Every 6 months, IPC’s board and councilors suggest and vote on articles that make the greatest impact on psoriasis research. The 5 papers that received the most votes for articles published January through June 2018 are reviewed here. Summaries and commentaries were written by this issue’s co-editors, IPC councilors Dr. Clay J. Cockerell, MD, founder/medical director, Cockerell Dermatopathology, Dallas, Texas, United States, and Dr. Gail Todd, BSc (Agric), MBChB, FFDerm (SA), PhD, Emeritus Professor, Department of Medicine, University of Cape Town, South Africa.

1. New molecule bimekizumab blocks both IL-17A and IL-17F, shows good response in psoriasis treatment in phase 2 study


Summary
The immune pathways associated with psoriasis have been well delineated, and inhibitors of interleukin (IL)-17 have been shown to be highly effective with minimal side effects. Since IL-17 was discovered, a number of different variants of the cytokine have been delineated as well. Now there are 6 so far, named IL-17A through IL-17F. The currently available IL-17 inhibitors target IL-17A as well as one that inhibits the IL-17 receptor. This latter molecule has blockade activity against more than IL-17A only, as other IL-17 subtypes bind to this receptor. This led the authors of this study to question whether a molecule that blocked both IL-17A and IL-17F, bimekizumab, might be more efficacious or have benefits over agents that block only IL-17A. In this phase 2b dose-ranging trial, moderate to severe plaque psoriasis patients were randomized to receive 64 mg, 160 mg, 160 mg with 320 loading dose at baseline, 320 mg, 480 mg dose of bimekizumab, or placebo. A statistically significant dose response was observed for Psoriasis Area Severity Index (PASI) 90 at week 12. The 320-mg dose group demonstrated the highest response, with 80% of patients achieving PASI 90 or Investigator Global Assessment (IGA) clear or almost clear. The drug had a swift onset of action with good responses observed at week 4 after a single dose. There were no significant side effects, with only a few cases of...
A President’s farewell
Dear colleagues,

As I reflect upon my time leading our organization, I am proud to have seen the launch of innovative programs that illustrate our growth and widen our influence around the world:

• In its first year, the International Fellowship program partnered 3 early-career dermatologists to work alongside IPC board members and councilors and attend IPC events worldwide. In 2019, the program will award 4 fellowships. With this initiative, we are fostering psoriasis leadership and influencing the future of our field. I look forward to watching the growth of this program and its participants’ careers in the coming years.

• Over the past 2 years, we increased our efforts in underserved areas. These included our first IPC Psoriasis Master Class offered in India, symposia in Egypt and South Africa, sponsorship of 2 conferences in China, an expanded Chinese translation of the IPC Psoriasis Review, and Master Classes planned in Egypt and Argentina this spring. These initiatives exemplify our strong and continuing commitment to increase high-quality care in these regions.

I know that under Professor Jonathan Barker’s expert leadership, IPC will continue to grow these efforts and initiate others, which will move our extraordinary research and clinical care agenda forward.

Best wishes for the new year,

Alexa Boer Kimball, MD, MPH
Immediate Past President, International Psoriasis Council

A new term begins
Dear colleagues,

Welcome to the January 2019 issue of the IPC Psoriasis Review newsletter. As IPC’s new board president, I am honoured to take the reins and to build on the significant progress made by my predecessor, Professor Alexa B. Kimball.

Since joining the IPC board in 2004, I have been part of IPC’s growth into a prominent global organization in psoriasis education, research, and treatment. As IPC’s new leader, I intend to build on this growth with these goals:

• Ensure that psoriasis is recognized as a serious disease as stated in the World Health Organization’s 2016 Global Psoriasis Report

• Enhance access to care and medications through our education, research, and advocacy programs

• Engage more fully with IPC councillors and all stakeholders

• Encourage and support the next generation of psoriasis leaders

• Increase our outreach into underserved countries and expand our network of key opinion leaders in these regions

At IPC’s Think Tank this past December, we examined our current projects and looked to the future. Working with our councillors, we generated many ideas and opportunities to help us achieve the above goals. I look forward to working with all of our partners, including board members, councillors, staff, corporate members, and partner organizations. Together, we will continue to advance our work and mission.

With best wishes for a happy and productive new year,

Jonathan Barker, MD, FRCP, FRCPath
President, International Psoriasis Council
mild fungal infections and transient neutropenia reported. The investigators concluded that this drug is efficacious and is well tolerated with minimal side effects.

**COMMENTARY** It is well established that IL-17A is a mediator of inflammation and intimately involved in the pathogenesis of psoriasis. In the last several years, other IL-17 molecules have been discovered, and data indicate that IL-17F in particular contributes to inflammation and is also involved in psoriasis. This study confirms that a new agent that blocks both molecules is indeed efficacious. Whether this agent is truly significantly better than those that block IL-17A alone remains to be seen, however, as this was not a head-to-head study against an IL-17A blocker. Will this agent fill any unmet needs or have any differentiating factors? Some of these that may be real contributions include a significantly faster rate of onset, fewer side effects, longer duration of response, fewer doses required, efficacy in difficult-to-treat subsets such as nail or volar psoriasis, and finally, and perhaps most importantly, lower cost. As the authors acknowledge, more studies are needed to answer these questions, as this study simply proved efficacy.

– Dr. Clay J. Cockerell
2. Innate immune dysregulation promotes T-cell-mediated inflammation in generalized pustular psoriasis, study reveals

**Unopposed IL-36 activity promotes clonal CD4+ T-cell responses with IL-17A production in generalized pustular psoriasis.**

**Summary**
The identification of loss-of-function mutations in IL36RN, an inhibitor of IL-36 cytokines in generalized pustular psoriasis (GPP) leading to unopposed IL-36 signal disturbance, supported an autoinflammatory etiology for GPP, together with circumstantial evidence, fulfilling the Noel Rose criteria for autoimmunity. Genetic predisposition in GPP is heterogeneous. Patients may have single, combined, or no mutations in IL36RN, AP1S3, and CARD14 genes. Genetic analyses alone leave the pathogenesis of GPP unexplained. This study’s authors investigated the role of combined autoinflammation and T-cell-mediated mechanisms in GPP pathogenesis. Blood and tissue samples were taken from 8 healthy controls, 8 patients with GPP (flaring von Zumbusch type on systemic treatments) and 8 patients with chronic plaque psoriasis vulgaris (PV) of undefined extent and severity. Using a variety of sophisticated in vitro techniques, they investigated T-cell involvement in GPP pathogenesis. Their findings:

- CD4+ T cells in blood and skin lesions characterized GPP, a significant number of which were pre-activated and committed to T-helper type 17 (Th17) differentiation.
- Highly restricted T-cell receptor (TCR) repertoires supported antigen-driven CD4+ T-cell expansions in GPP but not PV.
- Antigen-driven CD4+ T-cell responses were unrelated to the IL36RN mutation status in GPP.
- Clonally expanded CD4+ T cells were a preferential source of IL-17A in GPP.
- Enhanced autoinflammatory IL-36 signalling may promote TCR driven CD4+ T-cell clonal proliferation in GPP.
- Select involvement of CD4+ T cells discriminated GPP from PV.
- Antigenic selection of clonal CD8+ T cells was similar in GPP and PV.

