

# 2022 American Academy of Dermatology Innovation Academy Conference

## Post Conference Highlights July 21-24, 2022

The American Academy of Dermatology Innovation Academy (AAD IA) meeting brought top dermatologists together to learn from one another and share pearls on how to manage skin diseases.

Held at the Vancouver Convention Center in British Columbia, Canada, the meeting spanned four days and included a focus on advances in treating dermatologic diseases, along with sessions on practice management and updates on diagnosing and treating skin diseases in darker skin tones.

Below, please find our postconference wrap-up.

### Summary of the 2022 AAD IA Conference

#### **And the winner is ...**

Robert T. Brodell, M.D., a tenured professor and chair of the department of pathology, the past founding chair of the department of dermatology, and the Billy S. Guyton distinguished professor at the University of Mississippi Medical Center in Jackson, received the 2022 Everett C. Fox, M.D., Memorial Lectureship Award at the meeting, where he gave a lecture on access to care.

The Everett C. Fox, M.D., Lectureship was formed through a bequest from the estate of Everett C. Fox, M.D. Fox was a practicing clinician in Texas and was vice president of the American Academy of Dermatology in 1946.

Brodell is a graduate of Washington and Jefferson College and the University of Rochester School of Medicine and Dentistry. He completed dermatology and

dermatopathology training at Barnes Hospital of Washington University in St. Louis and was in solo private practice for 27 years in Warren, Ohio.

“Dr. Brodell has worked tirelessly to enhance the availability of dermatology care throughout the rural state of Mississippi,” said Kathryn Schwarzenberger, M.D., a professor of dermatology at the Oregon Health & Science University in Portland, in her opening remarks. “He is well respected and much beloved by his trainees.”

### **Embracing technology**

Jamie Metzl, a New York-based technology and health care futurist and author of *Hacking Darwin: Genetic Engineering and the Future of Humanity*, gave the keynote lecture at the AAD IA meeting.

He discussed how the future of dermatology – and all specialties – will involve partnering with technology. “As we collect more and more data in massive datasets and develop predictable algorithms, we are transitioning to a new phase of predictive health care,” said Metzl. “A human practicing alone will be insufficient and [artificial intelligence] data alone insufficient, but the standard of care will be humans and artificial intelligence working together.”

We are entering the realm of augmented intelligence, Metzl said. “[Technology] is not replacing doctors; it’s augmenting the care that they give,” he said.

### **Running a successful practice**

Today’s dermatologists are faced with caring for patients and running a business, which is not something routinely taught in medical school. This was the focus of several key talks at the meeting.

Libby Gill, a leadership consulting and executive coach based in Medford, Oregon, discussed how to navigate teams through change, challenge, and chaos. She is the author of several books, including *You Unstuck*, *Capture the Mindshare and the Market Share Will Follow*, *Traveling Hopefully*, and *The Hope-Driven Leader: Harness the Power of Positivity at Work*.

Change is a process, and the first step is to identify any barriers to change. “Identify both positive and negative impacts and create a communications strategy,” Gill explained. Make sure your team is aligned with the coming changes. “Reward

positive behaviors, manage resistance, and offer training and resources as needed," Gill said.

M. Shane Chapman, M.D., echoed these sentiments in his talk, "Innovating People: Creating a Positive Environment for Success." Chapman is the professor and inaugural chair of dermatology at Dartmouth-Hitchcock Medical Center and the Geisel School of Medicine at Dartmouth in Hanover, New Hampshire.

"Motivating your staff starts with believing in yourself and your abilities as a leader, and creating an aura of positivity at your office or in your department," Chapman said.

"Always say 'good morning,' 'please,' and 'thank you,' and make sure to show that you care about your staff so they feel valued," he said. "Your staff will give 110 percent if they feel like you are on their side," said Chapman.

Staff development and mentoring are also great ways to retain high-performing employees as we work through the Great Resignation, Chapman said.

### **JAK of all trades**

Janus kinase (JAK) inhibitors are the hottest ticket in dermatology today. These drugs interrupt the JAK-STAT (signal transducer and activator of transcription) signaling pathways that are involved in the pathogenesis of many immune-mediated and/or inflammatory diseases, including vitiligo, atopic dermatitis (AD), alopecia areata, and plaque psoriasis.

David Rosmarin, M.D., a dermatologist at Tufts Medical Center in Boston, discussed the recent U.S. Food and Drug Administration approval of ruxolitinib cream 1.5 percent for nonsegmental vitiligo in adults and children 12 years and older. This is the only FDA-approved treatment for repigmentation in vitiligo and the only topical formulation of a JAK inhibitor, Rosmarin said. "Ritlecitinib, a JAK3 inhibitor, and upadacitinib, a JAK1 inhibitor, are orals in development for vitiligo."

