12TH INTERNATIONAL CONGRESS ON SLE &
7TH ASIAN CONGRESS ON AUTOIMMUNITY

A full Congress experience in The Land Down Under

LUPUS2017
ACA2017

26-29 MARCH 2017

MELBOURNE, AUSTRALIA

www.lupus2017.org

by
Elaine Veñegas and
Miguel Molina

CONGRESS VENUE
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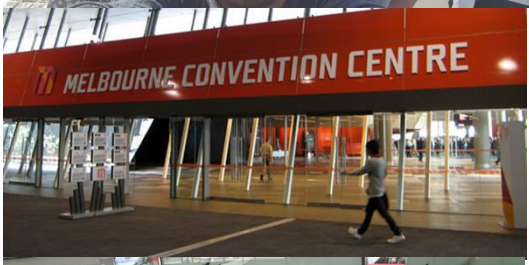

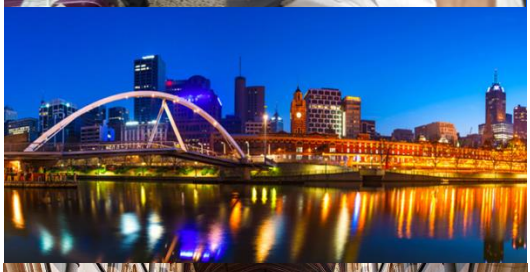

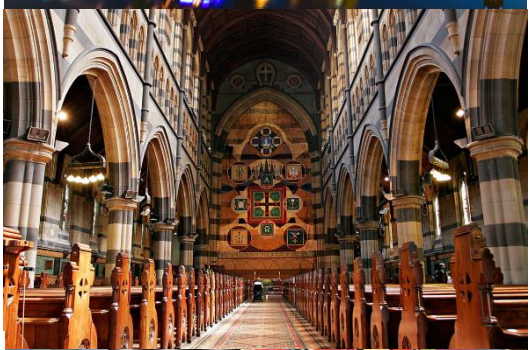

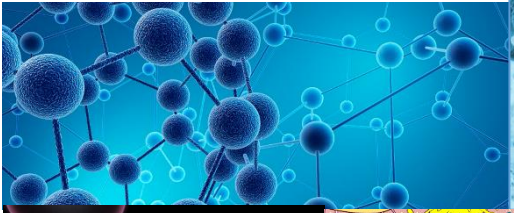

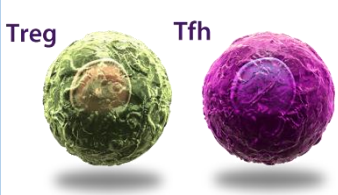

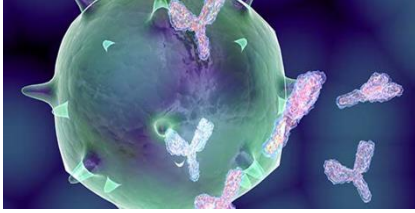
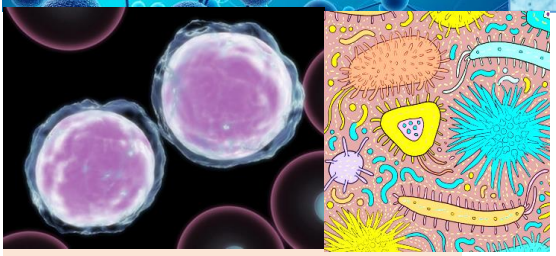

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Mandana Nikpour – Clinical Science
Alberta Hoi – Patient Program

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The 12th International Congress on SLE and 7th Asian Congress on Autoimmunity is an educational event that catered to the learners 'continuing education in the field of rheumatology, immunology, nephrology, dermatology and autoimmunity who share the common goal of exchanging knowledge. Through this congress experience participants were able to tailor individual curricula to meet the needs of international clinicians of all levels of experience.

DAY 1

Registration started at three in the afternoon. All participants and exhibitors were given name badges to wear throughout the Congress in order to gain admittance into lecture halls, Exhibition Area and scheduled activities. Free access to Wi-Fi was provided for the convenience of all and were advised to download and log on the App for a convenient and full congress experience. Welcome address to LUPUS 2017 and ACA 2017 were given by Prof. Eric Morand and Prof. Yehuda Shoenfeld. Prof. CS Lao graciously delivered a warm tribute to the Late Prof Feng. Bioprofiling in SLE was introduced by Prof. Virginia Pascual. At 6:30 pm, refreshments were served in the exhibition area.

