

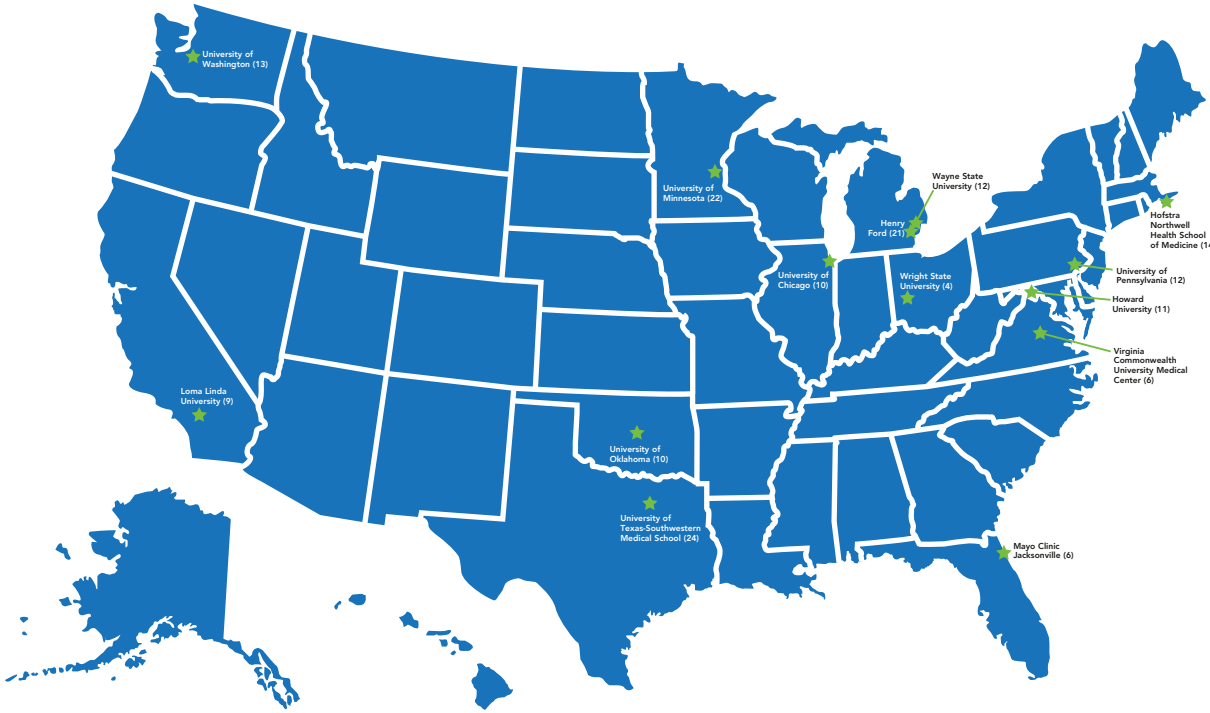


# DermWorld

## directions in residency

A Publication of the American Academy of Dermatology | Association

Spring 2024



## Ambassadors assemble! Nationwide efforts inform residents about AAD resources

By Morgan Murphrey, MD, MS

This past year, we launched the new “AAD Resident Ambassador Program.” Over the years, the AAD has received feedback from residents that it is difficult to navigate the many offerings of this organization. Although many residents have the opportunity to attend the AAD Annual Meeting, most are not acquainted with the vast majority of resources that the AAD has to offer.

With this in mind, we were excited to introduce the Resident Ambassador Program — an initiative by the AAD Residents and Fellows Committee. The purpose of the Resident Ambassador Program is to appoint dermatology residents to serve as ambassadors between the AAD and their residency programs. In August 2023, we launched a pilot of this initiative, electing residents from 14 programs across the country as our inaugural class of resident ambassadors.

