal for locations where limb of flap hidden in RSTL.	
Island pedicle (V-to-Y advancement flap)	Unique advancement flap in that advancement of tissue is perpendicular to the skin and vascular supply comes from SubQ pedicle, which is attached to the central portion of the flap – DEEP vascular blood supply rather than horizontal.	Ideal for locations with elastic and "spongy" SubQ tissue with rich vascular supply.	
Crescentic advancement	Removal of a crescent of tissue along advancement flap to better hide scar line or increase length of incision.	Upper lip and peri-alar region.	

Table 3: Rotation flap: Movement of adjacent tissue around a single pivot point along a radiating arc

Type	Description	Ideal Locations	Drawing
O-to-Z flap (bilateral advancement rotational flap)	Circular defect turned into Z-shaped incision, then tissue is rotated into defect from two opposite sides.	Large defects on scalp and lower lip.	
Dorsal nasal rotation flap (Rieger flap)	Curvilinear incision that involves entire rotation of dorsum of nose (undermining at perichondrium).	Distal dorsum or tip of nose.	

Flaps (cont.)

by Lance Chapman, MD, MBA, Dorota Korta, MD, PhD, and Patrick Lee, MD

Table 4: Transposition flap: Movement of flap by lifting and "transposing" tissue over intervening skin

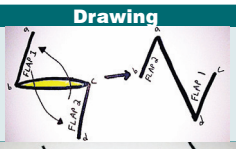
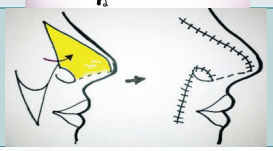
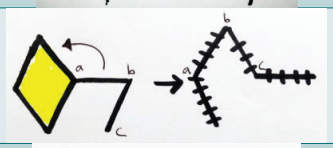
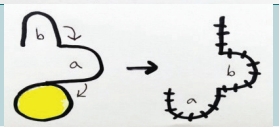
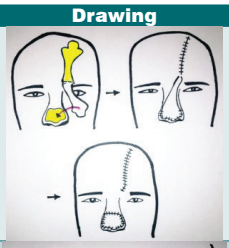
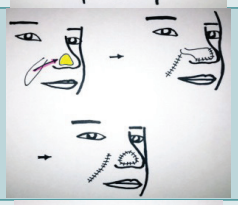
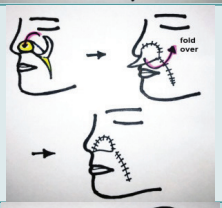
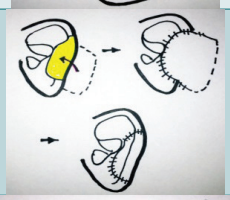
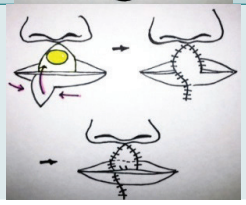
Type	Description	Ideal Locations	Drawing
Z-plasty	Used in scars that cross RSTLs to elongate scars or rotate scar tension lines.	Locations with contracted surgical scars and/or scars distorting a free margin (i.e. lower eyelid margin).	
Nasolabial transposition flap	Alar wound defect in which flap from medial cheek adjacent to melolabial fold transposed to defect (flap taken from sebaceous skin in medial cheek).	Lateral nasal sidewall and central alar wounds.	
Rhombic flap	Defect converted into four-sided parallelogram with angles 60 and 120. Incisions extended from one of 120 degree angle tips (length of incision equal to one of sides of rhombus, see line a-b). Then from free end of extended line, a second line is incised with angle of 60 degrees (line b-c).	Medial canthus, upper nose, lower eyelid, temple, peripheral cheek.	
Bilobed transposition flap	Two transposition flaps performed in succession. Primary defect filled with adjacent primary lobe and secondary defect filled with secondary lobe, leaving a triangular tertiary defect to be closed primarily.	Distal lower one-third of nose.	