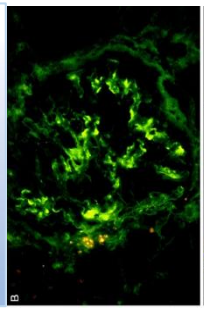
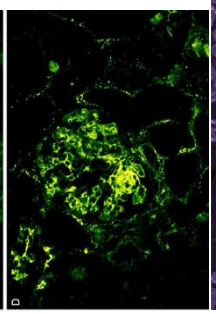
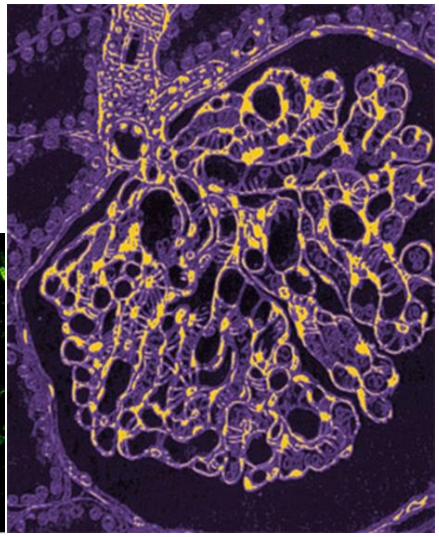
PARTICIPANTS from THE UNIVERSITY of SANTO TOMAS, PHILIPPINES

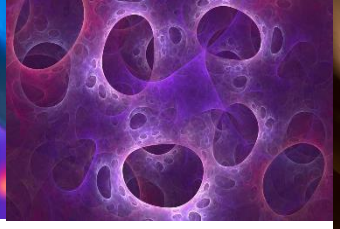
List of participants from University of Santo Tomas include Drs. Edgar Ramiterre, Caroline Arroyo, Millicent Tan-Ong, Cheryl dela-Cruz Tan, Helmar Soldevilla, Marian Galdones-Velasco, Leonid Zamora, Aime de Asis-Fabila, Mary Joy Flor Edar, Elaine Venegas, Bryan Paras, Miguel Molina and Vivian Santos.

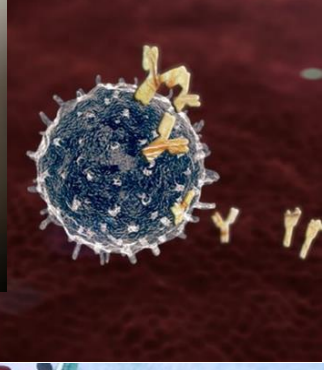
DAY 2

Meet the Professor Sessions commenced on second day. These were the starting sessions in the morning at 7:30am that lasted for an hour and were conducted on three session halls. These sessions provided participants archers and clinicians and gain new perspectives in SLE and autoimmunity. These sessions were designed to give participants the unique opportunity to hear from these international experts about topics that they are passionate about. Designated abstracts were presented in all sessions.

Plenary session one in two session halls started at 830am. The plenary session chaired by Professors Nan Shen and Virginia Pascual tackled Lupus 2017: *Molecular Targets to New Therapies*. Presenters were the following*: Genetics and epigenetics as tools for elucidating SLE heterogeneity and pathogenesis* by Dr. Linsey Criswell, Genome *Sequencung in SLE* by Dr. Carola Vinuesa, *Stem cells and the Treatment of SLE* by Dr. LinYung Sun. Parallel sessions simultaneously started at 11am. Parallel session one topic was about CNS lupus chaired by Professors Yasuhiro Katsumata and Tim Godfrey. Topics discussed were *Clinical Heterogeneity, attribution and outcome* by Dr. John Hanly and *Antibody-mediated neuropsychiatric lupus* by Dr. Betty Diamond. In parallel session two, *Cell targeting in SLE* chaired by Professors Sarah Jones and CS Lau talked about PDC,