### Participating programs:

- Loma Linda University (9 residents)
- University of Washington (13 residents)
- Howard University (11 residents)
- Virginia Commonwealth University Medical Center (6 residents)
- Mayo Clinic Jacksonville (6 residents)
- University of Minnesota (22 residents)
- Hofstra Northwell Health School of Medicine (14 residents)
- Wright State University (4 residents)
- University of Texas-Southwestern Medical School (24 residents)
- University of Pennsylvania (12 residents)
- Henry Ford (21 residents)
- University of Chicago (10 residents)
- University of Oklahoma (10 residents)
- Wayne State University (12 residents)



**Morgan Murphrey, MD, MS**, is a cosmetic laser dermatology fellow at Mass General/Harvard, and is chair of the AAD Residents and Fellows Committee.

see **AMBASSADORS** on p. 3

# Discover the power of GEP

An ongoing collaboration with the **National Cancer Institute** to produce the **largest real-world study** of gene expression profile (GEP) testing in melanoma demonstrates:

- DecisionDx-Melanoma® provides **significant, independent risk stratification** of patients with cutaneous melanoma.
- Testing with DecisionDx-Melanoma was associated with **lower melanoma-specific and overall mortality** relative to untested patients.

DecisionDx-Melanoma is a GEP test that integrates a patient's tumor biology with clinical and pathologic factors to precisely predict individual risk of metastasis, SLN positivity, and recurrence.

## Tumor biology matters



Bailey CN, Martin BJ, Petkov VI, et al. 31-Gene Expression Profile Testing in Cutaneous Melanoma and Survival Outcomes in a Population-Based Analysis: A SEER Collaboration. *JCO Precis Oncol.* 2023. doi:10.1200/PO.23.00044

## AMBASSADORS from p. 1

After a dynamic kick-off meeting last summer, ambassadors embarked on their mission. A primary goal of the ambassador program is to facilitate communication between the AAD and residents, and the ambassadors are integral in this endeavor. Ambassadors host short meetings with the residents in their residency program every 2-3 months. During these meetings, they focus on topics and present helpful resources from the AAD. Residents also receive a combination of digital and print communications relevant to the topic of the month.

The goal of the content strategy is to provide valuable, relevant information throughout residents' training, supporting them through milestones and fostering a connection with the AAD.

Ambassadors serve a one-year term, ideally as PGY3s, facilitating mentorship for incoming ambassadors. This role is a valuable opportunity for residents. All ambassadors meet 1-2 times over the year, allowing them to connect with other residents across the country. This program provides a leadership opportunity, as well as exposure to the AAD leadership structure, governance, and staff. In addition to a meal budget for quarterly meetings, ambassadors also receive an honorarium for their time.

The goal of the program is not only to benefit ambassadors, but also to benefit residents. In addition to a curriculum focused on exploring helpful resources, residents also receive swag from the AAD. This program offers a means of two-way communication, where residents can voice suggestions or concerns to their ambassadors, who can then share their comments with the AAD. This allows the AAD to streamline efforts targeting resident support and success based on real-time resident feedback.

Since its debut in August, this program has been very well received. After the majority of ambassadors met with their programs, we sent a brief feedback survey. Out of the 11 responses, 10 respondents indicated that their program's residents found the information presented by the ambassadors very beneficial, and one indicated somewhat beneficial. Ambassadors offered positive feedback on the organized presentations and newfound awareness of AAD offerings.

From personal experience, many may underestimate the organization's breadth beyond networking opportunities. The AAD stands not just for fostering community, but also for education and advocacy, carefully curating and fact-checking resources for its members. All in all, the overarching goal of the AAD is to support its members, and the ambassador program is yet another way in which this is accomplished.

The Resident Ambassador Program pilot concludes in June 2024. We plan to expand the program to more residency programs nationwide, incorporating feedback from the pilot program for an improved experience. We express deep gratitude to the participating pilot residencies and eagerly anticipate launching the program on a larger scale. If you're interested in becoming a resident ambassador for the 2024-2025 academic year, please stay tuned as applications will open soon! **DR**



Jessica Forbes Kaprive, DO, is a PGY-3 resident at Lewisgale/ VCOM Dermatology in Blacksburg, Virginia.

