IPC’S SEMI-ANNUAL REVIEW OF THE TOP 5 PAPERS: JANUARY-JUNE 2017

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 2017 are reviewed here. Summaries and commentaries were written by this issue’s co-editors, Professor Anne M. Bowcock, Imperial College, London, United Kingdom, and Dr. Nawaf Al-Mutairi, Kuwait University, Farwaniya, Kuwait.

1. Psoriasis treatment with adalimumab does not decrease vascular inflammation in multicenter study


**Summary**
In this randomized, double-blind, multicenter study, the authors evaluated the effects of adalimumab on vascular inflammation in patients with moderate to severe psoriasis. The psoriasis severity was assessed using PASI (Psoriasis Area Severity Index) scoring and a 6-scale physician global assessment, and by evaluating the body surface area involved. A total of 107 patients were randomized (1:1) to receive adalimumab 80 mg, followed by 40 mg at week 1 and 40 mg every other week for 52 weeks, or to receive placebo for 16 weeks followed by adalimumab 80 mg at week 16, 40 mg at week 17, and 40 mg every other week thereafter, for a total of 52 weeks. Vascular inflammation was assessed with positron emission tomography (PET) and computed tomography (CT) after injection of radiolabeled fluoro-2-deoxy-D-glucose (FDG) at baseline, at week 16, and at week 52/week 68. The primary endpoint of the study was the change from baseline in the TBR (target-to-background ratio) from the ascending aorta at week 16. Secondary endpoints included similar changes from the mean of carotid arteries at week 16, change in TBR from the ascending aorta, and from the mean of carotid arteries at 52 weeks after the first dose of adalimumab. The study showed no difference between adalimumab and placebo in change from baseline vascular inflammation in the aorta and carotid arteries at 52 weeks after the first dose of adalimumab. Thus, the authors concluded that these results suggest that adalimumab does not decrease vascular inflammation in patients...
Dear colleagues,

On behalf of the board and staff of the International Psoriasis Council (IPC), I want to wish you a happy and productive new year and welcome you to the January 2018 issue of the IPC Psoriasis Review newsletter.

We are looking forward to an exciting year ahead as we continue to implement IPC’s recently-adopted 5-year strategic plan. As part of the plan, the board identified key priorities for research, patient care, and education programs. Moderate psoriasis has risen to the top of our priorities for 2018 as we continue a large-scale project to develop a new clinical definition.

Currently, there is no consensus on how to define moderate psoriasis – multiple definitions are used in different ways, which often leads to a decrease in access to treatment for patients with psoriasis, a population that, studies show, is widely undertreated.

A more specific clinical definition would help clinicians prescribe treatments that better align with the severity of a patient’s disease. It would also help strengthen psoriasis treatment guidelines and guide future clinical trials of drugs that target moderate psoriasis.

IPC has already begun working on this project. We first conducted a survey of IPC councilors, which highlighted the challenges of defining moderate psoriasis and the variation in treatments clinicians use. IPC’s Systemic Therapy Working Group, led by Professors Peter van de Kerkhof, the Netherlands, and Caitriona Ryan, Ireland, met with other councilors and industry representatives who recommended that a definition of moderate psoriasis should include body sites such as face, hands, feet, genitals, and other difficult-to-treat sites. All stakeholders agreed that a systematic approach would provide a framework for the definition by including data from both objective and subjective measures.

Members of that working group are gathering and analyzing published clinical study data and registry data to help develop definition statements. Final consensus will be determined by a panel of experts using the Delphi voting technique. Our belief is that a new definition of moderate psoriasis that satisfies all stakeholders will result in the most optimal treatment for patients with psoriasis.

IPC’s Patient Care Committee, under the leadership of Dr. Bruce Strober, United States, will continue to work on the project this year.

In addition to moderate psoriasis, the Patient Care Committee will also initiate projects on palmoplantar psoriasis, which manifests in many clinical forms that have a negative impact on quality of life, and also continue the work of the Biosimilars Working Group.

The overarching goal of these projects – and others that will be spearheaded by the Research Committee in 2018 – is to improve care for patients’ overall health and well-being. We will achieve this goal by incorporating P4 medicine (predictive, preventive, personalized, participatory), an approach that could transform health care for patients with psoriasis by emphasizing prevention and wellness over disease.

As you can tell, 2018 promises to be a busy and dynamic year for IPC. I look forward to working with dedicated colleagues on these and other projects as we continue to build IPC’s momentum and achievements in our core areas of research, education, and patient care.

With best wishes,

Alexa Boer Kimball, MD, MPH
President, International Psoriasis Council
with psoriasis. Moreover, the increase in carotid vascular inflammation observed after 52 weeks of treatment suggests that adalimumab cannot completely prevent the natural progression of carotid wall atherosclerosis in patients with psoriasis.

**COMMENTARY**

As rightly mentioned by the authors themselves, future studies on the effect of blocking TNF-α on vascular inflammation should involve patients with more extensive skin psoriasis and patients with psoriatic arthritis. In addition, studies should compare the effects of long-term treatment using a TNF-α antagonist to another non-TNF-α-blocking active treatment on vascular inflammation in a double-blind randomized way. Serum biomarkers studies and possibly other imaging studies that are practical are warranted in order to further the understanding of vascular inflammation in patients with psoriasis.

– Dr. Nawaf Al-Mutairi

For additional copies of the IPC Psoriasis Review newsletter, or to learn more about IPC, please visit www.psoriasiscouncil.org.
2. Risankizumab shows superior clinical response when compared with ustekinumab in phase 2 trial


Summary

The development of several highly effective biologic drugs in the past decade has revolutionized the treatment of moderate to severe plaque psoriasis. With increased understanding of the immunopathogenesis of psoriasis, the emphasis has turned toward more specific targets for psoriasis drugs. Although the complex immunological pathways of psoriasis are not yet completely understood, molecules such as IL-23 and IL-17 that are produced by skin or immune cells during the disease process are secreted and then bind to other immune cells. This leads to their differentiation or activation, thereby triggering inflammation. IL-23 itself is thought to induce and maintain T helper 17 cells, Th22 cells, innate lymphoid cells and the effector cytokines IL-17, IL-22 and tumor necrosis factor (TNF)-α. Biologics targeting IL-23 include BI-655066 (risankizumab), briakinumab, guselkumab, tildrakizumab, and ustekinumab. Drugs targeting IL-17 include brodalumab, ixekizumab, and secukinumab. While many of these drugs have shown safety and efficacy in clinical trials of moderate to severe plaque psoriasis, long-term safety is still to be established. IL-23 is composed of two protein subunits: p19 and p40. The p19 subunit is unique to IL-23, whereas the p40 subunit is found in both IL-12 and IL-23. More recently, risankizumab (BI 655066), a drug targeting the p19 subunit of IL-23, has been developed. In a phase 1 trial of patients with moderate to severe psoriasis, risankizumab produced rapid and durable clearing of skin lesions. The article by Papp et al, cited above, reported the results of a phase 2, head-to-head trial conducted over 48 weeks at 32 sites across North America and Europe. It compared the effects of treating psoriasis patients with either one of 3 dosages of risankizumab (18-mg dose at week 0 or a 90-mg or 180-mg dose at weeks 0, 4 and 16) or ustekinumab (45 mg for patients with body weight <100k or 90 mg for patients with body weight >100k, at weeks 0, 4, and 16). A total of 166 patients received subcutaneous injections of risankizumab (126 patients received a single 18-mg dose at week 0, or 90-mg or 180-mg doses at weeks 0, 4 and 16) or ustekinumab (40 patients treated with 45 mg or 90 mg at weeks 0, 4 and 16). After 12 weeks, the percentage of patients with a 90% or greater reduction in their Psoriasis Area Severity Index (PASI) score was determined. At week 12, risankizumab (90 and 180 mg, pooled) was superior to ustekinumab with regard to the primary endpoint, PASI 90 (77% vs 40%, P<0.001). Adverse events reported for the risankizumab group and ustekinumab group at 48 weeks were similar; however, larger and longer studies are needed to determine the full safety profile of risankizumab. The authors also looked at the Dermatology Life Quality Index (DLQI) status of these groups. These results showed that 72% of patients receiving risankizumab achieved a DLQI score of 0 or 1, in comparison to 53% of the group treated with ustekinumab at week 12. Treatment with risankizumab also led to a greater mean reduction in scalp, fingernail and palmoplantar disease. In addition, skin sample analysis demonstrated decreased expression of genes involved in the IL-23 pathway and genes associated with psoriasis pathogenesis in only the samples taken from risankizumab-treated patients. Overall blockade of IL-23 with risankizumab was associated with a clinical response that was superior to those associated with ustekinumab.