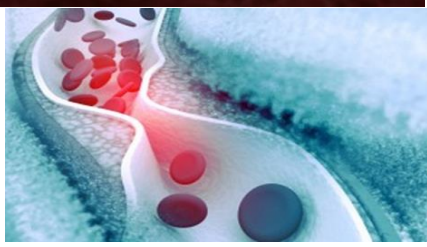





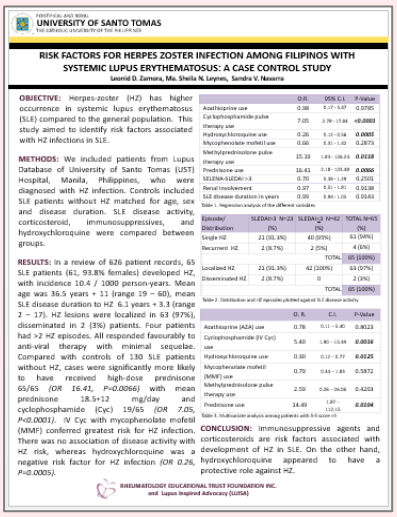
T cell and B cell targeting by Drs. Andrew Lew, Joe Craft and David Tarlinton, respectively. Parallel session three (ACA) *From Genomics to Therapeutics via Structure* chaired by Professors Matthew Cook and Carlo Perricone discussed molecularly mindboggling topics: *Molecular basis underpinning HLA association with disease* by Dr. Jamie Rossjohn, *Uncovering the role of dark matter of genome in lupus* by Dr. Nan Shen, *Development and trials of antigen-specific therapy in the rheumatoid arthritis and type 1 diabetes: implications for lupus* by Dr. Ranjeny Thomas and *Using related diseases to advance our understanding of genetic causes of autoimmunity* by Dr. Matthew Brown. Break out session, exhibition and poster viewing. Plenary session two started at 2:15pm tackling *Lupus Nephritis: From Bench to Bedside* was moderated by Professors Richard Kitching and Daniel TM Chan. Topics included *The science of lupus nephritis* by Dr. Anne Davidson, *Biomarkers in lupus nephritis* by Dr. Brad Rovin *and Treatment of lupus nephritis: My ten top tips* by Dr. Frederic Houssiau. After a second break of the day, three Parallel Sessions commenced simultaneously. Professors Fiona Goldblatt and John Esdaile the moderated the event on *Lupus Reflections Across the continents: Are we addressing the Needs of our Patients* on Parallel session four. Of course, our very own Professor Sandra Navarra inspired and motivated her audience by sharing true stories of how the Section of Rheumatology of the University of Santo Tomas Hospital on its own and in partnership with other hospitals and government sectors in reality meet the needs of our patients. Representatives from North America and UK and Europe was led by Drs. Jinoos Yazdany and Ian Bruce, respectively. Parallel session five talked about lupus nephritis moderated by Professors Brad Rovin and Frederic Houssiau. Topics discussed under this were *Resident kidney cells in the pathogenesis of lupus nephritis* by Dr. Susan Yung, *Cross-talk between clinical and translational research in lupus nephritis* by Prof. Daniel TM Chan and *What can we learn from studies of vasculitis?* by Dr. Richard Kitching. *Conversations on B cells in SLE Pathogenesis and Therapeutics* was in Parallel session six with issues *in Targeting the BAFF receptor TACI: A B cell-sparing therapeutic approach to SLE* by Dr. Fabienne Mackay, *Secreted autoantibody repertoires in lupus and Sjogren's syndrome studied by proteomics* by Dr. Tom Gordon and *Evidence of glucocorticoid induced leucine zipper as a regulator of B cell activation in SLE* by Dr. Sarah Jones.

POSTER VIEWING

Thomasian Rheumatologist Marian Galdones' study, co-authored with Dr. Mary Flor Joy Edar and Dr. Navarra, described the frequency of clinic visits and hospitalizations among rheumatic diseases seen at a tertiary Rheumatology center in Manila, Philippines, derived from the census of patients seen at UST Hospital Rheumatology Clinics from 2008 to 2015. The 8 year patient census in a tertiary care Rheumatology training center shows SLE with consistently the highest frequency of clinic visits and hospitalizations - reflecting the burden of illness in a condition which affects relatively young individuals. Dr. Leonid Zamora presented *Risk factors for herpes zoster infection among Filipinos with systemic lupus erythematosus: a case control study*, which showed that immunosuppressive agents and

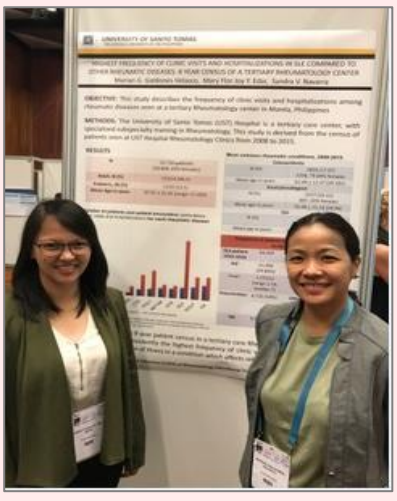


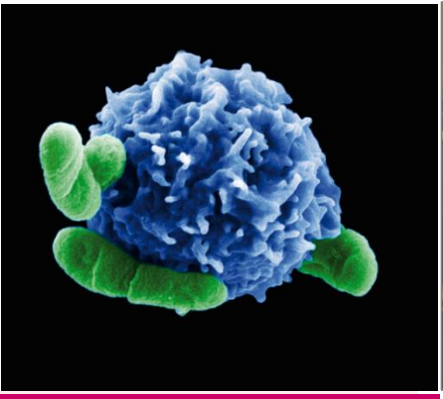
Poster Presentations from University of Santo Tomas Hospital, Philippines