## Race for the Case

By Jessica Forbes Kaprive, DO



*A 16-year-old Middle Eastern female with no past medical history presents with a complaint of skin discoloration, located on the left posterior neck for approximately three years. The patient reports that the discoloration has recently become more noticeable, progressively darker and spreading toward the anterior neck and posterior shoulder blade on the left side. She denies any symptoms associated with the rash such as pruritus or burning. She also denies a personal or family history of any prior dermatologic conditions, autoimmune diseases, or thyroid disease. Review of symptoms is significant for travel history to the Middle East in the past two years where she previously lived.*

1. What is the most likely diagnosis?
2. Describe the findings of this condition?
3. What are common conditions that one could consider on the differential diagnosis?
4. What is the clinical course and prognosis for this condition?
5. What is the treatment of choice for ashy dermatosis?



Respond with the correct answers at [www.aad.org/RaceForTheCase](http://www.aad.org/RaceForTheCase) for the opportunity to win a Starbucks gift card!

### Race for the Case winner (Winter 2023)

Our congrats and a Starbucks gift card go out to Jill Wieser, MD, a PGY-4 dermatology resident at University Hospitals/Case Western Reserve University in Cleveland, Ohio. She correctly identified Wolf's isotopic response and other details our winter issue. You can read more about this case online at [www.aad.org/race-case-answers](http://www.aad.org/race-case-answers). If you can solve the latest case, there may be a Starbucks gift card in your future, and you may be invited to contribute your very own Race for the Case. Better get on it now!

## Filler complications

By Eduardo Michelen-Gomez, MD, Andrea Paola Caro-Muñiz, MD, and Karina J. Cancel-Artau, MD

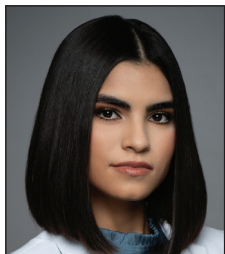
**Table 1: Injection site reactions**

Complication	Clinical presentation	Risk factors	Most common site	Prophylaxis	Treatment	Other considerations
<b>Edema</b>	Localized swelling due to expansion of interstitial fluid volume to the affected tissue Transient swelling is normal Usually resolves after 1-2 weeks	Timing and severity are dependent on the specific product used	Lips Periorbital region	Cold compresses (about 5 min) Arnica gel	Mild: Cold compresses Moderate: Diclofenac 50mg BID x 4 days Ibuprofen 400-600mg TID x 3-4 days Severe: Prednisone 30mg + pantoprazole 40mg x 3-5 days	N/A
<b>Bruising/echymosis</b>	Nonblanching purpuric patches >1cm common complication	Fanning and threading technique	N/A	Avoid strenuous exercise for 24h Use Arnica with vitamin K creams for 3 to 4 days	Arnica with vitamin K creams for 3 to 4 days Photoprotection	The risk of bleeding in patients taking oral anticoagulants is small Discontinuation may increase the risk of thrombosis Omega-3 fatty acids, fish oil and vitamins/herbal supplements can be discontinued
<b>Erythema</b>	Red discoloration of the skin due to dilation and irritation of superficial capillaries Post-procedural erythema is normal	Past medical history of rosacea	N/A	N/A	If prolonged (more than 3-4 days), may consider: Oral tetracycline Low-potency topical steroid Vitamin K cream	N/A
<b>Erysipelas</b>	Tender erythematous well-demarcated plaque	N/A	N/A	N/A	Penicillin V 250 - 500mg PO q6h x 10-14 days Clindamycin 300-450mg PO q6h x 5-7 days	Most common culprits: <i>Staphylococcus Aureus</i> <i>Streptococcus pyogenes</i>
<b>Abscess</b>	Subcutaneous tender nodule +/- purulence Rare complication Can occur from 1 week to several years after treatment May persist for weeks, and periodically recur for months	Permanent hydrogel fillers	N/A	Sterile techniques: Clean injection site before and after procedure, use of chlorhexidine gluconate	Incision & drainage Culture Empirical broad-spectrum antibiotic Tailor treatment after sensitivity results	Usually culture positive; midfacial and periorbital infection can result in intracerebral complications
<b>Herpetic outbreak</b>	Angioedema-like swelling, erythema, local pain, and crusting commonly observed 24 to 48 hours after filler injection in the area where the filler has been injected (perioral area, nasolabial folds, etc.); can extend to neighboring areas	Treatment of lips or mouth + hx of cold sores (3 or more episodes)	Lips and nasolabial fold	Prophylactic Valaciclovir 1g PO 1 day before and 3 days after filler injection	400mg Acyclovir three times per day for 10 days or 1g Valacyclovir BID x 7 days	In patients with active infection, injection should be delayed until complete resolution