GPP pathogenesis involves strong antigen-driven Th17 responses in association with certain HLA-class II alleles, promoted by unopposed IL-36 signaling. In the absence of exogenous triggers or infections, these antigen-specific T-cell responses are directed at self-antigens.

**COMMENTARY** This study has the following implications:

- Innate immune IL-36 dysregulation promotes T-cell-mediated inflammation in generalized pustular psoriasis.
- There is variable interplay between innate and adaptive immune mechanisms on a background of genetics in the pathogenesis of GPP.
- IL-17A is a key mediator for the manifestation of GPP and chronic plaque psoriasis vulgaris.
- Generalized pustular psoriasis and chronic plaque psoriasis vulgaris have distinct and overlapping immune characteristics.

-- Dr. Gail Todd
3. Study compares effect of treating psoriasis with adalimumab and phototherapy on vascular inflammation and cardiovascular biomarkers


**Summary**
Systemic inflammation related to psoriasis disease severity has been proposed as the link between psoriasis and cardiovascular disease. Increasing psoriasis severity is associated with increasing vascular inflammation as measured using 18F-fluorodeoxyglucose positron emission tomography/computed tomography (18F-FDG PET/CT) of the aorta and is independent of traditional cardiovascular risk factors. This was a well-designed, proof-of-concept, phase 2, randomized controlled trial in patients with moderate to severe psoriasis. Its aim was to compare the effect of treatment with adalimumab (a systemic immune-modulating biological therapy), phototherapy (a skin-directed therapy), and placebo on skin disease and vascular inflammation. Measures included 18F-FDG PET/CT and biomarkers of inflammation, advanced lipoprotein characterization, and glucose metabolism. Despite methodological rigor, the investigators did not demonstrate a reduction in vascular inflammation with adalimumab therapy or phototherapy compared to placebo despite a variable reduction in inflammatory markers. The study found a statistically significant reduction in vascular inflammation compared to baseline vascular inflammation in the phototherapy treatment arm only. There was no change in glucose levels or insulin resistance nor in adiponectin or leptin compared to placebo for adalimumab or phototherapy. Phototherapy increased high-density lipoprotein-p at 12 weeks. Cholesterol efflux and high-density lipoprotein-p were reduced at week 52, the end of the open-label adalimumab phase. One-fourth of the patients did not complete the 1 year of adalimumab treatment, primarily because of failure of treatment response.

**COMMENTARY**
This study has the following implications:

- More research is needed to understand the complex pathophysiological mechanisms between inflammation, psoriasis, and cardiovascular disease.
- Controlling psoriasis of the skin by any means may decrease overall systemic inflammatory burden and mitigate cardiovascular risk.
- Atherogenic shifts in lipoproteins and interleukins varied between adalimumab (proatherogenic) and phototherapy (antiatherogenic) despite decreased inflammation and unchanged vascular inflammation.
- Clear evidence of a beneficial effect on actual clinical vascular events needs to be demonstrated directly, and the extent of the benefit in terms of numbers needed to treat to prevent one vascular event provided.
- While the use of a standardized dosing regime in a highly selected cohort is a prerequisite of trials following a fixed protocol, patients are individuals, and the 25% drop-out rate due to failure of treatment response may reflect the inability to individualize therapy.

This trial report was accompanied by an editorial by Daghem and Newby in which the findings and design are fully analyzed and discussed.1

4. IL-17 antagonist ixekizumab improves genital psoriasis, patient’s quality of life


**Summary**
This study was targeted to evaluate whether ixekizumab, a humanized antibody directed against IL-17, was effective against psoriasis of the genitalia, which affects up to 63% of patients and is associated with significant decrease in quality of life, as patients are often quite self-conscious about their disease when it affects this site. All patients had moderate to severe plaque psoriasis and were administered standard doses of the drug, which has been approved for psoriasis on other body parts. The diagnosis of psoriasis had been previously established and no biopsies were performed to confirm the diagnosis prior to therapy. As with other forms of psoriasis, there was dramatic and excellent improvement of genital psoriasis that was sustained with few side effects. The authors noted that there were a few limitations of the study and that most of the patients were Caucasian men. They found that there was also increased sexual frequency and significant improvement in quality of life.

**COMMENTARY**
All dermatologists are now aware that biologic agents are highly effective in treating psoriasis. Patients treated with biologics appreciate their long-term efficacy, and more and more patients are anxious to learn more about the great opportunity of long-term, safe control. However, psoriasis is not just one disease, and patients with some subtypes can have their quality of life altered dramatically even though there might not be a large amount of surface area involved. Some of these include psoriasis on volar skin, psoriasis of the nails, scalp psoriasis, and, as these authors note, genital psoriasis. In their innovative study, the researchers limited their subjects to those who had genital involvement and evaluated whether this drug would improve their disease in this location. Not surprisingly, they found that it was highly effective, and it improved the quality of life with a concomitant increase in sexual frequency. Future studies could be expanded to include more women and perhaps even add a psychological evaluation to see if self-confidence improved. One elephant remains in the room, however: Will payers comprehend the multifactorial and complex nature of the burden of psoriasis?

– CJC
5. ‘Paradoxical psoriasis’ has different pathogenesis, histology, clinical features than true psoriasis


**Summary**
It has been known for some time that patients being treated with TNF-alpha inhibitors occasionally develop resistant psoriasiform plaques even though the majority of the patient’s psoriasis may resolve. This has been termed “paradoxical” psoriasis by some clinicians. In this study, the researchers sought to determine the cause of this phenomenon and whether it is truly psoriasis. They discovered that within these lesions, there was an increase in the number of plasmacytoid dermal dendrocytes, decreased T cells, and an increase in the production of Interferon 1. They documented that the eruption is driven by IF-1 and that it was not T-cell dependent. The histology demonstrated spongiosis, variable degrees of psoriasiform hyperplasia and inflammatory infiltrates with neutrophils and, in some cases, scattered eosinophils. They also used an elegant mouse model to study how interferon and inflammatory cells induce the changes in an animal model. While they were not certain how all of these factors ultimately resulted in the persistent eruption, they suggested that innate lymphocytes, mast cells, neutrophils, and NK cells may all play some role.