COMMENTARY This study is of great interest, as p19 blockade may therefore be superior to p40 blockade in the treatment of psoriasis. Since both ustekinumab and risankizumab target IL-23, the reasons for the differences might be dosage (p19 is specific to IL-23, whereas p40 targets both IL-23 and IL-12) or it may highlight a critical role for IL-12 in helping to keep cellular pathways in balance.

– Anne M. Bowcock, PhD
3. Large-scale study expands number of genes with common variants that increase psoriasis risk from 47 to 63


Summary
Susceptibility to psoriasis is due to both genetic and environmental risk factors. For more than 20 years, scientists have been searching for the predisposing genetic risk factors leading to psoriasis. Initially, studies involved families in which several members had psoriasis. However, with the exception of a few significant findings in some large families, this approach has not explained psoriasis in the majority of individuals. For over a decade, an approach known as the genome-wide association study (GWAS) has been performed. These studies rely on the common and numerous natural genetic variants (SNPs or single nucleotide polymorphisms) found in everyone. An investigation of the frequency of natural variants in patients with psoriasis versus individuals lacking psoriasis has revealed more than 40 common variants that predispose to disease. In turn, these variants lie in genes that can provide important insights into the cellular pathways that are altered in psoriasis. These include signaling of the IL-23 cytokine and activation of genes involved in inflammation via a pathway known as the NF-kB (nuclear factor of kappa B). However, a number of these GWAS investigations involved a subset of variants associated with immune activation queried via an “Immunochip.” This has limited findings. The current study incorporated old and new GWAS (a total of seven studies) and one Immunochip data set, all consisting of psoriasis cases and controls of European origin. The total number of individuals queried was more than 30,000, which is about 3 times larger than any previous analysis. This meta-analysis revealed 16 regions of association in addition to those 47 that had already been described. Many of the causative variants driving the GWAS signals are thought to lie in regions of the genome that regulate genes rather than genes themselves, and the authors were able to show that a number of the signals may reflect changes in genomic regions operating in CD4+ T helper and CD8+ cytotoxic T cells. They also found that 7 genes from 6 of the novel GWAS regions are targets for 18 different drugs, some of which have already been used to treat psoriasis in clinical practice. It is important to note that many of the additional individuals in this study came from the genetic testing company 23andMe and their diagnosis of psoriasis was self-reported. This required sophisticated statistical tests, as part of the study, to ensure that only individuals likely to have psoriasis were included in the final analysis. It became apparent via this study that such individuals who thought that they had psoriasis sometimes had other diseases that might include atopic dermatitis and seborrheic dermatitis. The 63 regions of association identified in this and earlier GWAS now account for more than 28% of the estimated heritability of psoriasis.

COMMENTARY This study is important because it expands the number of potential genes with common variants that increase risk of psoriasis; it is the largest study performed to date, incorporating both previous and novel studies, and it shows that data from individuals who are “self-reporting” can be incorporated as long as an appropriate algorithm is included to adjust for misdiagnosis. It also provides further insights into what these variants are in these regions of association, and illustrates the potential for GWAS to identify novel drug targets for psoriasis.

– AMB
4. Psoriasis treatment may improve aortic vascular inflammation, observational study shows, but finding needs longer, larger study


**Summary**
This manuscript describes a longitudinal observational case-cohort study aimed at understanding the association between psoriasis and cardiometabolic diseases. Vascular inflammation measured by FDG-PET/CT scans was used as a primary endpoint. Out of 220 recruited initially, the investigators were able to follow 115 consecutive patients with psoriasis for 1 year. Anti-tumor necrosis factor (TNF) therapy was initiated in 17 patients with severe psoriasis who were eligible for biologic therapy. Patients were excluded if they had any comorbid condition known to promote cardiovascular disease or systemic inflammation. All patients underwent PASI (Psoriasis Area and Severity Index) scoring and FDG-PET/CT scans at baseline and at 1 year. The cohort had a low cardiovascular risk by Framingham risk score and mild to moderate psoriasis, with a median PASI score of 5.2 to start. After 1 year of follow-up, the total cohort had a median improvement in PASI score of 33%, with use of topical therapy (60%), biologic therapy (66%, mostly anti–TNF) and phototherapy (15%). The study found that improvement in psoriasis skin disease severity was associated with improvement in aortic vascular inflammation, with greater improvement in those who had higher than 75% reduction in skin disease severity. Moreover, this association persisted beyond traditional risk factors and was the strongest in those initiated with anti–TNF therapy.

**COMMENTARY** As the authors themselves rightly mention in the limitations of their study, they did not follow uniform therapy throughout the cohort. Also, the use of anti-TNF agents was open-label, nonrandomized, and in a very small proportion of patients. In addition, they did not examine cardiovascular events, but, instead, used vascular inflammation as a primary endpoint to understand modulation of cardiovascular disease risk. While the study’s data strengthen the hypothesis of inflammation reduction leading to cardiovascular disease mitigation, they do not alone prove causality. To be able to directly establish a causal relationship, a longer-term (perhaps 5-15 years) follow-up of a larger cohort is needed to see actual reduction in cardiovascular events. Moreover, if an intervention is being evaluated, it should be administered in a randomized and blinded fashion to obtain stronger evidence of its efficacy. – NAM
5. Controlling skin inflammation with psoriasis therapies may reduce coronary artery risk, study suggests