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## Filler complications

By Eduardo Michelen-Gomez, MD, Andrea Paola Caro-Muñiz, MD, and Karina J. Cancel-Artau, MD

**Table 2: Adverse effects from improper technique**

Complication	Clinical presentation	Risk factors	Most common site	Treatment	Other considerations
<b>Non-inflammatory nodule</b>	Presents as an isolated lump in the area of the injection Does not grow Well-defined from the surrounding tissue When too much material accumulates in an area Appears early after the procedure (days to week)	Overcorrection Superficial placement of a filler Use of a filler for an incorrect indication	In highly mobile areas such as the lips when using particulate fillers	Early nodules may respond to vigorous massage If HA filler, the nodule will resolve with hyaluronidase IL Kenalog (small amount) IL 5-FU + lidocaine +/- kenalog Needle aspiration Minimal stab wound incision with evacuation (last resort)	N/A
<b>Biofilm (inflammatory nodule)</b>	Presents as a red, indurated, persistent nodule that recurs after resolution A mature biofilm can release individual free-swimming bacteria in the tissues Local infection Systemic infection	Chronic skin ulcers, dental work, surgery, trauma	N/A	Antibiotic treatment is the first step Ciprofloxacin 500mg BID AND clarithromycin XL 500mg BID x 4-6 weeks Removal of the filler Hyaluronidase if HA filler was used If long-term indurated area persists (despite above tx) IL 5-FU If refractory, optic laser microfiber or radiofrequency heating Surgical excision (last resort)	Usually culture negative; do NOT use IL steroids
<b>Foreign body granuloma (inflammatory nodule)</b>	Present as red papules, nodules, or plaques (+/- ulceration) Lesion becomes indurated over time Longstanding inflammatory nodules are most frequently foreign body granulomas	Larger volumes injected Intramuscular injections Previous infection or trauma The shape of the microspheres (irregular and sharp-edged particle)	N/A	If granulomatous reaction to HA filler, hyaluronidase IL Kenalog If unresponsive: IL Kenalog + 5-FU Surgical excision (last resort)	Usually culture negative; commonly appears several months to years after the injection; can occur with all injectable dermal fillers

**The complete chart, including allergy and hypersensitivity reactions, vascular-mediated events, and other considerations is available online, along with references, at [www.aad.org/boardsfodder](http://www.aad.org/boardsfodder).**

## More study charts online!



In addition to the expanded [Filler complications](#) chart, you can view a new [Angiosarcoma](#) chart by Jessica Kaprive, DO, Aaron Burch, DO, and McKenzie Tibbs, DO, at [www.aad.org/boardsfodder](http://www.aad.org/boardsfodder).

Check out the full archives at [www.aad.org/boardsfodder](http://www.aad.org/boardsfodder).



**Raj Chovatiya, MD, PhD, MSCI, FAAD,** is a board-certified dermatologist based in Chicago, and is a member of the AAD Scientific Assembly and Young Physicians Committees.

### More Clinical Pearls online!

Visit the archives at [www.aad.org/member/publications/more/dir/clinical-pearls](http://www.aad.org/member/publications/more/dir/clinical-pearls).