**COMMENTARY** This elegant study represents a “deep dive” into a relatively obscure process that is observed in some patients who receive TNF-alpha inhibitors for psoriasis and other conditions. As they note, the eruption is not truly psoriasis, as it has a different pathogenesis as well as different clinical and histologic features. For that reason, this condition probably should not be termed “paradoxical psoriasis” and would be better named “anti-TNF-induced psoriasiform dermatitis” or an analogous term. While many patients are very pleased with their anti-TNF treatment, they may be dissatisfied with these persistent plaques. Given that this may be induced by other inflammatory cells, perhaps treatment with antihistamines or antineutrophil agents such as Dapsone might be efficacious, permitting patients to continue with their medication. ■ – CJC

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**Hot Topics in Psoriasis:** A Focus on Women, Palmoplantar Psoriasis and Biosimilars
77th Annual Meeting of the American Academy of Dermatology (AAD)
February 28, 2019 | 2:00-5:00 pm | Washington, D.C., USA

**Cardiovascular Disease in Psoriasis:** A changing paradigm
77th Annual Meeting of Society for Investigative Dermatology (SID)
May 8, 2019 | 9:00 am-1:00 pm | Chicago, IL, USA
P4 medicine: Personalized, predictive, preventive, participatory medicine in a digital environment

HOW CAN THE INTERNATIONAL PSORIASIS COUNCIL CONTRIBUTE?

By Peter van de Kerkhof, MD, PhD
Christopher EM Griffiths, OBE, FMedSci
Daniella Armijo, MD

As dermatologists, we know the heterogeneity of psoriasis, a polygenic, multifactorial disease with several comorbidities. For instance, some patients have a few localized plaques, whilst others have extensive involvement of the skin. In some patients, lesions are stable for years and can be controlled effectively with topical preparations until relapse many months later. Others have a course of frequent exacerbation and remission, and the lesions are characterized by active areas of inflammation. The locations of psoriasis may be the visible areas or hidden and localized areas of the body, which makes a difference to the burden of disease. Psoriasis is often accompanied by itch, although this may vary from patient to patient. The clinical phenotypes of psoriasis have been described and classified before, in a review by a task force of the International Psoriasis Council (IPC).  

The psychological impact of psoriasis is substantial. In particular, anxiety and stigmatization can be heavy burdens of the disease, but, again, there are large differences between patients.  

Several triggering factors have been suggested to be relevant to the course of psoriasis, such as medications, the Koebner phenomenon (development of psoriatic lesions in previously unaffected skin after trauma or injury), focal infections, and psychological stress. In addition, a variety of other potential triggering factors have been suggested, without epidemiological evidence. We learn from our patients about the personal relevance of some factors perceived by them as triggers that lack solid evidence from the literature.

Focusing on personalized care

Each patient has his/her own psoriasis. One of IPC’s strategic aims is to “elevate the standard of care of those living with psoriasis with a focus on personalized care.” This has implications for our research, patient care, and teaching. How can we as an organization make a significant contribution to this aim?

As professionals, we need a systematic approach to the appreciation of disease severity. The dimensions of disease severity assessment have been developed by the University of Manchester Centre for Dermatology Research as a three-integer approach: (1) the objective severity assessed, for example, by Psoriasis Area Severity Index, Body Surface Area, and Psoriasis Global Assessment; (2) the subjective severity as experienced by the patient, assessed, for example, by the Dermatology Life Quality Index; and (3) the historical severity assessed by responsiveness to previous treatments and episodes of erythroderma.  

The long-term course is actually what matters to most people with psoriasis. Patients experience remissions and exacerbations, but mostly we do not understand why a patient relapses, what the relevant disease-modifying
Due to the polygenic and multifactorial nature of psoriasis, there isn’t a “one size fits all” answer. For example, in which patients is early active treatment of the most importance to change the long-term course of the disease? Striving for true disease modification instead of maintenance therapy may require a treatment strategy that is different from only realizing a quick-fix clearance. One of the major gaps in our understanding, as defined by IPC, is the natural history of psoriasis and to what extent early active intervention improves long-term modification, including skin manifestations, comorbidities, and overall health.9,10

Over the years, a wealth of research data has been generated on psoriasis, including heredity, pathogenesis, epidemiology, quality of life, comorbidities, and responses to treatment. An important development has been evidence-based guidelines, based on high-quality research, fulfilling certain established quality criteria. The classic “evidence-based” research, however, has a well-known limitation of focussing only on a small number of variables. This reductionist approach to research does not do justice to what is most important for the individual patient in real-world practice. By this we mean sustainable disease control, triggering factors, and the risk management of comorbidities. Thus, an integrative whole-system approach is needed.

In practice, how do we take the right decision for the individual patient if the evidence is fragmentary? In real-world practice, patient history is important for revealing comorbidities, triggering factors, and disease-modifying factors, which are meaningful to the individual patient. Clinical experience with many patients helps us integrate these parameters to judge the best treatment for the individual patient at the right time.

An integrated approach to psoriasis
We are witnessing great innovations in health care that can integrate the multitude of factors that exist and influence the course of diseases. These factors can be classified under: biological systems including genomics, epigenomics, transcriptomics, and proteomics; the medical system, with data from the medical record; and welfare, with a multitude of data regarding lifestyle, leisure activities, workload, and health apps.

Unfortunately, all these data are fragmented among electronic patient records that cannot “talk” to each other or are hidden due to privacy regulations. It is important that this information is stored in well-structured personalised clouds for each patient. Health care will make great progress as a result of “big data analytics,” a digital process involving the application of machine learning to identify connections between a large number of triggering factors in very large patient populations. This development requires ethical reflection guaranteeing privacy on the one hand and enabling collective analyses on the other.

Relevant personal evidence will have to be provided for each patient on the basis of his or her individual characteristics. This development is specified as “computational medicine,” “precision medicine,” or, more accurately, “P4 medicine: personalized, predictive, preventive, participatory.”11

For example, can we predict which person with psoriasis will develop metabolic syndrome? Can we prevent the development of cardiovascular disease in a patient with psoriasis? In many other disciplines, this development is in progress.12-17

As the skin is, quite literally, right at the surface, dermatology in particular can play a leading role in this development. Skin imaging, subsequent pattern recognition by “machine-based learning” connected to systems medicine, and information on welfare in a digital environment will create a new form of evidence-based health care. On the one hand, the individual patient’s data cloud will contribute to data collection. On the other, it will provide collective evidence for answers to relevant questions of the individual patient, reconciling multiple factors, questions such as:

• Is there a chance that this patient will develop severe symptoms of psoriasis?
• Will this patient develop comorbidities and, if so, which ones?
• To which treatments will this patient respond best?
FOCUS ON PSORIASIS: P4 MEDICINE

• Is this a patient who requires active and early intervention to prevent cumulative damage to his or her health and welfare?

We are moving from reactive medicine towards proactive medicine.11

What can IPC contribute?
Dermatology as a discipline is on its way from the classical evidence-based approach to an integrated omics computational medicine using patient registries23-39 and lifestyle approaches.40,41 International collaborations using pooled data bases and bioresources will help the implementation of P4 medicine. This approach is being established in a number of institutions and national task forces, such as the stratified medicine consortium Psoriasis Stratification to Optimise Relevant Therapy (PSORT) in the United Kingdom, which has made important observations about predictors of response to therapy in psoriasis. The next step is to move from invention to innovation of health care. A highly variable, polygenic multifactorial disease such as psoriasis requires P4 medicine in a learning health care environment.