Summary
Patients with psoriasis experience myocardial infarction at younger ages than patients without psoriasis; however, little is known of the actual disease process. This accelerated cardiovascular risk is most evident in adults with psoriasis who are younger than 50 years of age, but is not accurately captured by traditional risk assessment. It is proposed that this is due to an increased burden of subclinical coronary artery disease (CAD) in these patients with psoriasis. However, CAD burden has not been measured in this vulnerable population. Also, because of their age, patients with psoriasis who might be at increased risk of cardiovascular disease do not meet criteria for therapies such as statins. Patients with coronary heart disease frequently have coronary artery calcification (CAC), which correlates with the rate of future adverse cardiovascular events. Coronary computed tomographic angiography (CCTA) is the main noninvasive tool for detecting CAC. CCTA quantifies both total (TB) and noncalcified burden (NCB) of coronary plaque, and provides a reliable tool to identify coronary atherosclerotic plaques with high risk of rupturing. In this study, the authors investigated increased cardiovascular risk observed in psoriasis by evaluating coronary plaque in patients using CCTA. They hypothesized this would be partially due to noncalcified plaques with high-risk features. Their study included 3 cohorts of participants who were all recruited at the National Institutes of Health Clinical Center. This included 105 patients with moderate to severe psoriasis and compared their findings with those from 100 patients with hyperlipidemia who were >55 years of age and a decade older than the patients who had psoriasis. These hyperlipidemia patients were candidates for lipid-lowering therapy (statin therapy) according to the National Cholesterol Education Program-Adult Treatment Panel III guidelines. They also looked at 25 healthy volunteers without psoriasis. The investigators noted that patients with psoriasis had greater NCB and increased high risk plaque (HRP) prevalence than healthy volunteers. This was similar to the older patients with hyperlipidemia. In fact, the prevalence of HRP was similar between patients with psoriasis and hyperlipidemia, and was approximately 6 times greater than that observed in healthy volunteers. The authors also noticed that there was a significant association with psoriasis severity (PASI score) and NCB, and that if patients responded to psoriasis treatment, their NCB improved at 1 year. Other improvements included the plasma levels of inflammatory proteins such as tumor necrosis factor (TNF)-alpha, IL-1b, and monocyte chemotactic protein-1. However, even adjusting for these biomarkers, the association between reduction in PASI score and improvement in coronary plaque burden did not change. These biomarkers were not reduced in patients who did not have improvement in their skin disease. These at-risk patients who had psoriasis were more often male than female, were more likely to have been diagnosed with hypertension, had an increased BMI (body mass index), and had elevated ASCVD (atherosclerotic cardiovascular disease) risk. Patients using systemic biologic psoriasis therapies had less NCB.

COMMENTARY These studies indicate that patients with psoriasis have similar coronary artery disease risk as patients with hyperlipidemia who are a decade older. They also suggest that by controlling skin inflammation with psoriasis therapies, coronary artery risk in psoriasis patients may be reduced. However, the patients undergoing treatment were generally on systemic therapies, so these may have an overall effect on inflammation, some of which is leading to increased cardiovascular risk. The authors recommend that patients with psoriasis should be screened earlier for cardiovascular disease than is currently performed on the general population and that they be educated about their elevated risk. The authors also recommend that there should be further investigation into the longitudinal impact of psoriasis treatment on features of cardiovascular disease risk such as HRP morphology, and that patients be able to be entered into randomized trials evaluating the effect of drugs for mitigating cardiovascular risk. ■

– AMB
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The International Psoriasis Council (IPC) is pleased to announce a series of accredited education programs designed for clinicians managing patients with psoriasis. These programs will provide clinicians with an informative and engaging online learning experience delivered by the leading experts in psoriasis.

### TOPICS:
- Patient behavioral factors
- Comorbidities and complications
- Treatment approaches based on individualized patient needs
- Newer therapies available for treatment of psoriasis

#### ONLINE PROGRAMS

**Individualizing Treatment in Psoriasis: Empowering You and Your Patients to Make Well-Educated Decisions as a Team**
On-demand webcast filmed at the 2017 American Academy of Dermatology Annual Meeting  
*Program chair: Alan Menter, MD; Program faculty: April Armstrong, MD, MPH, & Christine Bundy, PhD, C Psychol AFBPS*  
2.0 AMA PRA Category 1 Credit(s)™; Program expires 8/2018

**Clinical Challenges in Psoriasis: Raising the Standard of Care**
On-demand webcast recorded during a Live WebEx  
*Program chair: Peter van de Kerkhof, MD, PhD; Program faculty: Caitríona Ryan, MD, & Jashin J. Wu, MD*  
1.0 AMA PRA Category 1 Credit(s)™; Program expires 11/2018

**Advances in Psoriasis: A Focus on Emerging Therapies and Approaches to Treatment**
On-demand webcast filmed at the 2017 European Academy of Dermatology and Venereology Congress  
*Program chair: Peter van de Kerkhof, MD, PhD; Program faculty: Claudia de la Cruz, MD, & Mark Lebwohl, MD*  
1.5 AMA PRA Category 1 Credit(s)™; Program expires 10/2018

**Interactive Psoriasis Cases**
Interactive case-based activity designed to improve your skills in managing complex cases: Psoriasis, metabolic syndrome and pregnancy; Psoriasis treatment and managing the risk of lymphoma  
*Program chair: Alan Menter, MD; Program faculty: Elise Kleyn, MD, PhD*  
1.0 AMA PRA Category 1 Credit(s)™; Program expires 1/2019

These programs are provided through the joint providership of the A. Webb Roberts Center for Continuing Medical Education of Baylor Scott & White Health and the International Psoriasis Council.  
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Learn more at [www.psoriasiscouncil.org/cmeonline](http://www.psoriasiscouncil.org/cmeonline)
Microbiome, genomics, IL-17 among the psoriasis-related themes discussed at well-attended congress in London

By Teresa Tsakok

Teresa Tsakok studied medicine at the University of Oxford before embarking on integrated academic training at Guy’s & St Thomas’ Hospitals and King’s College London. She is now a dermatology registrar at St John’s Institute of Dermatology, London, and was recently awarded a 3-year Medical Research Council Clinical Research Training Fellowship to investigate predictors of drug immunogenicity in psoriasis within the School of Basic & Medical Biosciences, King’s College London.

In November 2017, representatives of the worldwide psoriasis community descended on Westminster, London, for the 8th International Congress of Psoriasis: From Gene to Clinic. With 800 delegates in attendance, the event marked the 21st birthday of this collaborative and dynamic forum, which shines a spotlight on the psoriasis field at its cutting edge. A carefully-considered program ran the gamut of subspecialist areas; key themes included the microbiome, genomics, the interleukin (IL)-17 axis, and stratified therapy. With the poster room a hive of networking and discussion, as well as invited lectures broadening the perspective far beyond the bounds of dermatology, the trump card of this congress was its entirely plenary nature - allowing attendees to soak up everything on offer. Serving as congress co-chairs were IPC Immediate Past President Chris Griffiths, University of Manchester, and IPC Vice President Jonathan Barker, St John’s Institute of Dermatology, London, who founded the Psoriasis: From Gene to Clinic Congress in 1996.

Microbiome

Professor Bjorn Andersson of the Karolinska Institute, Stockholm, Sweden, presented a bioinformatics perspective on the human skin microbiome, including an update on the European Consortium Study MAARS (Microbes in Allergy and Autoimmunity Related to the Skin). He described how the skin microbial communities in 129 patients with psoriasis and 88 patients with eczema have been deeply sequenced using 16S and shotgun techniques, with clear differences seen in microbiome signatures between psoriasis and eczema samples versus healthy controls. Coupling this with skin biopsy transcriptome data has allowed researchers to associate the microbiome with changes in gene expression, thus pointing to inflammatory pathways for further interrogation.