UNIVERSITY OF SANTO TOMAS

RISK FACTORS FOR HERPES ZOSTER INFECTION AMONG FILIPINOS WITH SYSTEMIC LUPUS ERYTHEMATOSUS: A CASE CONTROL STUDY

Leonid D. Zamora, Ma. Sheila N. Leynes, Sandra V. Navarra





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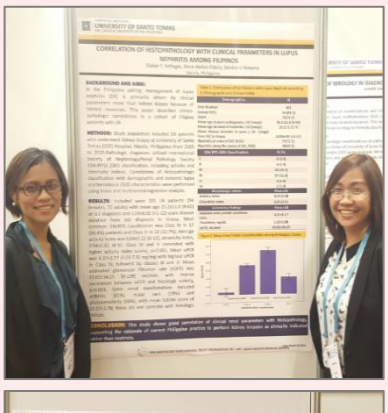
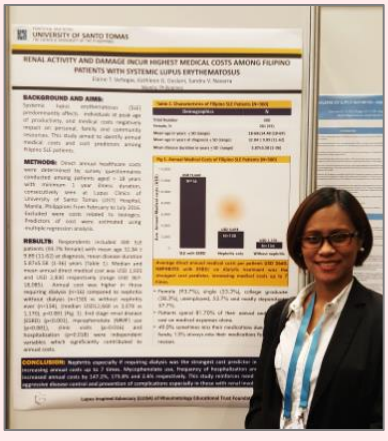
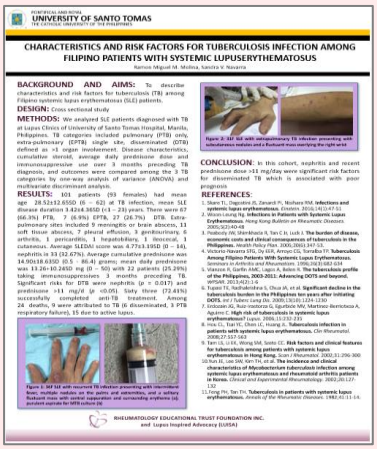
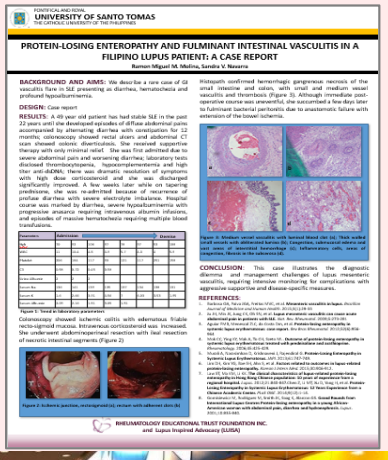




corticosteroids are risk factors associated with development of HZ in SLE. On the other hand, hydroxychloroquine appeared to have a protective role against HZ. This study was co-authored with Dr. Ma. Sheila N. Leynes and Dr. Navarra. Dr. Mary Flor Joy Edar presented *Disease activity patterns among Filipino patients with systemic lupus erythematosus: a 3-year observational* Hospital and co-authored with Drs. Zamora and Navarra. The study reflected improvement in disease patterns among patients participating in an observational cohort study. Damage is largely driven by high cumulative steroid use. Dr. Elaine Veñegas with co-authors Dr. Aime de Asis-Fabila and Dr. Navarra presented their poster, Correlation of histopathology with clinical parameters in lupus nephritis among Filipinos, which included were 101 lupus nephritis patients. This study proved the good correlation of clinical renal parameters with histopathology, supporting the rationale of current Philippine practice to perform kidney biopsies as clinically indicated rather than routinely. Dr. Elaine Veñegas with co-authors Dr. Kathleen Geslani and Dr.Navarra described how renal activity and damage incurred highest medical costs among Filipino patients with systemic lupus erythematosus demonstrating that nephritis especially if requiring dialysis was the most important cost predictor in this cohort, increasing annual costs up to 7 times including other cost predictors such as medications, clinic visits and hospitalizations. Dr. Maria Eizelle Muleta, presented by co-authors Dr. Edar and Dr. Navarra displayed their poster, *Contributors to disease flares among Filipino patients with SLE* in the UST Hospital concluded that their cohort, renal, mucocutaneous and musculoskeletal organ-systems were most commonly involved in a disease flare. Stress and infection were the leading factors contributing to a flare. These findings underscore need for holistic management approach in SLE, integrating effective disease control with patient education. Bryan Paras with co-authors Dr. Veñegas and