In several respects, IPC as a worldwide organisation can enhance P4 medicine. It is important that clinicians realise there is no turning back to the times of eminence and, to some extent, evidence-based medicine and the fragmented approaches by individual specialties. Open collaborations, data sharing, functional assays, and model organisms play a key role in the validation of -omics discoveries.42 A joint effort between relevant specialties, perhaps under the umbrella of “inflammation medicine,” can accomplish a new diagnostic approach and an individualized management plan according to the information retrieved from -omics investigations (eg, actionable mutations, novel therapeutic interventions). This collaboration is key in P4 medicine. Adequate registration of clinical data and harmonization of data collection are required.

For the patient of today:
• Awareness that psoriasis is a multi-faceted disease is needed in teaching programmes and in guideline development. A host of factors is important in the appreciation of disease severity, and multiple factors determine which treatment a patient receives, when the treatment should occur, and for how long. Knowledge about phenotyping and assessment of disease-modifying factors is important. In patient management, it is important to move away from fixed treatment paradigms.
• In describing degrees of disease severity, it is important to realise that there is no simple classification and that this is a linear scale. Professionals have to unlearn traditional dogmas of categories delineated by artificially uniform definitions, which only depersonalise care.
• Studies on treatment efficacy in special phenotypes — such as palmoplantar psoriasis, pruritic psoriasis, psoriasis at sensitive skin sites, scalp psoriasis — are crucial.
• Studies on intervention in the phases of the disease, in particular, early intervention, are needed.

For the patient of tomorrow:
• For systematic analyses of clinical data and data from welfare, it is important to design registration systems that facilitate a uniform collection of essential, relevant items of information.
• For a comprehensive availability of key components of biological systems, it is important to provide a laboratory platform for a collaborative approach on the different -omics.
• A platform for integration of patient registries will facilitate big data analytics worldwide.

The basis of P4 medicine is the holistic approach to the individual patient. We are cognisant that in many countries around the world the -omics technologies are not available. However, the principles of personalized, preventive, predictive, and participatory medicine still hold firm and are adapted and shaped by local circumstances.
FOCUS ON PSORIASIS: P4 MEDICINE

References


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The human race has always been curious, hopeful and resilient. Discovery is our purpose on this planet. It’s our calling and the spirit that’s defined Lilly since day one. After more than a century and nearly 100 medicines and countless innovations, we’re still searching for the next great discovery that will make life better for people with psoriasis around the world.

lilly.com
Daniela Armijo, MD  
*University of Santiago, Chile*

During this year it was a real pleasure to be an IPC fellow and participate in IPC activities. I had the opportunity to attend the European Academy of Dermatology and Venereology Congress in Paris and IPC’s Biosimilars, Patient Care, and Global Psoriasis Atlas committee meetings.

From September to November, I completed the onsite clinical observation period at Salford Royal NHS Foundation Trust Hospital in Manchester, United Kingdom, mentored by IPC Past President Professor Chris Griffiths. During that period, I attended the psoriasis clinic, the biologic therapies nurse’s clinic, and the psoriasis arthritis clinic. I also spent some time in the clinical trials unit and I learned about the basic science research projects that are being carried out at the University of Manchester.

Because I have special interests in epidemiology and burden of psoriasis, I met the British Association of Dermatologists Biologic and Immunomodulators Register (BADBIR) team. I was able to get involved with the Global Psoriasis Atlas Work Stream 1 team in Manchester, and Work Stream 2 in Zurich and Hamburg. During the onsite period, I attended several enlightening psoriasis meetings, such as Royal College of Physicians in London and the IPC Psoriasis Master Class in Barcelona.

In the future, I would love to work with my Chilean colleagues to create a national database of patients with psoriasis to get a better estimation of the prevalence and burden of the disease in the country, to set psoriasis as a national health priority, and to further collaborate with IPC on the Global Psoriasis Atlas Project.

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**2018 IPC International Fellows**

The IPC International Fellowship Program is an IPC initiative aimed at fostering the next generation of psoriasis leaders. The fellowship program matches early-career dermatologists with IPC councilors and board members, providing an in-clinic shadowing opportunity up to one month and a yearlong mentorship. Chosen from a highly qualified international field of young dermatologists, our 2018 Fellows have been active participants in IPC programs with the world’s key opinion leaders, gaining exposure to clinical, research, and educational skills that will further their careers as psoriasis leaders. Learn more about the Fellows and their experiences this year in their following commentaries.

The 2018 IPC International Fellowship Program is supported by AbbVie, Amgen, Janssen Biotech, Inc., LEO Pharma, and Novartis.
Jia Qi Chen, MD, PhD
Second Affiliated Hospital Zhejiang University School of Medicine, Hangzhou, China
During 2018, I was an IPC International Fellow, mentored by IPC Councilor Dr. Curdin Conrad at the University Hospital of Lausanne in Switzerland. As a dermatologist and researcher, I am particularly interested in the pathogenesis of psoriasis and the differences between the phenotypes of psoriasis. While at the University Hospital, I had the opportunity to observe Dr. Conrad and his team’s ongoing research in psoriatic mice models and research techniques, paradoxical psoriasis, and the study of psoriatic patients’ PBMCs (peripheral blood mononuclear cells). Additionally, I participated in Dr. Conrad’s psoriasis clinic, where I learned about choosing the specific antibody based on the level of cytokines. I appreciated the opportunity to attend the 27th European Academy of Dermatology and Venereology Congress in Paris and IPC Think Tank in Miami. In the future, based on my fellowship experience, I would like to focus my research on the differences between psoriasis vulgaris and generalized pustular psoriasis and the role of long non-coding RNA in the pathogenesis of psoriasis. Clinically, I hope to help my patients who are living with psoriasis be happy and to bring beauty to people.

Filip Rob, MD, PhD
Na Bulovce Hospital, Charles University, Prague, Czech Republic
I am working in the Na Bulovce Hospital dermatology department, Charles University, Prague, as an attending dermatologist and university lecturer. My special interest and research activities are focused on infectious diseases in patients with psoriasis treated with biologic therapy and on skin microbiota changes in patients treated with biologics. During my fellowship, I luckily was able to choose IPC Councilor Professor Joel Gelfand as my mentor and spend November at the University of Pennsylvania dermatology department. During the onsite observation phase of the program, I have been shadowing Professor Gelfand in his outpatient clinic for patients with psoriasis, attending his research team meetings and other events organized by the department. I learned a lot about research in cardiovascular comorbidities associated with psoriasis and their management, advanced phototherapy, and pragmatic clinical trials in psoriasis. Moreover, IPC gave me the opportunity to attend events at the 27th European Academy of Dermatology and Venereology Congress in Paris and the IPC Think Tank meeting in Miami.