## Clinical Pearls

*Clinical Pearls will help prepare residents for the future by providing them with pearls about what they should know about a specific subject area by the time they complete their residency.*

# Seborrheic dermatitis

By Raj Chovatiya, MD, PhD, MSCI, FAAD

- 1. It's technically a form of eczema.** Seborrheic dermatitis (SD) is often described as existing on the psoriasis spectrum of inflammatory dermatoses given cases of clinical overlap, particularly on the scalp and face (so called 'sebopsoriasis'). However, SD is technically considered to be a form of chronic eczema, a family of disorders that also includes atopic dermatitis. Clinical findings of SD (i.e., erythema, flaky scales, and pruritus) can resemble aspects of both eczematous and psoriasiform eruptions. Histopathology may similarly show overlapping features. Acute SD demonstrates spongiosis and superficial perivascular and perifollicular lymphocytic infiltrate (akin to eczematous dermatoses), while more chronic lesions can show irregular acanthosis and focal parakeratosis (more akin to psoriasiform dermatoses). At an immunologic level, SD can demonstrate immune skewing and activation consistent with both eczema (type 2 helper T [Th2] cells) and psoriasis (Th17 cells). Unlike either family of disease, SD uniquely demonstrates a predilection primarily for areas rich in sebaceous glands, as well as intertriginous areas.
- 2. It's not all about the yeast.** Since the earliest descriptions of SD, *Malassezia furfur* (*Pityrosporum ovale*) has been suspected by some to be the causative etiology. Evidence supporting a primary causative role of yeast in SD includes the distribution of *M. furfur* in highly sebaceous areas, increased density in lesional skin, its contribution to production of inflammatory sebum-derived metabolites, and clinical efficacy of antifungal therapy. The debate continues to this day, and while *M. furfur* is acknowledged to have a role in pathogenesis, SD is not considered to be an "infectious" process directly driven by yeast. Evidence supporting a more secondary role for yeast in SD pathogenesis includes ubiquity of *M. furfur* both on healthy skin and healthy individuals, lack of strong correlation between density and either disease presence or severity, and efficacy of primarily anti-inflammatory therapies (like topical corticosteroids and topical calcineurin inhibitors). Emerging data suggest that immune dysregulation and barrier dysfunction may play more important and central roles in SD than previously appreciated, which is supported by clinical data from the newly approved roflumilast 0.3% foam (a novel topical phosphodiesterase-4 inhibitor).
- 3. Patients experience a greater disease burden than one might expect.** SD can be viewed by some (inaccurately) as a secondary issue, benign entity, and/or non-burdensome condition. However, a closer look at

patient-centered data reveals significant disease-related emotional distress and perceived physical limitations — perhaps unsurprising given that SD primarily involves highly visible and cosmetically sensitive areas. Two decades ago, the U.S. combined direct and indirect cost associated with SD was calculated to be nearly a quarter of a billion dollars. However, in reflection of the major psychosocial and quality of life (QoL) burden imposed by the disease, patient willingness to pay for symptomatic relief totaled \$1.2 billion. A recently presented population-based survey of SD patients and clinicians revealed that most SD patients experienced significant mental health impact, had negative QoL impact that was underestimated by clinicians, needed nearly six different treatments per week to manage their symptoms and weren't satisfied with common treatment options, and even felt they would be further along in their career if they didn't have SD.

- 4. Dandruff may be one of several different clinical phenotypes.** Dandruff of the scalp is characterized by flaking of the scalp (with or without itch) and commonly referred to as pityriasis sicca. Accompanied by minimal to no clinical signs of inflammation, dandruff is considered by many to be mildest entity on one end of the SD spectrum — though this is yet another debated aspect of SD. Despite limited epidemiology, the prevalence of SD is estimated to be approximately 1-5%, and when including dandruff, this number reaches nearly half the population. Other scalp phenotypes to be aware of with increasing disease severity on this spectrum include pityriasis steatoides ("classic" SD characterized by orange-pink erythema and yellow greasy scales) and pityriasis amiantacea (characterized by concretions of scale around the hair shaft). Beyond the scalp, SD can also commonly involve the forehead, eyebrows, eyelids, nasolabial folds, cheeks, ears, post-auricular folds, beard area, neck, and trunk. Distinct patterns include intertrigo, petaloid (polycyclic plaques), seborrheic eczematids (annular plaques with central clearing), pityriasiform, and psoriasiform.

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# AAD Career Networking Event!