Poster Presentations from University of Santo Tomas Hospital, Philippines



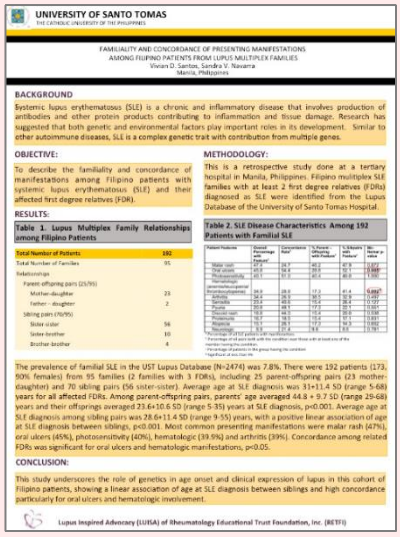


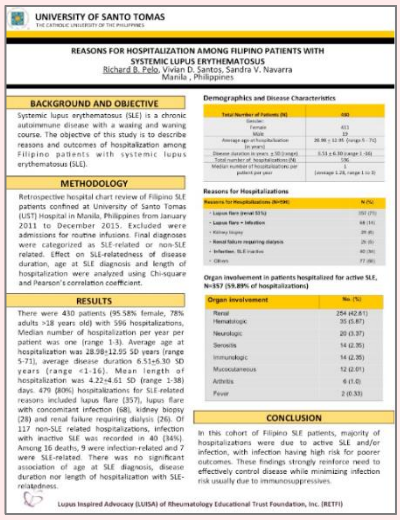
Dr. Navarra presented a case control study on *Predictors of end-stage renal disease in Filipinos with lupus nephritis*. This study showed that this cohort of Filipino lupus patients with ESRD, hypertension and diabetes mellitus prior to SLE diagnosis were strongly associated with progression to ESRD, reinforcing need to recognize and aggressively control these co-morbidities early at SLE diagnosis, including maximal use of steroid-sparers. Dr. Ramon Miguel Molina presented three posters: a cross sectional study on TB in SLE, a case report and a case series on gastrointestinal vasculitis in SLE. The first paper, *Characteristics and risk factors for tuberculosis infection among Filipino patients with SLE,* was a cross-sectional study showing that nephritis and recent prednisone dose >11 mg/day were significant risk factors for disseminated TB which is associated with poor prognosis in his cohort of patients. Dr. Ramon Miguel Molina presented three papers –The first paper described a rare case in a 49 year old SLE patient with GI vasculitis flare presenting as diarrhea, hematochezia and profound hypoalbuminemia. This case elucidated the diagnostic dilemma and management challenges of lupus mesenteric vasculitis, requiring intensive monitoring for complications with aggressive supportive and disease-specific measures. The second paper pertained to gastrointestinal (GI) flares among 12 cases of Filipino patients with SLE seen at the Lupus Clinics of University of Santo Tomas (UST) Hospital, Manila, Philippines. Dr Molina's study concluded that GI vasculitis, though rare in SLE, can be potentially catastrophic. Because of nonspecific manifestations, diagnosis strongly relies on clinical assumption and response to steroids. In some cases, surgery can be life-saving and belimumab offers another effective therapeutic option. All three papers were co-authored with Prof. Sandra Navarra.

Dr. Vivian Santos showcased her *Familiality and concordance of presenting manifestations among Filipino patients* from UST Lupus Multiplex-families. She co-authors with Dr. Navarra. Their study described the familiality and concordance of manifestations among Filipino patents with SLE and their affected first degree first relatives. Their study underscored the role of genetics in age onset and clinical expression of lupus in their cohort, showing the linear association of age at SLE diagnosis between siblings and high concordance particularly for oral ulcers and hematologic involvement. Dr. Richard Pelo with Dr. Santos as co-author and representative, demonstrated in their study, *Reasons for hospitalization among Filipino patients with SLE,* that in their cohort, majority of hospitalizations were due to active SLE and/or infection, with infection having high risk for poorer outcomes. These findings strongly reinforce need to effectively control disease while minimizing infection risk usually die to immunosuppressives.

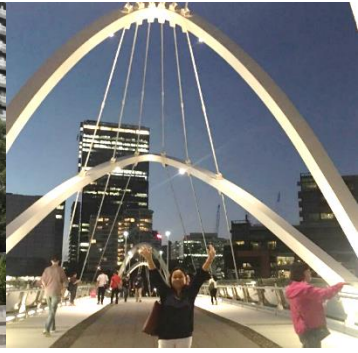
Conversations on Meet the Professor 4: East Meets West: CNS Lupus was with Professors Yoshiya Tanaka and John Hanly. Meet the Professor Session 5 tackled on

Poster Presentations from University of Santo Tomas Hospital, Philippines



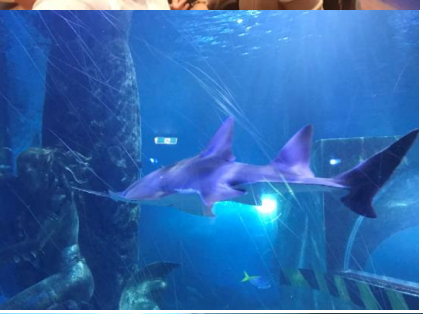










Career in Lupus Research: Tips and Inspiration by Porfessors Fabienne Mackay, Dafna Gladman and CS Lau. In the first session on Free Communications, six abstracts were presented on topics of lupus nephritis & genomics in SLE. The third plenary session was led by Professors Marvin Fritzler and Tim Godfrey. *Lessons on clinical trials: its lessons and designs* were discussed. Topics on Parallel 7 session were under the umbrella of *Manifestations, comorbidities and complications of SLE* which dwelled on cardiovascular disease