JAK inhibitors are also revolutionizing the treatment of AD, said Benjamin Ungar, M.D., an assistant professor in the department of dermatology at the Icahn School of Medicine at Mount Sinai in New York City.

In recent months, the FDA approved two oral JAK inhibitors – upadacitinib and abrocitinib – for AD, said Ungar.

In June 2022, the FDA gave its nod to baricitinib, an oral JAK inhibitor for adults with severe alopecia areata. This is the first systemic drug ever approved for alopecia areata, a condition that affects as many as 6.8 million people in the United States.

While baricitinib has the official FDA nod, at least two other oral JAK inhibitors – deuruxolitinib and ritlecitinib – are working their way toward FDA approval, according to Brett King, M.D., Ph.D., an associate professor of dermatology at Yale School of Medicine in New Haven, Connecticut.

Studies are also looking at JAK inhibitors in hidradenitis suppurativa, said Afsaneh Alavi, M.D., a dermatologist at the Mayo Clinic in Rochester, Minnesota.

“There's a lot of hope about JAK inhibitors, but safety is always something that requires close attention,” Alavi added. The FDA requires a black box warning for JAK inhibitors due to an increased risk for heart attack or stroke, blood clots, cancer, and death.

The psoriasis pipeline is also full, said Jennifer Soung, M.D., director of clinical research at Southern California Dermatology in Santa Ana, California, and a clinical professor at Harbor-UCLA Medical Center, also in Santa Ana.

Bimekizumab may soon join the interleukin-17 family of biologics, Soung said. The FDA issued a complete response letter regarding the biologic's license application stating that certain preapproval inspection observations related to manufacturing must be resolved before the application can be approved.

Another novel therapy, deucravacitinib, is intended to block tyrosine kinase 2 (TYK2) without inhibiting JAK1, JAK2, or JAK3, thus potentially avoiding adverse events associated with JAK inhibitors, said Soung. The FDA is expected to rule on the investigational TYK2 inhibitor in September 2022. Also in the pipeline is a steroid-free topical option called roflumilast that inhibits PDE4, she said. Lastly, EDP1815 is an orally delivered, anti-inflammatory, gut-restricted commensal microbe that is also under investigation in psoriasis, Soung said.

## Optimizing skin care regimens

Michelle L. Jeffries, D.O., a dermatologist in Chandler, Arizona, gave a talk on how circadian rhythms affect skin health. "The cells in your body can tell time, including your skin cells, using clock genes," Jeffries said. "A key missing piece in skin health is integrating the alignment of time into our skin health care routines and recommendations."

Sebaceous gland activity is highest at midday and lowest at night, said Jeffries. There is also less blood flow to the skin during the day, and this increases at night.

In the evening, there is higher transepidermal water loss. In addition, the proliferation of keratinocytes is highest around midnight, and inflammatory cytokines peak at night.

This information can help optimize skin care routines, Jeffries said. During daylight hours, use oil-control products and lighter moisturizers due to less transepidermal water loss. In the evening, patients should use thicker moisturizers and peptides, growth factors to boost collagen production. Topical corticosteroids can help cool increased inflammation at night. "Low evening cortisol is a contributing factor to increased inflammation and itching at night in psoriasis, eczema, and chronic idiopathic urticaria," said Jeffries, and topical retinoids will complement the increased keratinocyte proliferation.

The bottom line? "Optimizing your sleep, skin care routine, and cortisol response can impact your skin health and overall health," Jeffries said.

## Stress and skin cancer: Understanding the connection

Studies have shown that 30 percent of people diagnosed and treated for any stage of melanoma report psychological distress, and as many as one in five patients who are newly diagnosed with nonmetastatic melanoma have treatable depression, according to Keira Barr, M.D., a dermatologist in Gig Harbor, Washington.

"Studies have shown that stress promotes tumor initiation, migration, invasion, and growth and reduces the effectiveness of antitumor therapy," said Barr, who is also author of *The Skin Whisperer: A Dermatologist Reveals How to Look Younger, Radiate Beauty and Live the Life You Crave*.

Here's how: "Elevated glucocorticoids inhibit p53, which promotes tumorigenesis, and elevated catecholamines regulate the tumor microenvironment by activating B-adrenergic receptors, enhancing tumor cell migration, invasion, and growth," Barr said. In addition, stress hormones promote tumorigenesis and cancer development.

Taking steps to reduce stress levels can make a big difference for skin cancer patients, said Barr. These steps can include meditation, acupuncture, visualization, breathwork, Tai chi, qigong, or yoga.