Meanwhile, Professor Andre Franke of the University of Kiel, Germany, emphasized the need to gain a basic understanding of the microbiome as a primary step in understanding why and how humans develop disease. He lamented a proliferation of “fake news” regarding the number of bacteria in/on a human body. In fact, it approximates to your body cell number (roughly 30 trillion). But does our genome shape our microbiota? It appears that around 10% of gut microbiome variability is under genetic influence. Professor Franke also explained that the advantage of working with meta-genomics using a database-free approach is that data can be assembled de novo and, in theory, new taxa discovered.

Genomics

Dr. Tuuli Lappalalainen of Columbia University, New York, addressed the question: How do we get from genetic associations to functional insights? With a focus on understanding genetic influence over the human immune system, her team has mapped hundreds of highly dynamic immune response eQTLs (expression quantitative trait loci), each with associations specific to different timepoints. These can then be linked to GWAS (genome-wide association study) using a co-localization approach. Although it is clear that immune response eQTLs and cytokine response contribute to genome-wide signals in autoimmune disease, the challenge ahead will lie in integrating different layers of molecular phenotypes.

In his free oral communication, which was named the congress’s best oral presentation, Y. Arakawa of Ludwig-Maximilian-University, Munich, Germany, described functional genomics work, suggesting that T-cell cross-
reactivity causes autoimmunity in psoriasis. Due to TCR polyspecificity, T cells expressing autoreactive TCRs may become activated by environmental antigens, providing a rationale for verification of environmental triggers in psoriasis using a pathogenic psoriatic TCR specific for a proven psoriatic autoantigen. Peptide library screening was first used to define the amino acid pattern recognized by the Vα3S1/Vβ3S1 TCR in the context of HLA-C*06:02, then environmental proteomes were searched for peptides sharing this pattern. Candidate epitopes were tested for their ability to ligate the ADAMTSL5-reactive Vα3S1/Vβ3S1 TCR when presented by HLA-C*06:02. This technique identified diverse peptides related to the human skin and gut microbiome, infectious pathogens and foods, implying that exposure to environmental antigens may represent the initiating step in autoimmune disease by driving the priming and expansion of potentially self-reactive T cells.

**Cytokine axes**

Xiaofei Xu of Erasmus Medical Center, Rotterdam, the Netherlands, who received the award for best poster presentation at the congress, outlined work in psoriatic arthritis showing that, in addition to lymphoid cells, specific myeloid cell types may also produce IL-17A. Furthermore, IL-17RA/IL-17RC-positive myeloid cells including monocytes and neutrophils may be targeted by IL-17A. These preliminary findings point to a broader yet specific signalling network among different cell types involved in the pathogenesis of psoriatic arthritis.

Neurology Professor Vijay Kuchroo of the Brigham Research Institute, Boston, United States, explained that both pathogenic and non-pathogenic Th17 cells exist and define differing functional states. At the single-cell level, his team has used expression analysis to identify novel regulators of these Th17 states, with genes ranked and selected for functional validation in knockout mice. As two salient examples, Professor Kuchroo showed that loss of CD5-like and loss of protein C receptor both enhance pathogenicity of Th17 cells, resulting in upregulated inflammatory disease. Conversely, a different gene set is expressed in non-pathogenic Th17 cells, and furthermore is overexpressed in a number of cell types, converting them into regulatory cells – for instance, in the tumor microenvironment.

IPC Councilor James Krueger of Rockefeller University, New York, reiterated this concept of “good” Th17 cells in the gut versus “bad” Th17 cells elsewhere, and argued that the study of regulatory cells (which may include “good” Th17 cells) should form a major focus of future investigation. In a second lecture, Professor Krueger outlined a comparative evaluation of cellular and molecular changes associated with response to selective IL-23 blockade (guselkumab) versus dual IL-12/23 blockade (ustekinumab) in skin biopsies from patients with psoriasis. Not only was there stronger neutralization of the psoriasis gene expression profile by guselkumab compared to ustekinumab, but Professor Krueger also highlighted the concept of the residually expressed gene set as the “molecular scar” of disease, likely representing the nidus for rekindling psoriasis when treatment is stopped. Interestingly, IL-23 blockade appears to leave a smaller residual gene set than IL-12/23 blockade. This work implies that there are potentially fundamental differences in the ability of different inhibitors to modulate disease.

IPC Board President Alexa Boer Kimball of Harvard Medical School, Boston, gave an elegant overview of the timeline of discovery of IL-17/IL-23 biology, beginning with early hypotheses based on clinical observation. Discussion also centred on comorbid conditions, with a prime example being the “autoimmune triple flip” of obesity, type 1 diabetes, and psoriasis. Although genetic epidemiology has confirmed a biological basis in some instances, others seem to represent associated risks. There remains huge scope to examine inter-relationships between psoriasis and other conditions, including multiple sclerosis and depression.

Dr. Jennifer Towne of Janssen Research & Development, San Diego, provided a personal perspective on her previous work at Immunex/Amgen on IL-36. Indeed, her tale charting the elucidation of this cytokine exemplifies the “Gene to Clinic” concept, as was pointed out in a subsequent lecture by IPC Vice President Jonathan Barker, St John’s Institute of Dermatology, King’s College London. Professor Barker reviewed the paradigm shift from psoriasis being viewed primarily as an epidermal disease to the realization that this was a T-cell mediated disease by the mid-to-late 1980s. Since then, the adaptive pathway has been extensively mined for therapeutic targets. However, Professor Barker noted that we have yet to dig deep into the possibilities.
offered by the innate pathway and that there is still much to do in terms of targeting the environment and the microbiome.

**Therapeutics**

The PSORT (Psoriasis Stratification to Optimise Relevant Therapy) Consortium was represented at the congress by a trio of presentations from King’s College London/St John’s Institute of Dermatology. I was grateful for the opportunity to present data on developing a therapeutic range for adalimumab and determining that early adalimumab levels predict response at 6 months. Nick Dand gave an overview of the preliminary genetic analysis, suggesting that HLA-C*06:02 carriers show better early response to ustekinumab while appearing less likely to achieve high rates of response to TNF inhibitors. Rosa Ejarque described her work using a functional immunophenotyping approach to show that the TNF inhibition exerted by adalimumab in psoriasis mainly affects cells of the lymphoid lineage.

Professor Ann Gils of Katholieke Universiteit Leuven, Belgium, set out a framework for answering the question, “Why do biologics fail?” The four main causes were given as non-adherence, failure of the drug to inhibit the target causing inflammation, underexposure to the drug, and upregulation of alternative pathways of inflammation. With regard to drug immunogenicity, the key may be to identify patients who have developed a low level of anti-drug antibodies. Intervention at this point should still be possible prior to reaching a certain threshold level of anti-drug antibodies, whereas this appears unlikely beyond a certain threshold level of anti-drug antibodies.

IPC Board Member Hervé Bachelez, Paris Diderot University, France, presented thought-provoking pilot data from a longitudinal follow-up study of arterial stiffness in 13 psoriasis patients on TNF inhibitors and 18 patients on ustekinumab. Carotid pulse wave velocity and carotid-femoral pulse wave velocity increased independently of blood pressure with ustekinumab and decreased with TNF inhibitors, whereas intimal medial thickness tended to increase more with ustekinumab than in the TNF inhibitor group. This mid-term differential impact of ustekinumab versus TNF inhibitors on arterial remodeling may be due to a protective effect of TNF inhibitors and/or an opposing effect of anti-IL-12/23. Either way, this work may reopen important debate about the cardiovascular side effects of certain biologics.