and metabolic syndrome by Ian Bruce, *Lupus and skin: Update 2017: Evaluation and management of cutaneous lupus Erythematosus* by Annegret Kuhn and Infections in the Asia Pacific Region by Worawit Louthrenoo. Session 8 addressed issues on Tregs and Tfh cells in Autoimmunity moderated by Professors Eoin Mckinney and Joe Craft. Dr. Yu discussed on Leptin as a new link between Tfh, Treg and autoimmunity. *Regulation of T cell subsets by low dose IL2 and its clinical relevance in SLE* by Zhan-Guo Li and T *Follicular regulatory cells* by Carola Vinuesa followed the discussion. Parallel session 8 by the ACA focused on *The Mosaic of Autoimmunity* chaired by Professors John Axford, and Dimitrios Bogdanos. *Clinical significance of autoantibodies in myositis with ILD and Takayasus's and polyangiitis* were lectured by Drs. Tsuneyo Memori and John Axford respectively. Plenary session 4 updated the listeners on the cutting edge science in SLE moderated by Professors Ann Davidson and Eric Morand. *The role of innate immunity in SLE pathogenesis, T cell fatigue in SLE and Accelerated Medicine Partnerships* by Drs. Keith Elkon, Eoin McKinney and Betty Diamond respectively imparted their knowledge on the topics. Parallel sessions 10 updated us on *Antiphospholipid Syndrome* lead by Professors Alberta Hoi and Fiona Goldblatt. They tackled shared updates on *Thrombosis risk score and role of primary prophylaxis* (Prof. Munther Khamashta), *Pregnancy in SLE, more than just antiphospholipid antibodies* (Dr. Pier Luigi Meroni) and *Pathogenesis of thrombosis in APS* (Dr. Steven Krilis). Parallel 7 session focused more on *Effector T cells in SLE* moderated by Professors Annegret Kuhn and Luc Mouthon which imparted on subtopics *Pathognic T cell subsets in SLE* (Joe Craft), *Immunophentype and gene expression analysis* (Tsutomu Takeuchi) and *Immunometabolism defects in SLE mechanisms and therapeutic opportunities* by Dr. Laurence Morel.

NETWORKING UNDER THE SEA

Participants were invited to network with colleagues inside a stunning 360-degree Fish Bowl at SEA LIFE Melbourne Aquarium which started seven in the evening. This event provided a great opportunity to mix, mingle and establish connections with every participant in that unique and exquisite underwater backdrop.







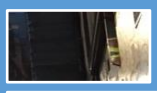


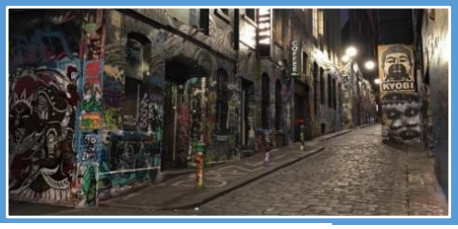













DAY 3

The final day of the Congress began with the three conversations with the Professors. Session 6 on Meet the Professor on *East Meets West*, tackled on difficult cases of lupus led by Professors Sandra Navarra, CS Lau and Alberta Hoi. Session 7 with Professor Munther Khamashta shared his expertise on *Antiphospholipid Syndrome* while Professor Eoin McKinney imparted his wisdom on the *Big Science in SLE and Autoimmune Disease*. The last plenary session moderated by Professors Sandra Navarra and Sean O-Neil discussed on important umbrella topics regarding outcome measures and treatment targets in SLE. We have learned and have been updated regarding measuring disease activity and damage in SLE (Dr. Dafna Gladman), R*emission as a treatment target in SLE* (Dr. Andrea Doria) and *Low disease activity as a treatment target in SLE* (Dr. Mandana Nikpour). Parallel session topics were as follows: Parallel 12: *Innate Immunity and Interferon* (moderators: Professors Ann Davidson and Matthew Cook) – *Autophagy regulates cytokines in innate immune cells: A role in lupus?* (Dr. James Harris), *Pre-clinical evaluation of a cytotoxic anti-IL-3Ra antibody that depletes the plasmacytoid dendritic cells and suppresses IFNa production* (Dr. Nicholas Wilson).

Parallel 13: Patient Program Module 1: *What have we learned about the Lupus?* (Moderator Dr. Barbara Ward)- *Causes, pathways and progression of lupus* (Dr. Eric Morand), *Pregnancy journey* (Dr. Susan Walker), *Challenge and triumph of kidney disease in SLE* (Dr. Brad Rovin) and *Cardiovascular risk in SLE* (Dr. Ian Bruce). Parallel 14 (ACA): *Pearls in Autoimmunity* (Moderator: Prof. Laurence Morel and Andrea Doria) – *Nutrition and Autoimmunity* (Dr. Keonie Moore), *Autoimmunity associated lymphomas* (Dr. Jorge Martins), *Harnessing autoimmunity [disease- specific autoantibody and its variant] in theranostics of disease* (Dr. Eiji Matsuura). Parallel 15: Patent Program Module 2: *The Changing Outlook for Treatment of Lupus* (Moderator Prof. Sandra Navarra) – *Current therapies and changing perspective on managing lupus* (Dr. Joan Merrill) *and Overview of new therapies in development for lupus* (Dr. Richard Furie).

Parallel 16: *Quality of Care and Patient Reported Outcomes* (Moderator Prof. Mandana Nikpour and Cynthia Aranow)- *Advancing the quality and safety of healthcare in SLE using novel clinical informatics approaches* (Dr. Jinoos Yazdany) and *The challenges and triumph of integrated model of lupus clinic in Australia* (Dr. Alberta Hoi). Parallel 17: Patient Program Module 3*: Living and Coping with Lupus* (moderator Prof. Barbara Ward). Parallel 18: *Autoimmunity and environment* (Moderartors: Prof. CS Lau, Dafna Gladman) – *Pathogenensis and therapy in SLE everything is microbiome until proven otherwise* (Dr. Yehuda Shoenfeld), *The HPV vaccine and SLE: possible connection?* (Dr. Carlo Perricone) and *Infections and autoimmunity: the impact of the microbiome* (Dr. Dimitrios Bogdanos).