Table 5: Interpolation (importation) flap: Two-stage tissue flap in which the base of the flap is not immediately adjacent to recipient site (often axial flap)

Type	Description	Ideal Locations	Drawing
Paramedian forehead flap	Axial flap based on the supratrochlear artery. Tissue is mobilized from forehead and transposed to a large distal nasal defect. Requires pedicle division often at three weeks.	Subtotal and total nasal defects, particularly nasal tip and alae.	
Nasolabial (melolabial) interpolation flap	Random pattern pedicle flap. Tissue is mobilized from the cheek and transposed to a defect in the nasal alar rim. Requires pedicle division at three weeks.	Medium to large defects involving the nasal alar rim. The disadvantage is the mild blunting of the alar crease.	
Reverse nasolabial pedicle flap (Spear's flap)	Tissue is mobilized from the cheek to a defect in the nasal alar rim; flap is folded upon itself to recreate the alar rim and internal and external nasal surface.	Full-thickness defects of the ala that involve the alar groove (attachment point of the lateral ala to the cheek).	
Retroauricular flap	Random pattern flap. Tissue is mobilized from the retroauricular skin to a defect in the helical rim. Requires pedicle division at three weeks. The donor site can either be closed with a skin graft or left to heal by second intention.	Large defects of the helical rim that involves loss of cartilaginous support.	
Abbe flap	Tissue is mobilized from normal lip and turned 180 degrees to fill the defect on the opposite lip. Requires pedicle division at three weeks.	Medially based defects of the upper lip most frequently.	

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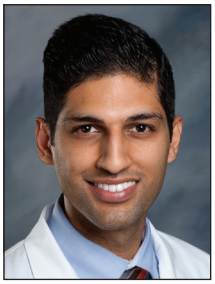
2. Lee, Ken, Neil A. Swanson, Han N. Lee. Color Atlas of Cutaneous Excisions and Repairs. Cambridge: Cambridge University Press, 2008.
3. Goldsmith, Lowell, Stephen Katz, et al. Fitzpatrick's Dermatology in General Medicine. "Part 11: Surgery in Dermatology." Eighth ed. McGraw-Hill, 2008.

Double the Boards' Fodders online!

In addition to this issue's Boards' Fodder, you can download two new Boards' Fodder online exclusives from ***www.aad.org/Directions.***

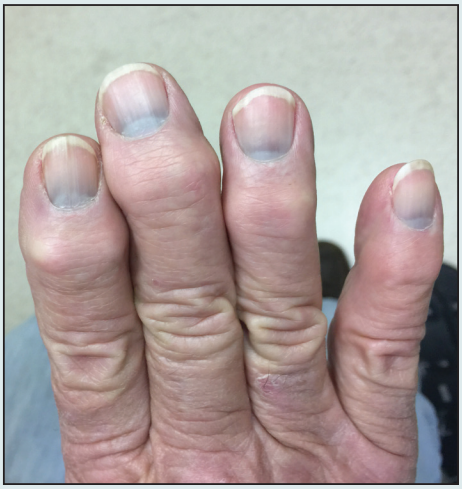
The latest online Boards' Fodders are **Advanced & Immuno-therapies** *by Helena Pasieka, MD and* **Wound Healing** *by Aileen Santos, MD. To view, download, or print every Boards' Fodder ever published, check out the archives at* ***www.aad.org/boardsfodder.***



Aman Sandhu, MD, is a PGY-3 resident physician, department of dermatology at Loma Linda University Medical Center

Race for the Case: Summer 2016

By Aman Sandhu, MD



A 70-year-old Caucasian man with a history of melanoma presented for his scheduled skin monitoring evaluation. On physical exam, he was noted to have a diffused gray-blue discoloration of his skin and nails. He has been otherwise healthy and does not take medications, with the exception of a natural immune boosting supplement.

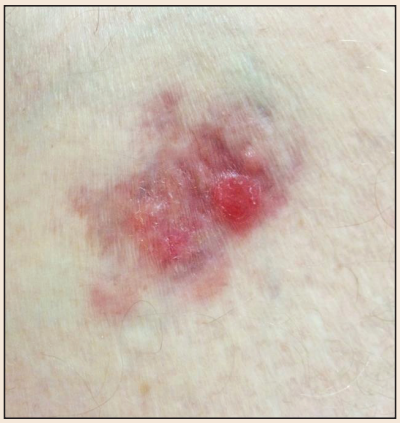
1. Which over the counter supplement is the patient likely taking?
2. Which topical medication can also cause this finding?
3. What is the classic histopathologic finding?
4. What type of microscopy can further support diagnosis?
5. What other heavy metal can cause a similar presentation if administered parenterally?

