Patient Care
Education
Research
VISION
Adding years of healthy life

MISSION
To be a centre of excellence in providing high quality, safe and cost-effective dermatology care to the population

To be a leading centre for education and training in dermatology

To be a pivotal centre for clinical and translational research

In the setting of an innovative and nurturing environment

GOALS
Our goal is to achieve excellence in all services offered by the Centre.

For our PATIENTS, to provide the highest standard of dermatological care to meet their needs in a caring, compassionate, cost-effective and safe manner.

For our STAFF, we will strive to provide an environment in which they can work in confidence and dignity and to improve themselves according to their individual ability and initiative.

The National Skin Centre will strive to achieve its Mission and Goals in keeping with the highest moral, ethical, and professional standards.
C lose on the heels of the 25th Anniversary year, 2015 saw many significant milestones for the National Skin Centre (NSC). Following the senior management’s retreat in May 2015, the Centre renewed its mission statement to emphasize its triple mission for quality clinical care for the population, the deep culture of providing dermatological education and the aspiration to advancing the clinical and translational research for dermatology.

In line with promoting community dermatology, NSC has extended its care to National Health Care Group Polyclinics (NHGP) and expanded its network of GP partners. In January 2016, NSC rolled out its pilot project with the NHGP to provide e-consultation services Tele-DERM to designated polyclinic doctors. With this e-consultation platform, the polyclinic’s dermatology champions have direct access to the Centre’s dermatologist for his or her opinion and can discuss treatment options during NSC clinic’s operating hours.

We also continued to strengthen our partnership with General Practitioners (GPs) and Family Medicine Clinics (FMCs) through an engagement session and workshop with NHGP and GP alumni on right-siting of patients with common skin conditions such as psoriasis and eczema and how to manage them effectively at primary care level.

These initiatives benefit both institutions with its improved management of both the patients’ waiting time and their skin condition, as a great majority of the patients’ concerns can now be addressed within the same visit and patients can continue to be managed at primary care level.

In our continued efforts to improve quality of patient care, we have introduced nurse-led photodynamic therapy (PDT) in our phototherapy clinic to better coordinate care for patients with actinic keratosis, Bowen’s disease and superficial basal cell carcinoma. The Phototherapy clinic also introduced personal targeted phototherapy devices for the treatment of specific areas of the body, which will advance the eventual empowerment for self-administration of treatment by patients.

On the research front, we have established the competitive NSC Research Studentship for medical students as part of our efforts to cultivate budding interest in the field of research. Additionally, our effort to develop our clinical translational research arm has reaped rewards in the form of Suu Balm, an anti-itch menthol cream now made accessible to the public via a collaborative partnership with Good Pharma Dermatology. We are also making significant headway in refining skin imaging technology by employing confocal skin imaging technology – a non-invasive screening procedure, on patients seen in the skin cancer screening clinic since April 2015. An additional diagnostic tool that provides patients with a more in-depth analysis before definitive treatment, skin cancer patients now proceed directly to surgery without the conventional need for skin biopsy, cutting down on additional visits and cost.

In September 2015, the second grant exercise of the A*STAR-NHG-NTU Skin Research Grant (SRG) saw NSC clinicians receiving 9 joint awards with skin research scientists. I am confident that these grants will harvest fruitful multidisciplinary research collaborations for innovative, translational work in dermatology research.

The year capped off with our biennial conference - NSC Updates in Dermatology and Venereology, which encompassed a comprehensive range of topics in dermatovenerology and charted new insights and understanding in the field of dermatology.

All in all, it has been a busy and eventful year for the Centre, as we make inroads into providing more holistic care for dermatology within the institution, integrating with more care in the community by engaging our partners in primary care and in the nursing home sector. This would not have been possible without the passion and engagement of our staff in venturing to advance dermatology care outside the institution. I thank them for coming on this journey in breaking new ground for bringing dermatology care to our population.

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- A/Prof Tan Suat Hoon

Clinical Assoc Prof Tan Suat Hoon, Director
Research is Essential for NSC to Progress

A sense of helplessness was the push that directed Consultant Dr Tey Hong Liang to the path of clinical research. Since entering NSC as a registrar in 2006, Dr Tey encountered several frustrating occasions where he had to inform certain patients that he was unable to help them further due to the limited solutions available in clinical care.

Dr Tey shared, “In the back of my mind, I know there is great potential to actually improve clinical care and help these patients. And I wanted to do something to improve this, instead of just sitting there and telling them the same thing over and over again.”

His inclination towards clinical research was further reinforced after his Health Manpower Development Plan (HMDP) overseas stint to the United States in 2010, where he was given the opportunity and freedom to delve into the field of dermatological research.

Upon his return to NSC, Dr Tey was offered the chance to commit half of his time to research. “Naturally, I jumped at the offer,” he laughed.

His efforts has reaped numerous achievements, such as the formulation of Suu Balm, an anti-itch moisturising cream catered to the elderly and eczema patients, which was so well received that it is now made accessible commercially. It also netted him the National Medical Research Council (NMRC) Transition Award, which provides mentored research funding support and allowed him to devote a larger portion of his time to research.

Dr Tey stressed on the necessity for research in order for the Centre to elevate its standards of patient care. “We should not just be seeing patients with general dermatological issues, but we should also be a centre dedicated to addressing difficult issues that other doctors or institutions cannot solve,” he said. The only way to achieve this is to continue building up the Centre’s research capabilities and nurture budding clinician scientists, he added.
Having been in the nursing line for close to 42 years, Senior Nurse Educator Sister Wong Bee Yin is undisputedly a witness to how the profession has morphed and evolved with the aid of technology over the years.

However, despite the technology-propelled progress made in nursing care, Sister Wong believes that the key to being a good nurse has remained unchanged since her early days in Middle Road Hospital.