**New perspectives**

The first keynote lecture, from Professor Sir John Savill, chief executive of the Medical Research Council (MRC), provided a perspective from the United Kingdom on the critical importance of academic-industry collaboration. The UK’s research output remains world-leading, despite a relatively tiny proportion (0.7-1%) of GDP (gross domestic product) being allocated to research and development. This was also a valuable opportunity to gain an overview of MRC initiatives, some of which aim to minimize risk in the spin-out process prior to private sector investment in novel interventions. There is also the £60million drive to develop disease-specific research consortia, of which PSORT is a prime example. With no fewer than 80 academic-commercial partnerships and the first U.S. Food and Drug Administration approval for a primary biliary cirrhosis drug already in the bag, these consortia hold considerable promise for driving forward progress in stratified medicine.

In a lecture that was entertaining and enlightening, Dr. Jack Scannell (UBS Investment Research, Edinburgh) bemoaned the “lottery model” of research and development and the unfortunate queasiness around talking about drug economics. He explained that the mechanisms by which drugs are priced can be categorized by cost, value, power, and prizes. Although value-based pricing (the idea that the price of goods reflects their value to the buyer) appeals strongly to the drug industry, his view is that this can be bad public policy.

Dr. Leroy Hood, Institute for Systems Biology, Seattle, United States, gave a lecture outlining his vision of P4 healthcare (predictive, preventive, personalized and participatory). This encompasses a focus on the key transitions between wellness and disease, since modulating these will be critical in solving disease. Since more than half of all children born today in developed countries can expect to celebrate their 100th birthdays, society will inevitably adjust its allocation of resources from disease to wellness. Dr. Hood presented a fascinating insight into his “scientific wellness” effort in the form of the 108 Pioneers...
Study, which gives all participants Fitbits and “wellness coaches,” as well as taking blood, genome and gut microbiome samples. The study team detected measurable improvements in blood health after behavioral coaching, meaning that participants had successfully ascended the “wellness staircase.”

Finally, IPC Councilor Ulrich Mrowietz of the University Medical Center Schleswig-Holstein, Kiel, Germany, argued eloquently in favor of modernizing the taxonomy of psoriasis. He explained that today’s classification is unfit for purpose, failing to adequately take into account the unpredictable course, heterogeneous phenotype (particularly specific body site), multigenetic/multifactorial aetiology, and multiple comorbidities of this complex disease. Fortunately, a large-scale collaborative effort is underway to define a Global Psoriasis Atlas, including the proposal for formal recognition of microbiota and psoriasis “triggertypes”. Indeed, it was a fitting reminder that despite all the advances showcased during this congress, there remains much to be done before it convenes again in 2020.
That’s why we collaborate each day with physicians, academics, clinical experts, peers, and others. Together, we can truly make a difference for patients.

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Lluís Puig joins IPC board

During IPC’s 2017 Think Tank meeting in November, the IPC Board of Directors welcomed Councilor Lluís Puig of Spain as their newest member. Professor Puig, who has been an IPC councilor since 2012, is director of the Hospital de la Santa Creu i Sant Pau dermatology department and professor of dermatology at the Universitat Autònoma de Barcelona Medical School, both in Barcelona. His clinical research focuses on the treatment of psoriasis with biological agents. He is considered to be a key opinion leader in this field worldwide, frequently presenting at conferences and workshops. The results of his research have been published in numerous articles, 121 book chapters, and 11 international book chapters.

Professor Puig is a member of the Spanish Academy of Dermatology and Venereology, founding member of several of its working groups, and past coordinator of the Spanish Psoriasis Group. He is also an aggregate member of the Spanish Society of Rheumatology and its GEAPSO (Group for Research in Psoriasis and Psoriatic Arthritis), and of several international societies, including the European Academy of Dermatology and Venereology (EADV), American Academy of Dermatology (AAD), Colegio Ibero Latinoamericano de Dermatología (CILAD), European Society for Dermatological Research (ESDR), American Society of Dermatopathology (ASDP), International Society of Dermatopathology (ISDP), and Group for Research and Assessment of Psoriasis and Psoriatic Arthritis (GRAPPA). He also is co-chair of the EADV Psoriasis Task Force, coordinator of the scientific committee of the Skin Inflammation and Psoriasis International Network, president of the Fondation René Touraine Scientific Board Executive Committee and a member of the EADV board of directors and its nomination and elections committee.

3 new committees focus on strategic goals

At the 2017 IPC Think Tank meeting held in November, members of IPC’s 3 recently-organized committees – Education and Outreach, Research, and Patient Care – discussed each committee’s objectives for 2018-19. These committees will oversee and support IPC’s 3 strategic goals.

Education & Outreach

This committee plans to adopt a comprehensive approach to education by focusing its activities on a common set of learning objectives. To implement this goal, the committee will work with an outside vendor to develop a method to measure IPC program outcomes.

Also among the committee’s goals: update the IPC website and create an education resource center; produce on-demand webcasts and web-based programming; and host symposia and Meet the Experts programs, including meetings in Mexico, Sweden, Brazil, and Singapore. The committee will also oversee IPC’s new International Fellowship Program and its pilot Master Class Program.

The committee’s chair is Board Member Peter van de Kerkhof, the Netherlands. Members are Claudia de la Cruz, Chile; Edgardo Chouela, Argentina; Mahira El Sayed, Egypt; Paolo Gisondi, Italy; Elise Kleyn, United Kingdom; Mark Lebwohl, Mark Pittelkow, and Jashin Wu, United States; Murlidhar Rajagopalan, India; and Colin Theng, Singapore.

Patient Care

The Think Tank symposium focused on developing a new definition for moderate psoriasis (see IPC President Alexa Kimball’s letter on page 2). Preliminary data from a literature review and registry data were presented. Work on this project will continue under the Patient Care Committee in 2018.
In the coming year, this committee will also address issues pertaining to palmoplantar psoriasis, P4/personalized medicine, and biosimilars.

IPC Board Secretary Bruce Strober, United States, is the committee’s chair. Members are Andrew Blauvelt and Alice Gottlieb, United States; Wolf-Henning Boehncke, Switzerland; Arnon Cohen, Israel; Chris Griffiths, United Kingdom; Lars Iversen and Lone Skov, Denmark; Caitriona Ryan, Ireland; Fernando Valenzuela, Chile; and Matias Maskin, Argentina.

Research
This committee will oversee IPC’s participation in meetings of the International Investigative Dermatology Society (IID), the Society for Investigative Dermatology (SID), and the European Society for Dermatological Research (ESDR).

The committee will also advance work on the Global Psoriasis Atlas, a research project that aims to create a global psoriasis database that will help improve researchers’ understanding of psoriasis, facilitate disease control, and enable successful health care planning.

IPC Board Member Hervé Bachelez, France, is this committee’s chair. Members are April Armstrong, Johann Gudjonsson, and Nehal Mehta, United States; André Carvalho and Ricardo Romiti, Brazil; Michel Gilliet, Switzerland; Jörg Prinz, Germany; and Lars Iversen, Denmark.