Respond online with the correct answers at **www.aad.org/RaceForTheCase** for the opportunity to win a Starbucks gift card! If you win, we will also publish your mug (face), and if you have an interesting story to tell residents, we might share it *(see our current winner profile to the right)*. Good luck! DR

Answers to spring 2016 Race for the Case

Spring 2016 RFTC was submitted by Emily de Golian, MD — a resident physician at Loma Linda University Dermatology.

A 69-year-old Caucasian male presented for treatment evaluation for a 4.3 x 3.7 cm left hip plaque, which was present for 10 years prior to recent biopsy by an outside physician. Firm palpable nodules were present within this asymptomatic, growing lesion. His medical history is otherwise non-contributory.



1. *What translocation is most likely present within this lesion?* ***t(17;22), which leads to a collagen type I alpha 1 (COL1A1) and PDGF-beta chain (PDGFB) fusion protein.***
2. *What are the histopathologic findings?* ***Cellular proliferation of spindle-shaped cells in a storiform pattern infiltrating the subcutaneous fat, mild to moderate cytologic atypia with few mitoses.***
3. *Identify the immunohistochemical pattern classic to this diagnosis.* ***CD34 positive, Factor XIIIa negative.***
4. *What is the recommended standard treatment option with the highest cure rate without recurrence?* ***Mohs micrographic surgery has a lower recurrence rate than wide local excision.***
5. *What treatment is recommended for patients with recurrent or metastatic lesions?* ***Imatinib mesylate (a PDGF receptor inhibitor).*** DR

We've landed another Race for the Case winner!

Kate Oberlin, MD

Kate Oberlin, MD, our most recent Race for the Case winner, is a first year dermatology resident at the University of Miami in Miami, Florida. She attended Indiana University for her undergraduate studies and majored in chemistry before attending Indiana University School of Medicine in Indianapolis, Indiana. She also completed her intern year at St. Vincent Hospital in Indianapolis, Indiana.

Kate's interests within dermatology include pediatric and adolescent dermatology, and she hopes to specialize in pediatric dermatology when she graduates from residency. In her spare time, Kate enjoys traveling, running, and trying new fitness and cooking classes. Most importantly, she loves spending time with her husband and 4-year-old Jack Russell Terrier named Kai. Since moving to Florida, Kate has found new interests in paddle boarding and kayaking — which Kai also gets to partake in! DR

REGISTRATION NOW OPEN

2016 AADA Legislative Conference

Residents are encouraged to register for the 2016 AADA Legislative Conference that will take place in Washington, D.C. from September 11-13. The conference is a unique opportunity to receive advocacy training sessions taught by health policy experts, discuss dermatology issues with colleagues, and spend time meeting with U.S. Senators, Representatives, and their staff. Participants will also learn about issues and legislation that could affect the specialty's future, and will help advance the AADA's legislative priorities by meeting directly with members of Congress to voice dermatology-related concerns.

Residents do not need to be experts on health policy, the legislative process, or the legislators themselves in order to attend; they only need to be experts in the field of dermatology and patient care. At the conference, the AADA will provide you with any necessary background materials on your legislators, as well as a copy of the AADA legislative priorities, briefing materials on legislation, and training on how to advocate for the specialty. The AADA will schedule all Capitol Hill meetings for residents by using their home and office addresses to determine who their members of Congress are.

Moreover, the AADA also awards several scholarships for residents to attend the conference and commit to a year-long involvement in AADA advocacy issues. The scholarship gives recipients an all-expense paid trip to Washington, D.C., but space is limited, so those who are interested must apply early. For more information, please visit **www.aad.org/members/awards/resident-scholarship-to-legislative-conference**. The final deadline to apply for this scholarship is July 15, 2016.