If you're hunting for a dermatology job or are about to graduate, we highly recommend you do not miss the AAD Career Networking Event! It's a great, high-energy event where you'll meet over 40 employers face-to-face in a dedicated two-hour setting. Drinks will be provided as you meet and mingle with potential employers from all over the country and network with other dermatologists.

**Friday, March 8, 4:30-6:30 PM PST**

Location: Marriott Marquis San Diego Marina, The Grand Ballroom 3/4/6, which is located in the North Tower on the 2nd floor.



Scan QR code to register

Supported by Integrated Dermatology



There's a lot going on for residents in San Diego!

Be sure to attend these **2024 AAD Annual Meeting** sessions designed with resident needs in mind.



**Thursday, March 7 • 6:30 – 9:00 p.m.**

- Resident Networking Event

**Friday, March 8**

- C001 - Conquer the Boards: Core Exam & Review (led by Jennifer Lucas, MD, FAAD)
- C005 - Conquer the Boards: Applied Exam & Review (led by Jennifer Lucas, MD, FAAD)



**Saturday, March 9**

- S027 - Residents and Fellows Symposium (led by Cory Dunnick, MD, FAAD)
- S044 - Resident Jeopardy – Team submissions are open through January 31!
- F060 - Young Physician Pearls and Pitfalls: A Survival Guide for the First 10 Years (led by Sonal D. Shah, MD, FAAD)

**Sunday, March 10**

- F084 - Boards and Beyond (led by Morgan Murphrey, MD, MS)
- S053 - Boards Blitz (led by Jennifer Lucas, MD, FAAD)

**Plus!** Four Gross and Microscopic symposiums (March 8 and March 9)

And there's much more! Go to <https://am2024.aad.org/sessions> to see details for these and other sessions.



Is something interesting happening in your residency program? We'd like to feature it in *Directions*.

Send your ideas to [dmonti@aad.org](mailto:dmonti@aad.org).

## Inside this Issue



**Morgan Murphrey, MD, MS**, is a cosmetic laser dermatology fellow at Mass General/Harvard, and is chair of the AAD Residents and Fellows Committee.

It is bittersweet to write my final column as the Resident and Fellow Committee chair. Over the last year, taking the time to reflect as I write this column has been a privilege and a joy. I hope that my columns have resonated with you, and I appreciate you reading along.

When I started this column, I was a resident. I've continued the column as a fellow, and now as I prepare to be an attending dermatologist. For my final editorial, I wanted to share a collection of advice, from both me and my past co-residents, for success and happiness as a dermatology resident and beyond.

Residency is your chance to freely learn and make mistakes, honing your craft and developing your skills. It's important to **practice like you play**. When you see patients, **approach them as if you are the attending**, and commit to a diagnosis and plan of action. The habits you form in residency determine how you practice in the future. The more you think through clinical scenarios and bounce ideas off colleagues now, the better equipped you will be as an attending dermatologist making unilateral decisions in the future.

**Do not take constructive criticism personally.** Many of us in medicine identify as "type A," and it's hard not to feel hurt when someone points out things we could improve upon. Don't let your ego get in the way of your self-development and remember to **keep an open mind**. There is something to be learned from everyone, and even the most challenging interactions can lead to growth and resilience.

In terms of making the most of residency, **plan ahead for conferences and educational opportunities**. Many of these experiences are discounted or free for residents, so take advantage! When working as an attending, it can be even more difficult to take time away from work or family, so maximize these opportunities while you can.

And most importantly, **remember to have fun**. Residency is challenging and rewarding, but training is finite. As you come into your own as a physician and early-career dermatologist, you must learn to navigate challenges academically and socially. Remember that **the days are long, but the years are short**, and your success today was your past goal and dream. Approach your practice with gratitude and be kind to yourself: you've got this!

*The AAD thanks Dr. Murphrey for her enthusiastic work with Directions and the AAD Resident and Fellows Committee over the past year. Please attend Boards and Beyond at the AAD Annual Meeting in San Diego on March 10, led by Dr. Murphrey. DR*



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**DermWorld**  
directions in residency

**Spring 2024**

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