IPC launches fellowships to encourage future psoriasis leaders
Aiming to increase the number of scientists and clinicians who focus on treating and researching psoriasis, the IPC has launched the International Fellowship Program to provide training and real-world practice for early-career dermatologists or junior faculty who have completed their training within the last five years. For 2018, the program is awarding 3 fellowships to recipients who will be matched with IPC board members and councilors in their laboratories and clinics to observe and participate in researching and treating patients who have psoriasis. The program’s goals are to:

- encourage and educate early-career dermatologists to treat psoriasis as a systemic disease with significant comorbidities;
- expose early-career dermatologists to key opinion leaders and encourage their participation in projects and dialogue that furthers the advancement of psoriasis research and treatment globally; and,
- connect and strengthen early-career commitment to the field of psoriasis research and treatment.

IPC fellows will attend a major scientific congress during the year, such as annual meetings of the American Academy of Dermatology or the European Academy of Dermatology & Venereology. They will participate in IPC activities, including working groups and symposia. Learn more about the program at bit.ly/IPCfellowships.

RESEARCH

Global Psoriasis Atlas project names regional coordinators
When the World Health Organization issued an urgent call in 2016 to fill knowledge gaps on the global incidence and prevalence of psoriasis, IPC was 1 of 3 international health organizations that responded by forming the Global Psoriasis Atlas (GPA), a project to create the first-ever global online epidemiological database on this serious, noncommunicable disease.

The IPC, along with the International Federation of Psoriasis Associations (IFPA) and the International League of Dermatological Societies (ILDS), launched the GPA in September 2016. The project has taken a step forward with the appointment of 15 coordinators who will oversee GPA activities in 9 regions around the world.

These coordinators, all renowned experts in psoriasis research, education, and treatment, will be responsible for recruiting, organizing, and supervising national coordinators who will implement specific GPA activities in their respective nations, such as circulating and translating questionnaires and submitting progress reports. Regional coordinators will be required to attend 1 or 2 meetings per year of a newly-organized steering committee composed of representatives of the IFPA, ILDS and IPC.
IPC NEWS

Current coordinators and the regions they will serve are:

**Africa:** Ncoza Dlova, South Africa; Moussa Diallo, Senegal

**North America:** Yves Poulin, Canada; Jashin Wu, United States

**South America:** Claudia de la Cruz, Chile; Ricardo Romiti, Brazil

**Western Europe:** Peter van de Kerkhof, the Netherlands; Arnon Cohen, Israel

**Eastern Europe:** Jacek Cezary Szepietowski, Poland

**Eastern Mediterranean:** Mahira El Sayed, Egypt

**Asia-Pacific:** Jianzhong Zhang and Xuejun Zhang, China; Colin Theng, Singapore; Vermén Verallo-Rowell, Philippines

**Oceania:** Chris Baker, Australia

For more information about the GPA, visit www.globalpsoriasisatlas.com.

**IPC funds study examining safety of systemics in pediatric psoriasis**

Six IPC councilors were among the authors of a study, published in the Sept. 13, 2017 online issue of *JAMA Dermatology*, that examined the safety of using systemic medications to treat moderate to severe psoriasis in children.

For the study, funded by the IPC and entitled “Safety of Systemic Agents for the Treatment of Pediatric Psoriasis,” the authors conducted a retrospective review of medical records at 20 sites in North America and Europe. It included 390 children who were treated with agents or phototherapy for at least 3 months from December 1, 1990, to September 16, 2014. Methotrexate was the most commonly used medication on both continents (almost 70%), followed by tumor necrosis factor (TNF) inhibitors.

The study’s main findings:

- Medication-related adverse effects (AEs) occur less often with TNF inhibitors than with methotrexate.
- Of 270 children taking methotrexate, 130 reported one or more AEs, primarily gastrointestinal.
- Gastrointestinal side effects from methotrexate were reported much more often in Europe, where folic acid was administered weekly to protect against gastrointestinal AEs, versus 6 or 7 times a week as administered at lower dosages in North America. This discovery has changed the way practitioners in Europe prescribe folic acid for this purpose, said IPC Councilor Amy Paller, the study’s United States lead investigator.

**IPC 2017 Highlights**

- Published 6 manuscripts, with an additional 9 in development for publishing in 2018
- Reached a record number of physicians through IPC education programs
  - IPC *Psoriasis Review* newsletter distributed to 34,000 health care professionals
  - 1,250 physicians attended IPC-sponsored symposia
- Welcomed 6 new councilors in 2017, bringing the number of councilors to more than 100, with 90% councilor participation in projects and programs
- Advanced two key initiatives
  - Appointed 15 regional coordinators to further the Global Psoriasis Atlas project
  - Launched the IPC International Fellowship Program

IPC NEWS

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  - Launched the IPC International Fellowship Program
Prospective data collection for pediatric psoriasis is needed to form a single pediatric database that would record long-term risks of using systemic treatments for pediatric psoriasis. “In the meantime,” Dr. Paller said, “other studies are in the works in pediatric dermatology to better understand guttate psoriasis, the genetics of psoriasis in children, and best treatment practices.”

The study was performed jointly by the Psoriasis Investigator Group of the Pediatric Dermatology Research Alliance, of which Dr. Paller is a co-chair, and the European Pediatric Psoriasis Working Group. IPC Councilor Marieke Seyger, MD, PhD, of the Radboud University Department of Dermatology, Nijmegen, the Netherlands, was the European lead investigator for the study.

The article’s lead authors are Inge MGJ Bronckers, MD, and Dr. Seyger, both of the Radboud University dermatology department. In addition to Drs. Paller and Seyger, other participating IPC councilors were Claus Zachariae, MD, Gentofte Hospital, Hellerup, Denmark; Ruth Murphy, PhD, Queen’s Medical Centre, Nottingham, United Kingdom; Kelly M. Cordoro, MD, University of San Francisco, California, United States; and Ulrich Mrowietz, MD, German Psoriasis Association, Kiel, Germany. To read the full article, visit bit.ly/PediatricPso

IPC collaborates on study that reveals novel genetic psoriasis loci
A comprehensive genetics study, the result of collaboration between IPC and 3 research institutions, was published in the Nov. 1, 2017 issue of the international research journal Human Molecular Genetics. Entitled “Exome-wide association study reveals novel psoriasis susceptibility locus at TNFSF15 and rare protective alleles in genes contributing to type I IFN signaling,” the study examined common and rare psoriasis-associated gene-centric variation in approximately 40,000 individuals of European descent.

The study is part of IPC’s research project, begun in 2013, to complete a genetic “map” of psoriasis that could lead to novel treatment strategies for specific patients and find new therapeutic targets to advance the treatment of the disease. Collaborating on the project with IPC were King’s College London, the University of Michigan, and University of Kiel in Germany.

The study is the most comprehensive investigation to date of protein-altering variation in psoriasis risk in the European population, said Joelle van der Walt, IPC scientific director. The analysis comprised 4 independent exome array association studies in the United Kingdom, Estonia, Germany, and the United States.

The study linked a novel genome-wide association of the TNFSF15 locus with psoriasis risk. This gene encodes a member of the tumor necrosis factor superfamily of cytokines and is expressed in epithelial cells. The study also:

- established the association of common protein-altering variants at 11 loci previously implicated in psoriasis susceptibility;
- identified protective variants within the genes IFIH1 and TYK2, both of which play significant roles in type I interferon production and signaling;
- contributes to the understanding of several mechanisms of psoriasis pathogenesis and suggests that TYK2 may be a potential target for psoriasis drug development.