Registration for the 2016 Legislative Conference is now open. To register, or to obtain additional information on the conference, please visit: **www.aad.org/meetings/legislative-conference**.

Camp Discovery Residents Challenge

Congratulations to everyone who participated in the inaugural Camp Discovery Residents Challenge, which took place March 1 - April 30. Over $12,000 was raised, which is enough to send six kids to Camp Discovery! Special thank you to the top fundraising teams listed below:

1. **SUNY Downstate Dermatology**
   Georgina M. Ferzli, MD, *Team Captain*
   Tony Adar, MD
   Natallia Fiadorchanka, MD
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   Stephanie Gallitano, MD
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   Rex U. Ugorji, MD

2. **University of California, Davis**
   Faranak Kamangar, MD, *Team Captain*
   Whitney Fisk, MD, MS
   Farzam Gorouhi, MD
   Yong He, MD
   Baran Ho, MD
   Sandy Kuo, MD, MS
   Jillian W. Millsop, MD
   Jonathan Okman, MD
   Kory Parsi, DO
   Forum Patel, MD
   Tatyana Petukhova, MD, MS
   Neha Prakash, MD
   Vivian Shi, MD
   Danielle Tartar, MD, PhD
   Davina Wu, MD, PhD

3. **University of California, San Francisco**
   Lucinda L. Kohn, MD, *Team Captain*
   Yiyin Chen, MD, PhD
   Melissa A. Kinnebrew, MD
   Ethan C. Levin, MD
   Alison M. Small, MD
   Rabina K. Walsh, MD
   Bree Zimmerman, MD

4. **Mayo Clinic Rochester**
   Meredith A. Olson, MD, *Team Captain*

5. **Medical University of South Carolina Dermatology**
   Jessica Connett, MD, *Team Captain*
   Christina Clarke, MD
   James Lagrew, MD

Watch for an article on challenge winners from SUNY Downstate Dermatology in an upcoming issue of AAD's *Aspire* publication.

Message from the Chair

Faranak Kanangar, MD

In my first message as chair, I would like to thank you for the opportunity to serve our residents and fellows in this upcoming year. I would also like to thank our outgoing chair, Nathanial Miletta, MD, for his mentorship and exemplary job. With this in mind, I would like to discuss the topics of leadership and mentorship.

I am certain we can all recall leaders and mentors who have helped shape who we are today. At this point in our careers, it is important to embark on our own journey to develop our personal leadership style and focus. This April, I had the opportunity to attend the AAD Leadership forum. The focus of this forum was to develop insight into leadership, effective conversation, managing conflicts, as well as workshops on communicating with confidence and building effective teams.

One major theme of this conference was that leadership is not always an inherent trait; it is one that is learned and requires practice. These skills are absolutely vital, and if practice makes perfect…the earlier we start, the better. What can we do as residents to hone our leadership skills? There is a plethora of opportunities to not only give back to our field but also practice these crucial skills. To name a few: AAD committees and task forces, resident scholarships to attend the AADA Legislative Conference, American Society for Dermatologic Society, and the Women's Dermatologic Society.

Mentorship has been a crucial part in our success thus far. As a resident and in the early years of one's career, it is vital to continue meaningful relationships with mentors who can aid in this journey of personal development. The December 2015 edition of *JAAD* contains an article titled, "Mentorship in Dermatology" which includes a nice list of mentorship opportunities for residents.[1] Whether mentorship is obtained at one's own institution or from an outside source, it is vital to have clear goals set early in the process between the mentor and mentee. A "mentorship contract" can be a useful tool as a starting point for the partnership.

Volunteering and fundraising for Camp Discovery is another great way to take charge and become involved. I would like to thank all of the residents who dedicated their time and effort in the Camp Discovery Residents' Challenge fundraiser this year. With all of your help, we achieved our resident goal in raising funds to help our pediatric patients attend this life changing experience! DR

1. Blattner, C. M., DO. (2015). Mentorship in Dermatology. JAAD, 73(6), 1067-1071. Retrieved from http://www.jaad.org/article/S0190-9622(15)02209-4/fulltext.

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