This life-changing experience has helped me significantly improve my knowledge, which I will be able to use in managing my patients with psoriasis and also to expand psoriasis research in my department. In the future, I hope I will be able to stay in close touch with IPC, Professor Gelfand, and other psoriasis opinion leaders, and also to help future IPC Fellows.

I want to thank all the IPC members and staff who have been taking care of me and other Fellows during this past year, as well as all of the IPC sponsors who have made this fellowship possible.

Find out more about Drs. Armijo, Chen, and Rob and about IPC’s Fellowship program at psoriasiscouncil.org/fellows_2018.htm
NOW AVAILABLE

FOR MODERATE-TO-SEVERE PLAQUE PSORIASIS

ILUMYA™ (tildrakizumab-asnm) is an interleukin-23 antagonist indicated for the treatment of adults with moderate-to-severe plaque psoriasis who are candidates for systemic therapy or phototherapy.

IMPORTANT SAFETY INFORMATION

CONTRAINDICATIONS
ILUMYA is contraindicated in patients with a previous serious hypersensitivity reaction to tildrakizumab or to any of the excipients.

WARNINGS AND PRECAUTIONS

Hypersensitivity
Cases of angioedema and urticaria occurred in ILUMYA-treated subjects in clinical trials. If a serious allergic reaction occurs, discontinue ILUMYA immediately and initiate appropriate therapy.

Infections
ILUMYA may increase the risk of infection. Treatment with ILUMYA should not be initiated in patients with a clinically important active infection until the infection resolves or is adequately treated. Consider the risks and benefits of treatment prior to prescribing ILUMYA in patients with a chronic infection or a history of recurrent infection. Instruct patients receiving ILUMYA to seek medical help if signs or symptoms of clinically important chronic or acute infection occur. If a patient develops a clinically important or serious infection, or is not responding to standard therapy, closely monitor and consider discontinuation of ILUMYA until the infection resolves.

Pretreatment Evaluation for Tuberculosis
Evaluate patients for tuberculosis (TB) infection prior to initiating treatment with ILUMYA. Do not administer ILUMYA to patients with active TB infection. Initiate treatment of latent TB prior to administering ILUMYA. Consider anti-TB therapy prior to initiation of ILUMYA in patients with a past history of latent or active TB in whom an adequate course of treatment cannot be confirmed. Patients receiving ILUMYA should be monitored closely for signs and symptoms of active TB during and after treatment.

Immunizations
Prior to initiating therapy with ILUMYA, consider completion of all age-appropriate immunizations according to current immunization guidelines. Patients treated with ILUMYA should not receive live vaccines.

Adverse Reactions
The most common (≥1%) adverse reactions associated with ILUMYA treatment that were more frequent than in the placebo group are upper respiratory infections, injection-site reactions, and diarrhea.

Please see brief summary of Full Prescribing Information on next page or visit ILUMYAPRO.com for Full Prescribing Information.

Infections were slightly more common in the ILUMYA group. The difference in frequency of infections [see Warnings and Precautions] vaccines in patients treated with ILUMYA. No data are available on the response to live or inactive appropriate immunizations according to current immunization guidelines. Avoid the use of live Immunizations: Infections.

In clinical trials, 55 subjects with latent TB who were concurrently treated with ILUMYA and appropriate TB prophylaxis, no subjects developed active TB (during the mean follow-up of 56.5 weeks). One other subject developed TB while receiving ILUMYA. Monitor patients for signs and symptoms of active TB during and after ILUMYA treatment. Consider anti-TB therapy prior to initiation of ILUMYA in patients with a past history of latent or active TB in whom an adequate course of treatment cannot be confirmed. Do not administer ILUMYA to patients with active TB infection.

Immunoizations: Prior to initiating therapy with ILUMYA, consider completion of all age-appropriateimmunizations according to current immunization guidelines. Avoid the use of live vaccines in patients treated with ILUMYA. No data are available on the response to live or inactive vaccines.

ADVERSE REACTIONS

The following serious adverse reactions are discussed elsewhere in the labeling:

Hyper-sensitivities Reactions (see Warnings and Precautions).

Clinical Trial Experience

Because clinical trials are conducted under widely varying conditions, adverse reaction rates observed in the clinical trials of a drug cannot be directly compared to rates in the clinical trials of another drug and may not reflect the rates observed in practice. In clinical trials, a total of 1994 subjects with plaque psoriasis were treated with ILUMYA, of which 1083 subjects were treated with ILUMYA 100 mg. Of these, 672 subjects were exposed for at least 12 months, 587 for 18 months, and 469 for 24 months.

Data from three placebo-controlled trials (Trials 1, 2, and 3) in 705 subjects (mean age 46 years, 71% males, 81% white) were pooled to evaluate the safety of ILUMYA (100 mg administered subcutaneously at Weeks 0 and 4, followed by every 12 weeks [Q12W]) in clinical trials.

Placebo-Controlled Period (Weeks 0-16 of Trial 1 and Weeks 0-12 of Trials 2 and 3) In the placebo-controlled period of Trials 1, 2, and 3 in the 100 mg group, adverse events occurred in 48.2% of subjects in the ILUMYA group compared to 53.8% of subjects in the placebo group. The rate of serious adverse events was 1.4% in the ILUMYA group and 1.7% in the placebo group. Table 1 summarizes the adverse reactions that occurred at a rate of at least 1% and at a higher rate in the ILUMYA group than in the placebo group.

Table 1: Adverse Reactions Occurring in ≥1% of Subjects in the ILUMYA Group and More Frequently than in the Placebo Group in the Placebo Psoriasis Trials 1-3

<table>
<thead>
<tr>
<th>Adverse Reaction</th>
<th>ILUMYA 100 mg (N=705) N (%)</th>
<th>Placebo (N=355) N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper respiratory infections*</td>
<td>98 (14)</td>
<td>41 (12)</td>
</tr>
<tr>
<td>Injection site reactions†</td>
<td>24 (3)</td>
<td>7 (2)</td>
</tr>
<tr>
<td>Diarrhea</td>
<td>13 (2)</td>
<td>5 (1)</td>
</tr>
</tbody>
</table>

* Upper respiratory infections include nasopharyngitis, upper respiratory tract infection, viral upper respiratory tract infection, and pharyngitis.
† Injection site reactions include injection site urticaria, pruritus, pain, reaction, erythema, inflammation, edema, swelling, bruising, hematoma, and hemorrhage.

During the placebo-controlled period of Trials 1, 2, and 3, adverse reactions that occurred at rates less than 1% but greater than 0.1% in the ILUMYA group and at a higher rate than in the placebo group included dizziness and pain in extremity.

Specific Adverse Reactions

Hypersensitivity Reactions

Cases of angioedema and urticaria occurred in ILUMYA-treated subjects in clinical trials [see Warnings and Precautions].

Infections

Infections were slightly more common in the ILUMYA group. The difference in frequency of infections between the ILUMYA group (23%) and the placebo group was less than 1% during the placebo-controlled period.