“This study reveals important factors concerning the genetic basis of psoriasis,” said Professor and IPC Vice President Jonathan Barker, United Kingdom, who leads IPC’s genetics project. “First it provides evidence of new genetic associations in the TNF-α pathway. It also provides evidence for involvement in virus processing pathways in disease pathogenesis. Finally, it reveals that much of the genetic architecture of psoriasis does not involve protein-coding change and thus is likely to involve other mechanisms such as regulatory elements.

“Future work from the international community will involve studies to identify exactly what these regulatory pathways are. Such studies are crucial to the development of bioassays, with which to stratify the disease, predict outcome and potentially aid preventative approaches.”

In addition to Professor Barker, six other IPC councilors were among the researchers who authored the study: Immediate Past President Chris Griffiths, United Kingdom; Kristina Callis Duffin, Gerald Krueger, James Elder, and Johann Gudjonsson, all of the United States; and Ulrich Mrowietz, Germany. The article is available at bit.ly/PsoGenetics.
Advancing Knowledge | Enhancing Care

New & emerging therapies discussed at IPC-CME symposium at EADV congress

“Advances in Psoriasis: A Focus on Emerging Therapies and Approaches to Treatment” was the title of a symposium presented in September by IPC as part of the 26th annual European Academy of Dermatology and Venereology (EADV) Congress in Geneva, Switzerland. IPC Board Member Professor Peter van de Kerkhof, the Netherlands, moderated the forum and spoke on the topic, “Psoriasis management techniques: A patient-centered approach.” IPC Councilor Dr. Mark Lebwohl, New York City, spoke about “Current biologics available: To what extent are we satisfied?” The third speaker, IPC Board Member Dr. Claudia de la Cruz, Chile, addressed the topic, “New psoriasis therapies in development: Targeting the IL-23 pathway and others.” The symposium was offered for continuing medical education (CME) credit in partnership with the Dallas, Texas-based A. Webb Roberts Center for Continuing Medical Education of Baylor Health Care System. A webcast of the symposium is available for CME credit at www.psoriasiscouncil.org/eadvcme.

IPC’s Meet the Experts programs

Pretoria, South Africa

Challenging psoriasis-related cases were the topics discussed during a Meet the Experts program held during the South African Dermatological Society’s annual meeting in Pretoria in August. IPC Founding President Dr. Alan Menter, United States, a South Africa native, moderated the program and served as a panelist. Also on the panel were Professor Chris Griffiths, United Kingdom, and Dr. Tshepo Mokwena, Pretoria. The panelists discussed cases from each of their clinics and led discussions following each presentation. More than 300 dermatologists participated in the program and discussion that followed.

Cairo, Egypt

In October, as part of the 2017 Sharm Derma International Congress for Dermatology and Cosmetology, IPC sponsored a Meet the Experts panel discussion highlighting case studies from psoriasis clinics at Ain Shams University in Cairo and in Manchester, United Kingdom. IPC Councilor Mahira Hamdy El Sayed, MD, led a discussion about comorbidities associated with psoriasis. Mahmoud Abdallah, MD, spoke about pediatric psoriasis.

IPC presents a scientific poster walk

IPC Board Member and Research Committee Chair Hervé Bachelez, France, served as moderator for an IPC poster walk presented during the 47th Annual meeting of the European Society of Dermatological Research (ESDR) in Salzburg, Austria, in September. Discussions focused on 10 abstracts of studies pertaining to clinical outcomes in psoriasis. Researchers whose abstracts were discussed came from academic institutions in the United States, United Kingdom, Germany, Austria, Hungary, Romania, Korea, Switzerland, Korea, and Japan.

Among those attending IPC’s Meet the Experts program in Pretoria, South Africa, in August were, from left, Dr. Alan Menter, IPC founding president, United States; Cordelia Mokganyetsi Kgokolo and Tshepo Mokwena, Pretoria; and Professor Chris Griffiths, IPC immediate past president, United Kingdom.
IPC NEWS

NEWMASkERS

Seven IPC councilors have received the organization’s 2017 Outstanding Volunteer Award, which is given to councilors who have made the largest contributions to IPC projects during the year. These councilors volunteered their time and expertise on various IPC activities, including serving as leaders of working groups, making presentations at IPC symposia, and contributing to manuscripts that were published in a number of scientific journals. Those receiving awards were Andrew Blauvelt, MD, MBA, and Jashin Wu, MD, United States; André Carvalho, MD, PhD, Brazil; Arnon Cohen, MD, MPH, PhD, Israel; Elise Kleyn, MRCP, MMedSci, PhD, United Kingdom; Murlidhar Rajagopalan, MD, India; and Lone Skov, MD, PhD, Denmark.

IPC Councilor Joel M. Gelfand, MD, MSCE, and his research team at the University of Pennsylvania Perelman School of Medicine have received $8.6 million from the Patient-Centered Outcomes Research Institute (PCORI) to study the effectiveness of home-based phototherapy treatments for psoriasis compared to treatments that require a visit to a doctor’s office three times a week. “Home-based phototherapy represents a more patient-centered approach, but there is a lack of data comparing its effectiveness to that of the office-based treatments,” Gelfand said. The institute awarded the funding because of the study’s “potential to answer an important question about phototherapy and psoriasis and fill a crucial evidence gap,” said Joe Selby, MD, institute executive director. Gelfand, who will lead the project, is a professor of dermatology and epidemiology.

IPC Board President Alexa Kimball, MD, MPH, was interviewed for an online article about psoriasis research and treatment published by NPR news station WBUR-FM in Boston, Massachusetts. In the article, Dr. Kimball described the medical advances made with the advent of biologics, which are highly effective in treating the disease, but come with exorbitant price tags, which can be as high as $50,000 per year. “Figuring out how

Congratualtions to these IPC board members and councilors for their notable achievements

IPC Councilor Mahira Hamdy El Sayed, MSc, MD, has been named chair of the dermatology department at Ain Shams University, Cairo, Egypt, where she has served as professor of dermatology and venereology and as the director of the university’s dermatology training program. She has lectured widely at international meetings. She is a member of multiple national and international dermatology societies and has organized many congresses. She is very committed to improving the outcomes for patients with psoriasis in Egypt and has on numerous occasions lobbied the government to improve access to health care and medicine. Dr. El Sayed is a member of the editorial board of the Journal of Dermatology and Cosmetics published by the Center for Research and Training of Skin Diseases and Leprosy, Tehran University of Medical Sciences.

IPC Councilor Johann Gudjonsson, MD, PhD, will deliver the Society of Investigative Dermatology (SID) Rising Star Lecture at the International Investigative Dermatology Meeting, scheduled for May 16-19 in Orlando, Florida. Dr. Gudjonsson is an assistant dermatology professor at the University of Michigan in Ann Arbor and director of the inpatient consultation service. He is also the Frances and Kenneth Eisenberg Emerging Scholar of the Taubman Medical Research Institute. His primary focus is basic immunological and genetic research on psoriasis, with projects directed at improving the diagnosis and treatment of psoriasis. He has published more than 100 peer-reviewed articles and his work has earned several research awards. SID’s Rising Star lectures celebrate the best of emerging dermatological science throughout the world. Speakers are prominent researchers engaged in high-impact science.
to get this right so we ensure access to the patients who need these medications is one of the things that absolutely keeps me up at night,” Dr. Kimball said in the article. Dr. Kimball is a dermatology professor at Harvard Medical School and president of Harvard Medical Faculty Physicians at Beth Israel Deaconess Medical Center in Boston. Read the article at http://bit.ly/AKimball.