Parallel 19 session impacted the role of resources for patients with lupus and their families and how lupus patients can involve themselves in innovative researches. Speakers were Sarah Boyd for *Local researches for people with lupus* featuring representatives of Australian groups, Corry Ang for *Lupus Care Pack*, Dian Syarief for *Lupus Exercise and Personal Medication Record.*

Closing remarks were given by Prof. Duane Peters and Barbara Ward. Certificate of attendance will be available for all participants after the Congress after completing the electronically the educational evaluation procedure online via the link that they will receive following the Congress. Providing certificates online is a very wise initiative as responsible individuals in helping save mother earth.

Congress abstracts were available on USB memory stick given during the registration as well as in the Congress mobile app and the website.

Abstracts from 12th International Congress on SLE & 7th Asian Congress on Autoimmunity were published in an online supplement of Lupus Science & Medicine, and all citations to these abstracts should refer to this supplement. Access to the journal were available on Congress website from March 2017. - *end*

Virginia Pascual

Dr. Pascual is a practicing pediatric rheumatologist interested in basic and translational immunology. She is an Investigator and Director of the Centers for Inflammation and Genomics at the Baylor Institute for Immunology Research (BIIR) in Dallas, TX. Her research focuses on pediatric Systemic Lupus Erythematosus (SLE) and Systemic-onset Juvenile Idiopathic Arthritis (sJIA) with the goals of translating laboratory findings into the identification of therapeutic targets and useful biomarkers. Her studies have led to the discovery that type I interferon (IFN) and interleukin 1 (IL-1) are important pathogenic players in SLE and sJIA, respectively.

Key Learning points

- Bioprofiling in SLE: Tremendous progress defining the genetic contribution to SLE, but more work needed (identify casual variants & define biologic mechanisms
- Clues to etiologic pathways , therapeutic targets
- Specificity of genetic associations for disease manifestations
- Epigenetic factors may contribute to SLE risk and disease phenotype and serve as link to the environment.

Munther Khamashta

Munther Khamashta is Professor/Consultant Physician and Director of The Graham Hughes Lupus Research Laboratory at St Thomas' Hospital, London, and runs a large lupus pregnancy clinic. Professor Khamashta has a strong research interest in lupus and connective tissue diseases, with a special interest in pregnancy and antiphospholipid syndrome.

Key Learning points

- Seronegative APS was first described in 2003 and consisted of patients with typical clinical manifestations of APS, including arterial thrombosis, thrombocytopenia, heart valve lesions, and recurrent pregnancy loss, but with negative tests for LAC, aCL, and anti-β2GPI antibodies.
- Possible reasons for seronegative APS: Wrong diagnosis (other genetic/acquired prothrombotic conditions)?, aPL reverted negative?, Different antibodies that conventional testing fails to pick up.
- Anti-β2GPI antibodies are considered the most clinically significant of the aPLs since several studies have shown that aPLs are strongly associated with thrombosis.
- Anticoagulation with warfarin forms the cornerstone of conventional therapy in aPL-induced thrombosis. It is agreed that therapy should be indefinite, with a target internationalized normal ratio (INR) of 2.0–3.0.
- HCQ as an alternative treatment modality in patients with recurrent APS.
- Treatment of seronegative APS is the same as with seropositive APS.

Andrea Doria

Andrea Doria is Professor of Rheumatology and Head of the Unit of Connective Tissue Disease and Rare Rheumatic Diseases, Division of Rheumatology, Department of Medicine, University of Padua, Italy. Professor Doria has a long-standing experience in clinical management of connective tissue disease patients. In addition, he has expertise in the management and follow-up of pregnant patients with systemic rheumatic diseases.

Key Learning points

- Remission as a treatment target in SLE: Treatment of SLE should aim at remission or when remission cannot be achieved, the lowest possible disease activity that is assessed by a validated lupus activity index and/or organ-specific markers.
- The main treat-to-target in SLE is complete remission, however since longitudinal observations suggest that clinical remission or low disease activity even with minimal corticosteroid intake do improve patients prognosis and survival as well, they may be assumed as acceptable alternative targets.
- Suitable therapeutic strategies in achieving this goal: early diagnosis, effective treatment and proper corticosteroid tapering which in turn require development of more reliable serum biomarkers for early disease detection and less toxic targeted therapies with a steroid-sparing potential
- What is "treating to target" in SLE?
  - Identify a target for each patient
  - Make a specific intervention
  - Re-assess the patient after an established period of time
  - If a target is not met: modify the intervention
- Four domains considered as critical for defining remission in SLE:
  - Clinical disease activity
  - Serological activity
  - Treatment
  - Duration
- Some overarching principle and bullet points in Treat-to-target in SLE:
  - Since damage predicts subsequent damage and death, prevention of damage accrual should be a major therapeutic goal
  - For lupus nephritis, following induction therapy, at least three years of immunosuppressive maintenance treatment is recommended to optimise outcomes
  - Lupus maintenance treatment should aim for lowest glucocorticoid dosage needed to control disease, and if possible, glucocorticoids should be withdrawn completely.
  - Irrespective of the use of other treatments, serious consideration should be given to the use of antimalarials.