The most common (≥1%) infections were upper respiratory infections. The rates of severe infections for the ILUMYA group and the placebo group were ≤0.3%.

Safety Through Week 52/64

Through Week 52 (Trials 1 and 3) and Week 64 (Trial 2), no new adverse reactions were identified with ILUMYA use and the frequency of the adverse reactions was similar to that observed during the placebo-controlled period.

Immunogenicity

As with all therapeutic proteins there is the potential for immunogenicity. The detection of antibody formation is highly dependent on the sensitivity and specificity of the assay. Additionally, the observed incidence of antibody (including neutralizing antibody) positivity in an assay may be influenced by several factors including assay methodology, sample handling, timing of sample collection, concomitant medications, and underlying disease. For these reasons, comparison of incidence of antibodies to tildrakizumab in the studies described below with the incidences of antibodies in other studies or to other products may be misleading.

Up to Week 64, approximately 6.5% of subjects treated with ILUMYA 100 mg developed antibodies to tildrakizumab. Of the subjects who developed antibodies to tildrakizumab, approximately 40% (2.5%) of all subjects receiving ILUMYA had antibodies that were classified as neutralizing. Development of neutralizing antibodies to tildrakizumab was associated with lower serum tildrakizumab concentrations and reduced efficacy.

Live Vaccinations

Advise patients with latent or active TB in whom an adequate course of treatment cannot be confirmed. Do not administer ILUMYA to patients with active TB infection.

In the event of overdosage, monitor the patient for any signs or symptoms of serious infection or is not responding to standard therapy, monitor the patient closely and consider discontinuation of ILUMYA until the infection resolves or is adequately treated.

In patients with a chronic infection or a history of recurrent infection, consider the risks and benefits prior to prescribing ILUMYA. Instruct patients to seek medical help if signs or symptoms of clinically important chronic or acute infection occur. If a patient develops a clinically important or serious infection or is not responding to standard therapy, monitor the patient closely and consider discontinuation of ILUMYA until the infection resolves [see Adverse Reactions].

During the placebo-controlled period of Trials 1, 2, and 3, adverse reactions that occurred at rates less than 1% but greater than 0.1% in the ILUMYA group and at a higher rate than in the placebo group included dizziness and pain in extremity.

Infections:

Infections:

Advise patients to seek immediate medical attention if they experience any symptoms of serious infection or is not responding to standard therapy, monitor the patient closely and consider discontinuation of ILUMYA until the infection resolves or is adequately treated.
IPC Think Tank addresses psoriasis ‘hot topics’
The IPC Think Tank is an annual event in which the organization’s key stakeholders gather to discuss the most pressing issues facing the clinical management and scientific understanding of psoriasis. Held this past December in Miami Beach, Florida, nearly 100 attendees participated in the meeting with representation from 17 countries. The scientific session of the event was organized around several “hot topics” in psoriasis, stimulating discussion to further develop IPC’s 2020 strategic plan. These topics included: P4 medicine (predictive, preventive, personalized, participatory approach to medicine), optimizing translational research in psoriasis, pustular psoriasis, and access to medicines. A keynote lecture by IPC Councilor Nicole Ward, United States, explored the challenges of modeling psoriasis inflammation. Presentations were made by IPC board members and councilors Jonathan Barker and Chris Griffiths, United Kingdom; Kevin Cooper and Joel Gelfand, United States; Hervé Bachelez, France; and Claudia de la Cruz, Chile. Invited speaker Wingfield Rehmus of the University of British Columbia, Canada, offered current perspectives on barriers and solutions for expanding access to effective medications.

The second day of this event included a councilors’ meeting followed by the consensus meeting for IPC’s Psoriasis Severity Classification Delphi project. The councilors’ meeting included presentations by the chairs of IPC’s Research, Education, and Patient Care committees (Hervé Bachelez, Claudia de la Cruz, and Bruce Strober, respectively). More discussion followed on opportunities for the IPC to consider over the next 3 years and on themes highlighted during the scientific symposium. These were robust and engaging discussions, which provided the opportunity for key opinion leaders to offer input and ideas for shaping future IPC projects.

PATIENT CARE

IPC forum explores biosimilars at international conference
In July, IPC convened a Hot Topics Roundtable discussion on biosimilars, preceding the International Federation of Psoriasis Association’s 5th World Psoriasis & Psoriatic Arthritis Conference in Stockholm, Sweden. IPC councilors, staff, invited speakers, and corporate partners attended the full-day roundtable program, which focused on interchangeability, physician education, and integration of biosimilars into clinical practice. Presentations were made by industry partners and regional thought leaders, highlighting a variety of perspectives on biosimilars in practice. Following the presentations, IPC members discussed current perspectives and data in view of updating IPC’s position on biosimilar issues. Program chairs for this session were IPC councilors Arnon Cohen, Israel, and Jay Wu, United States. Invited speakers were Gillian Woolett, senior vice president of the Washington, DC-based advisory services firm Avalere Health, and Dr. Jonathan Kay, professor of medicine and director of clinical research.
rheumatology division, at the University of Massachusetts, Worcester. Additional presentations were made by IPC councilors Matías Maskin, Argentina; Omid Zargari, Iran; and IPC Board Member Lluís Puig, Spain.

Psoriasis severity project progresses
Over the past two years, IPC’s network of key opinion leaders and stakeholders have worked together to discuss challenges regarding the current definitions of psoriasis severity and how these definitions may limit treatment options for groups of patients with lower body surface area (BSA) and/or psoriasis on specific body sites. With this in mind, the IPC embarked on a consensus-building exercise to classify all “categories” of psoriasis. Using the Delphi survey method, participants were able to suggest severity statements that refine or even replace current definitions of mild, moderate, and severe psoriasis. The multi-staged voting exercise occurred over 4 months and was completed at the consensus meeting with a final round of voting on 7 final statements during the December IPC Think Tank meeting in Miami, Florida. It is envisioned that the consensus definitions will guide clinical decision-making to be practical, meaningful, and better aligned with the true severity of a patient’s disease; strengthen psoriasis treatment guidelines; and guide future clinical trials of drugs targeting various severities of psoriasis. A manuscript is currently in development.

RESEARCH
Committee sets 3 scientific symposia in 2019
In December, IPC’s Research Committee met as part of IPC’s Think Tank meeting in Miami Beach, Florida. During this meeting, committee members finalized the agendas for several key research symposia planned for 2019. The spring symposium at the Society for Investigative Dermatology Annual Meeting (SID) in Chicago will focus on cardiovascular disease and psoriasis to examine the interface of both systemic diseases by multiple measures, including epidemiology, in vivo studies, clinical trials, and real-world evidence. In the fall, the IPC will hold a symposium at the European Society for Dermatological Research Annual Meeting (ESDR) in Bordeaux, France. The meeting will explore both the adaptive and innate immune systems and the overlap of these pathways to assess their impact on disease pathogenesis and presentation of plaque psoriasis and other clinical psoriasis subtypes. The research symposia series will close in the winter with a symposium at the Japanese Society of Investigative Dermatology Annual Meeting in Aomori, the focus of which is still in development. Details for these important events will be updated on the IPC website as they become available.