As part of the 17th Iranian Society of Dermatology annual congress held in July in Tehran, Iran, IPC Councilor Omid Zargari, MD, FAAD, moderated a panel discussion addressing difficult psoriasis cases. The discussion primarily focused on the management of generalized pustular psoriasis and the role of biologic therapy in the treatment of the disease. The panel consisted of dermatology professors from Tehran University of Medical Sciences. Dr. Zargari is a consultant dermatologist at the DANA clinic in Rasht in Iran’s Gilan Province. Dr. Zargari is active in psoriasis-related research projects and educational programs in his country. He has published numerous scientific articles in different fields of dermatology and is a member of several professional organizations, including the American Academy of Dermatology. He serves as a national representative for PIN (Psoriasis International Network).

IPC Councilor Vermén M. Verallo-Rowell, MD, past president of the Philippine Dermatological Society, has obtained the approval of the society’s board of directors to form a Psoriasis Skin Study Group that will be composed of dermatologists throughout the Philippines who treat patients with psoriasis. According to Dr. Verallo-Rowell, its mission will be to develop a treatment protocol and to work with the society members as well as professionals form the Department of Health and the Philippine Psoriasis Registry. Another goal will be to develop Philippine Psoriasis Guidelines of Care. Currently, psoriasis clinicians follow European and American versions. Dr. Verallo-Rowell is a dermatologist at the Makati Medical Center, Makati, the Philippines.

NEW IPC COUNCILORS

**Darren Ashcroft, BPharm, MSc, PhD, MRPharmS**
**Manchester, United Kingdom**
Darren Ashcroft holds the foundation chair in pharmacoepidemiology at the University of Manchester and is the founding director of the Centre for Pharmacoepidemiology and Drug Safety. He graduated in pharmacy from the University of Nottingham and was awarded an MSc in clinical pharmacy (with distinction) from the Queen’s University of Belfast and a PhD from the University of Aston. Dr. Ashcroft’s major research interests are clinical epidemiology and pharmaceutical outcomes, with particular focus on the comparative safety and effectiveness of pharmaceuticals and biotechnology products, drug policy, risk management program evaluation, and epidemiological methods using electronic healthcare databases. He has many years of experience working with large electronic healthcare databases in the United Kingdom, particularly the Clinical Practice Research Datalink (www.cprd.com). He is currently a co-investigator on the Medical Research Council-funded Psoriasis Stratification to Optimise Relevant Therapy (PSORT) consortium.

**Matías Maskin, MD**
**Buenos Aires, Argentina**
Dr. Maskin is assistant professor at the Section of Dermatology, Department of Medicine, Centro de Educación Médica e Investigaciones Clínicas (CEMIC), University of Buenos Aires. He specializes in internal medicine and dermatology at the University of Buenos Aires and serves as chief of dermatology and coordinator of the psoriasis section at the Instituto Universitario CEMIC. Dr. Maskin is a founding member of the Latin American Society of Psoriasis (SOLAPSO) and is active in psoriasis education programs with SOLAPSO in Argentina, and is part of the SOLAPSO Biosimilars Consensus in that country. A member of IPC’s Latin America working group, Dr. Maskin has authored...
national and international publications, has served as an investigator for numerous psoriasis clinical trials, and has participated in many national and international congress presentations pertaining to psoriasis.

Min Zheng, MD
Hangzhou, China
Dr. Zheng is professor and chief of the dermatology department at the Second Affiliated Hospital, Zhejiang University School of Medicine, in Hangzhou. After completing his medical degree at Zhejiang University in Hangzhou, he finished his postgraduate training in dermatology at the Christian-Abrecht University in Kiel, Germany. After returning to China in 1996, he was promoted to the position of associate professor at Zhejiang Medical University. Dr. Zheng is vice president and executive committee member of the Chinese Society of Dermatology and a scientific committee member and Chinese national coordinator in the Psoriasis International Network (PIN). He has served as chairman of the Chinese Society for Psoriasis Research and as vice president of the Chinese Psoriasis Committee. He is an editorial board member of Experimental Dermatology and many Chinese dermatology journals, and has written for more than 320 publications. His research interests include mechanisms of inflammation, chemokine biology, and angiogenesis in inflammatory skin diseases. He is particularly interested in the psoriasis pathogenesis and management and in clinical trials.

American Academy of Dermatology
2018 Annual Meeting Global Education Day

Treating to Goal: Clear Path to Patient-Centered Psoriasis Management

Faculty: Christopher Griffiths, OBE, MD, UK
Paolo Gisondi, MD, Italy
Peter van de Kerkhof, MD, PhD, the Netherlands

www.psoriasiscouncil.org/aad2018
IPC councilors Xuejun Zhang, at left, and Min Zheng, both from China, were among the IPC councilors who were in London, United Kingdom, in November to attend the 8th International Psoriasis: From Gene to Clinic Congress and IPC’s Think Tank meeting. During a break between events, Dr. Zang, who is from Hefei in China’s Anhui Province, and Dr. Zheng, from Hangzhou in the Zhejiang province, pause to peruse the IPC Psoriasis Review newsletter.
RESOURCES
The International Psoriasis Council is pleased to bring you the following educational opportunities and resources to advance your knowledge of treating patients with psoriasis.

UPCOMING IPC EVENTS
February 15, 2018
IPC Symposium: Question the Answer: A Review of the Decision Points in a Treat to Target Strategy for Psoriasis
76th Annual Meeting of the American Academy of Dermatology
San Diego, California USA

April 28, 2018
IPC Symposium: What’s new in Psoriasis: An update by the International Psoriasis Council
36th Reunión Anual de Dermatólogos Latinoamericanos (RADLA)
Cancun, Mexico

May 16, 2018
IPC Symposium: The Psoriatic Disease Mechanistic Scenarios
7th International Investigative Dermatology (IID) Meeting
Orlando, Florida USA

June 27 – 30, 2018
IPC Symposium
World Psoriasis & Psoriatic Arthritis Conference of the International Federation of Psoriasis Associations (IFPA)
Stockholm, Sweden

IPC ONLINE RESOURCES
On-Demand Webcasts
Individualizing Treatment in Psoriasis: Empowering You and Your Patient to Make Well-Educated Decisions as a Team
This program explores approaches to complex patient cases involving comorbidities, lifestyle management, and communicating with patients. www.psoriasiscouncil.org/aadcmewebcast

Advances in Psoriasis: A Focus on Emerging Therapies & Approaches to Treatment
An exploration of the most current and compelling data for new treatments, and future opportunities for new therapies and treatment approaches. www.psoriasiscouncil.org/eadvcmee

Clinical Challenges in Psoriasis: Raising the Standard of Care
Discussion of newer therapeutic options and the importance of engaging patients in disease management in order to improve treatment outcomes and quality of life. www.bit.ly/LIVECME

CME interactive case-based activity
Designed to improve your skills in managing complex cases, this interactive online program explores psoriasis, metabolic syndrome and pregnancy; psoriasis treatment and managing the risk of lymphoma. www.psoriasiscouncil.org/interactivecases

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