Asia Lateef

Dr. Aisha Lateef is a senior consultant and head of the Rheumatology Division at the National University Hospital (NUH), Singapore. Her main research interests are clinical and translational research in Systemic Lupus Erythematosus (SLE), with a special interest in the management of pregnancy in rheumatic diseases. She has established SLE and Obstetric Rheumatology clinics at NUH which combine clinical care, research and education under one roof.

Key Learning points

- Disease activity may worsen during the pregnancy and in turn may increase the risk of other maternal and fetal complications.
- HCQ should be continued in all pregnant women with SLE. Benefits: reduction in disease activity and reduction of risk of CHB and neonatal lupus
- Drugs considered safe in pregnancy: ASA, Heparin, LMWH, UFH, Xa inhibitor, fondaparinux (limited but ressuring)
- Ante-natal management of pregnant patients will SLE requires close collaboration between rheumatologist and obstetrician
- aPL in pregnancy: Lupus anticoagulant is more specific in predicting the risk of adverse pregnancy outcomes, compared with other aPL.
- The management strategies differ, based on the risk profile of each pregnancy.
  - asymptomatic women with only persistently positive aPL and no prior event : Low dose aspirin alone
  - recurrent early losses or one or more late fetal loss, but no history of systemic thrombosis (Obstetric APS) : Aspirin + prophylactic doses of heparin
  - Low molecular weight heparin must be transitioned to unfractionated heparin prior to delivery.
  - Heparin treatment needs to be continued for 6 weeks post-partum
  - Patients with prior systemic thrombosis should receive full therapeutic doses of heparin throughout pregnancy.
- anti-Ro antibodies during pregnancy is the high risk of CHB, develops between 18–24 weeks of gestation.
- Pre-eclampsia during SLE pregnancy: may become extremely difficult to differentiate lupus nephritis and pre-eclampsia and they may also coexist - Sometimes, delivery of the baby may be the only definitive answer.

Eric Morand

Professor Eric Morand is the head of the School of Clinical Sciences at Monash Health (SCS), Monash University's largest clinical school. He specializes in research and clinical care of SLE, as well as complex rheumatic diseases and rheumatoid arthritis. He is the founder of the Monash Lupus Clinic, Australia's largest lupus-focused-research-grounded clinic for patients with SLE, a founding member of the Australian Lupus Registry & Biobank and Chair of the Asia Pacific Lupus Collaboration.

Mandana Nikpour

Dr Mandana (Mandy) Nikpour is a rheumatologist at St. Vincent's Hospital Melbourne, and a National Health & Medical Research Council of Australia fellow at the University of Melbourne. Her research interests include risk and prognostic factors for cardiopulmonary and other clinically important outcomes in SLE and systemic sclerosis, development of clinical tools for screening and prediction of outcome, measurement of disease activity, and clinical trials of novel therapies in the rheumatic diseases.

Key Learning points

- Low disease activity as a target treatment in SLE: The lupus low disease activity state (LLDAS) was recently defined by the Asia Pacific Lupus Collaboration using consensus methods (Delphi survey and nominal group discussion) and validated against the end-point of damage accrual using prospectively acquired cohort data.
- Given the rarity of sustained zero disease activity, LLDAS allows minimal disease activity and places limits on treatment
- Definition of LLDAS:
  - SLEDAI-2K≤ without major organ activity
  - No new features of lupus disease activity compared with previous assessment
  - PGA (scale 0-3) ≤1
  - Current prednisone (or equivalent) dosage ≤7.5mg/day
  - Well-tolerated treatment with immunosuppressive drugs and/or approved biological agents

Frederick Houssiau

Frédéric Houssiau, MD, PhD is Head of the Rheumatology Department at the Cliniques Universitaires Saint-Luc in Brussels and Full Professor at the Université Catholique de Louvain, Belgium. Frédéric Houssiau's scientific achievements encompass basic and clinical contributions in the field of rheumatology, with a focus on systemic lupus erythematosus (SLE). He is a founding member of the Lupus Nephritis Trials Network and is currently coordinating the RING trial. He has (co-)authored more than 110 scientific articles on SLE.

Key Learning points

- Ten Top Tips: #1 Always perform a renal biopsy because it influences treatment choices, #2Treat-to-Target approach,#3 Prescribe less steroids – time to damage differs according to the dose of GC prescribed at 1 year, #4 Prescribe MMF or IV cyclophosphamide for induction—MMF: best studied drug in LN, equally efficacious compared to IV CYC for induction at 6 months, IV CYC: Optimal compliance, low cost, #5 Maintain immunosuppression – very few withdrawal data and no proper withdrawal trail; at least 5 years, possibly 10 years, #6 Prevent and treat comorbidities—this really makes the difference, #7 Unmask non-adherence, #8 Keep the faith in targeted therapies, #9 Watch the CNI story—MMF + TAC vs IVCYC with complete remission at week 24, #10 Keep hoping for precise medicine.

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