EDUCATION AND OUTREACH
Personalized treatment is focus of IPC symposium at EADV Congress
Individualized treatment of patients with psoriasis, including real-world clinical approaches, was the subject of an IPC symposium held during the European Academy of Dermatology and Venereology Congress in Paris, France, in September. Serving as faculty were IPC councilors Murlidhar Rajagopalan, India, who spoke about treating resistant psoriasis in countries with limited access to innovative medicines; Claus Zachariae, Denmark, who led a discussion about palmoplantar psoriasis; and IPC Chief Medical Officer Peter van de Kerkhof, the Netherlands, whose topic was early intervention in treating psoriasis. The symposium also included a Meet the Experts session in which the faculty presented complex cases for discussion and a session that summarized key points made during the symposium. Professor van de Kerkhof served as the event’s program chair. Webcasts of this session are available on the IPC website at www.psoriasiscouncil.org/eadv2018.htm
IPC NEWS

IPC's 2nd China conference covers wide range of psoriasis topics
In October, IPC participated in its second Chinese Psoriasis Conference, a two-day meeting held in Hefei, China. Serving as co-chairs of the event were IPC councilors Professor Xuejun Zhang, Hefei, and Professor Xinghua Gao, Shenyang. In addition to Professor Zhang, IPC councilors making presentations included Professor Min Zheng, Hangzhou, China, whose lecture was entitled, “Research Progress of Small Molecule-targeted Drugs and its Application in Psoriasis Treatment,” Dr. Anne Bowcock, New York, and Dr. JT Elder, Michigan. Dr. Bowcock spoke about “The Role of Rare Variants in Psoriasis/Psoriatic Arthritis Susceptibility.” Dr. Elder discussed “Understanding Psoriasis Genetic Signals: Beyond GWAS.” IPC held its first program in China in May 2017.

IPC presents “Hot Topics in Psoriasis” at Latin American congress
In November, as part of the 22nd annual Congresso do Colégio Ibero Latino-americano de Dermatologia (Congress of the Latin American College of Dermatology, or CILAD) held in São Paulo, Brazil, IPC presented a program entitled, “Hot Topics in Psoriasis: An update by the International Psoriasis Council.” Symposium sessions focused on topics that included inflammatory bowel disease, infections, and life-threatening situations as they relate to psoriasis. Other topics included biosimilars therapy and their treatment targets in managing psoriasis. Serving as program chairs were IPC Councilor Matías Maskin, Argentina, and IPC Board Member Ricardo Romiti, Brazil. Faculty for the program were IPC Board Member Claudia de la Cruz and IPC Councilor Fernando Valenzuela, both of Chile; and IPC councilors César Gonzalez, Colombia, and Carle Paul, France. The program was extremely popular, with more than 200 attendees in the audience.

IPC’s 2nd Master Class held in Barcelona, Spain
IPC President Jonathan Barker, United Kingdom, and IPC Board Member Lluís Puig, Spain, were co-chairs for IPC’s second Psoriasis Master Class, a comprehensive educational program IPC launched in early 2018 for dermatologists wanting to expand their expertise in caring for people with psoriasis. IPC presented its first Psoriasis Master Class in Mumbai, India, last March. This second event was held over a day and a half in November in Barcelona, Spain.

IPC councilors who participated in the Chinese Psoriasis Conference in Hefei, China, were Anne Bowcock, Xuejun Zhang, and JT Elder.

‘Hot Topics’ symposium faculty at the CILAD conference in São Paulo, Brazil, were, from left, Ricardo Romiti, César Gonzalez, Claudia de la Cruz, Matías Maskin, and Fernando Valenzuela.

Serving as faculty for IPC’s Master Class program in Barcelona were, from left, Jonathan Barker, Karina Jackson, Brian Kirby, Lluís Puig, Ulrich Mrowietz, and Catherine Smith.
Discussions focused on a wide range of topics, including: pathogenesis and drug development, optimal use of standard systemics, overview of treatment options, care pathways and guidelines, status of drug development and its impact on clinical care, managing comorbidities, biologics and their uncertainties/problems; holistic management and service delivery tool kit; managing pediatric psoriasis; personalizing outcomes in psoriasis; and the future challenge of access to care. Serving as additional faculty were IPC councilors Brian Kirby, Ireland; Ulrich Mrowietz, Germany; Marieke Seyger, the Netherlands; Catherine Smith, United Kingdom; and Tiago Torres, Portugal. Others faculty discussion leaders were Karina Jackson, United Kingdom; and Anna Lopez, Raquel Rivera, and Eva Vilarrasa, all of Spain. IPC is planning additional programs in Egypt, India, and Argentina during this year.

NEWMASHERS

Outstanding councilor volunteers honored at IPC Think Tank
IPC councilors are invaluable to the organization. They donate their time and provide their expertise on all IPC projects. Each year, the organization honors individuals who contributed significantly to the organization. This year’s award-winning volunteers are IPC councilors Arnon Cohen, Israel; Elise Kleyn, United Kingdom; Murlidhar Rajagopalan, India; Fernando Valenzuela, Chile; and Xuejun Zhang, China. They were presented their awards by IPC President Jonathan Barker and IPC CEO Christy Langan at IPC’s Think Tank event in Miami Beach, Florida, in December.

IPC Councilor Nehal N. Mehta has received the 2018 National Institutes of Health (NIH) Director’s Award for leading a team that demonstrated favorable effects of anti-inflammatory psoriasis treatment on coronary artery disease. Dr. Mehta is section chief for inflammation and cardiometabolic diseases at the NIH in Bethesda, Maryland. He is also a professor of medicine at the George Washington University School of Medicine and director of inflammatory risk at the University of Pennsylvania. As part of his research, Dr. Mehta utilized the chronic inflammation state observed in psoriasis to study the development of cardiometabolic diseases. Through a combination of laboratory, imaging, and clinical studies, Dr. Mehta helped shift the prevailing model of psoriasis from thinking of it as just a skin disease to a disease of the whole body. His work has shown that people with psoriasis without cardiovascular disease risk factors are at increased risk of CVD and future vascular events.

IPC Councilor Kristina Callis Duffin has been named the new president of the Group for Research and Assessment of Psoriasis and Psoriatic Arthritis (GRAPPA). Dr. Callis Duffin is an associate dermatology professor at the University of Utah in Salt Lake City, United States, and is board-certified in dermatology and internal medicine. Her primary clinical focus is in the comprehensive care of patients with psoriasis. Her research interests include clinical trials of psoriasis medications and advocacy and education for patients with psoriasis. She is co-director of the Utah Psoriasis Initiative, a longitudinal registry aimed at defining the correlation between clinical features and genetics of psoriasis. GRAPPA, based in Seattle, Washington, United States, with a worldwide membership, is a consortium of rheumatologists, dermatologists, radiologists, epidemiologists, patient representatives, and others who...
would like to contribute to research into psoriasis and psoriatic arthritis.

NEW IPC COUNCILORS

Francesca Capon, BSc, PhD
London, United Kingdom
Dr. Capon obtained a BSc in biological sciences (1992) and PhD in medical genetics (1999) from La Sapienza, University of Rome, Italy. Her interest in the genetics of psoriasis brought her to the United Kingdom. She first moved to the University of Leicester as a Wellcome Trust Traveling Research Fellow (2001), then took on a Lectureship in human molecular genetics at University College London (2004). She joined King’s College London in 2006 as a lecturer, was promoted to senior lecturer in 2014, and to reader (associate professor) in 2018. Her main research interest is the genetic basis of psoriasis. In recent years, the Capon lab has been concentrating on two main research lines: the identification of disease genes in pustular forms of psoriasis and the role of interleukin-36 in the pathogenesis of pustular and plaque psoriasis. This research has been published in high-impact journals including the American Journal of Human Genetics, the Journal of Allergy and Clinical Immunology, and Science Translational Medicine.

Mohamed EL-Komy, MD
Cairo, Egypt
Dr. EL-Komy is a dermatology professor at the Faculty of Medicine, Cairo University, and is on staff at the university’s hospital, Kasr AL-Ainy. He obtained his medical degree and completed his residency at the Faculty. Besides general dermatology, he has a special interest in psoriasis and nail disorders for the past 23 years. He is the team director managing the psoriasis clinic at the Kasr AL-Ainy hospital, serving more than 2,500 registered psoriasis patients. Dr. EL-Komy is involved in several psoriasis research and educational projects involving both doctors and patients.

Jo Lambert, MD, PhD
Ghent, Belgium
Professor Lambert is professor and academic chair of the dermatology department at Ghent University. She obtained her dermatology training at the university and her PhD in medical sciences in melanosome transport, awarded with the Roche Fundamental Research Award. Research stays were performed at Boston University, United States; Leiden Center for Electron

Online report: 2018 EADV annual meeting

Did you miss the 2018 Annual Meeting of the European Academy of Dermatology and Venereology in Paris, France? IPC’s report of the meeting, featuring summaries of significant psoriasis-related presentations made by distinguished international experts, is available online. Numerous sessions attracted large audiences eager to hear about topics such as the diagnosis and management of palmoplantar psoriasis, late-breaking updates on pregnancy and psoriasis, generalized pustular psoriasis, and long-term efficacy and safety of tildrakizumab. Find writer Thomas Scharnitz’s report at bit.ly/EADVHighlights.
Microscopy, the Netherlands; the dermatology department at Hôpital E Herriot, Lyon, France; and St John’s Dermatology Department, London, United Kingdom. Professor Lambert is president of the Royal Belgian Society of Dermatology and Venereology and a board member of the Royal Academy of Medicine, Belgium, and the Fondation René Touraine (FRT). She also serves as president of the Skin Inflammation and Psoriasis International (SPIN) Network of FRT, belongs to several advisory boards in psoriasis, and is a member of the European Dermatology Forum. Since 2014, she has been an editorial assistant for the Journal of Investigative Dermatology in the field of psoriasis and human skin pigmentation. Her interests include improving management of immune-mediated inflammatory skin disorders through an evidence-based, integrated research approach.

Marcus Schmitt-Egenolf, MD, PhD
Umeå, Sweden
Professor Schmitt-Egenolf is professor of dermatology at Umeå University. He studied medicine in Frankfurt, Vienna, and Edmonton, and began his psoriasis research with a thesis on the immunogenetics of psoriasis under the guidance of Enno Christophers and Wolfram Sterry. Thereafter, he completed his specialist training at the Charité in Berlin. He was appointed associate professor of dermatology at the Norwegian University of Science and Technology in Trondheim, Norway, in 2000. Since 2002, he has been working at Umeå University, where he was appointed head of the division of dermatovenereology in 2012 and full professor and distinguished teacher in 2014. His main research interests are melanoma and genodermatoses RWE (real-world evidence) in psoriasis. Marcus founded the Swedish national psoriasis registry PsoReg in 2006 and co-founded the international PsoNet register. He has published numerous peer-reviewed articles about psoriasis as well as several book chapters. He serves on the editorial boards of three medical journals and is an associate editor for the British Journal of Dermatology. Professor Schmitt-Egenolf is the dermatologist responsible for the national psoriasis guidelines from the Swedish Board of Health and Welfare and serves as senior adviser for several public agencies and organizations, including the Swedish psoriasis patient organization.
RESOURCES
The International Psoriasis Council is pleased to bring you the following educational opportunities to advance your knowledge of treating patients with psoriasis:

UPCOMING IPC EVENTS

February 28, 2019
Hot Topics in Psoriasis: A Focus on Women, Palmoplantar and Biosimilars
76th Annual Meeting of the American Academy of Dermatology
Washington, DC

April 4-5, 2019
IPC Psoriasis Master Class
Cairo, Egypt

April 25, 2019
IPC Meet the Experts: Challenging Cases and Other Hot Topics in Psoriasis
6th Congress of the Skin Inflammation & Psoriasis International Network (SPIN)
Paris, France

May 2-3, 2019
IPC Psoriasis Master Class
Buenos Aires, Argentina

May 3, 2019
IPC Meet the Experts: Challenging Cases
32nd Annual Meeting of Latin American Dermatologists (RADLA)
Buenos Aires, Argentina

May 8, 2019
Cardiovascular Disease in Psoriasis: A Changing Paradigm
77th Society for Investigative Dermatology Annual Meeting (SID)
Chicago, Illinois

June 10, 2019
Hot Topics in Psoriasis: An Update by the International Psoriasis Council
World Congress of Dermatology (WCD)
Milan, Italy

IPC ONLINE ACTIVITIES
Comorbidities and Psoriasis: Challenging Cases from World Experts
In this program, participants have the opportunity to interact with complex cases taken from clinics of international experts in the field. At various stages, viewers will be asked to choose how to approach treating these patients while monitoring for comorbidities and conditions such as metabolic syndrome, pregnancy, and managing risk of lymphoma. 1.0 AMA PRA Category 1 Credit(s)™, Program expires 6/2019. bit.ly/CMEcases

Personalized Psoriasis Treatment: Real World Practice Approaches and Key Global Insights
Watch this series of on-demand webcasts filmed during an IPC Symposium at EADV 2018, which addresses individualized treatment of psoriasis patients with real clinical practice approaches highlighting three important topics: palmoplantar psoriasis, active early intervention, and management of treatment resistant psoriasis in a country with limited access to innovative medications. www.psoriasiscouncil.org/eadv2018.htm