"Compassion is irreplaceable, and is the most critical aspect in the field of nursing," she said. Having worked in virtually all the different clinics in the National Skin Centre (NSC) since its establishment in 1988, Sister Wong admits that patient care is more challenging now than it was before. "Previously, patients entrusted all their care to you and they don’t question your decisions. Now, with easy accessibility to medical information online, patients have much higher expectations when they come in," she said. Nevertheless, she asserted that this does not discount the need for nurses to always act with compassion and patient-centeredness.

While Sister Wong now plans and develops training programmes for junior nurses and nursing students as a nurse educator, she played an essential role in the setting up of the Department of Sexually Transmitted Infections (STIs) Clinic (DSC) and the setting up of the first Phototherapy Clinic in NSC. She also leads a team of nurses to various nursing homes in Singapore to provide dermatological education to their staff and residents.

Despite the many notches in her professional belt, a slower pace is not in the cards for Sister Wong. "Nursing is a life-long learning process, and we must continue to learn and develop ourselves both professionally and personally in order to serve our patients at our best capability," she said.
NSC Highlights 2015

NSC UPDATE IN DERMATOLOGY AND VENEREOLOGY 2015

Held from the 4th - 6th of September 2015 at the Mandarin Orchard Hotel, Singapore, the biennial conference embodied a comprehensive range of topics in dermato-venereology – from basic sciences, to practical approaches towards clinical problems, as well as future direction of the specialty. There were approximately 470 attendees - comprising of clinicians, researchers, nurses and pharmacists from 21 countries.

Consisting of 7 symposia of different themes, 2 plenary lectures, and a session for Dermatology trainees to showcase their work. In addition, there was a symposium for Nurses and another for Pharmacists, which were held concurrently on the first day of the conference. Invited guest speaker Prof. Sean Whittaker, a consultant dermatologist at the Guy’s and St Thomas’ NHS Foundation Trust and a Professor of Cutaneous Oncology at King’s College, London, delivered the plenary lecture, entitled “Dermatology 2020”, in which he provided an overview on the evolution of dermatology over the past two decades and opined on the future challenges.

For this year’s event, 4 pre-conferences were held at the National Skin Centre on 4th September, with topics focusing on Dermatopathology, Urticaria and Dermatologic Surgery. The main event consisted of 7 symposia of different themes, 2 plenary lectures, and a session for Dermatology trainees to showcase their work. In addition, there was a symposium for Nurses and another for Pharmacists, which were held concurrently on the first day of the conference. Invited guest speaker Prof. Sean Whittaker, a consultant dermatologist at the Guy’s and St Thomas’ NHS Foundation Trust and a Professor of Cutaneous Oncology at King’s College, London, delivered the plenary lecture, entitled “Dermatology 2020”, in which he provided an overview on the evolution of dermatology over the past two decades and opined on the future challenges.

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NSC ECZEMA SUPPORT GROUP FORUM 2015

Held on 27 June, the annual Eczema Support Group (ESG) Forum served as a public platform for the Centre’s doctors to share on choosing the correct skincare products for eczema patients and provided informative insight into effective management of the condition.

A particular highlight of the afternoon was the sharing sessions with two of the Centre’s patients, who gave personal accounts of their individual Eczema journey, and how they learn to overcome the many social and emotional issues they faced growing up and living with the condition.

In his concluding talk, Chair of the forum Senior Consultant A/Prof Mark Tang shared with the audience on the possible future management of atopic dermatitis with the use of biologics. A/Prof Tang touched on ‘Dupilumab’, a “smart” drug that can target specific pathways or molecules that cause Eczema, and thus, “hitting hard where it matters most”. Dupilumab is currently undergoing a global multi-centre Phase 3 study and NSC is one of the centres involved in the evaluation of the drug.

NSC PUBLIC FORUM 2015

Titled ‘Be Clear About Rashes’ and held at the Grassroot Club, this year’s NSC Public Forums (English and Mandarin) concentrated on common adult rashes and their treatments. The afternoon sessions saw our doctors clearing up some commonly held misconceptions of certain skin conditions.

The English forum, chaired by Senior Consultant Dr Anthony Goon, delved into commonly held misconceptions of various rashes, how to differentiate its symptoms, and the importance of accurate clinical diagnosis in treating them effectively. Concomitantly, at the Mandarin forum, which was chaired by Senior Consultant Dr Leow Yung Han, the speakers gave the audience an educational walkthrough on the various types of pigmentation and their treatments.

It was an afternoon of fun and learning as members of the public enjoyed the various talks and engaged in lively Q&A sessions with the doctors.
New Services and Facilities

INTRODUCTION OF NURSE-LED PHOTODYNAMIC THERAPY

Nurse-Led treatment service of Photodynamic Therapy (PDT) Clinic was set up in National Skin Centre to better coordinate care for patients with actinic keratosis, Bowen’s disease and superficial basal cell carcinoma.

Intensive PDT training for nurses was provided by the Head of Photo-dermatology Unit, Senior Consultant A/Prof Chong Wei Sheng, to expand the role of nurses in supporting the preparatory care of phototherapy, a task which was normally done by the doctors.

With the new initiative of the PDT Nurse-Led service, the patients referred from different doctors are now grouped into a same-day session to share the high cost of the photosensitizer cream, thus effectively reducing their bills as well as freeing up doctors’ time taken to perform preparatory care for patients.

NSC-NHGP TELE-DERM SERVICE

The National Skin Centre (NSC) embarked on its pilot project with the National Healthcare Group Polyclinics (NHGP) to provide Tele-DERM service to polyclinic doctors by using the store-and-forward method.

First launched with Hougang Polyclinic, Tele-DERM provides physician-to-physician telecommunication to polyclinics so that unwarranted referrals can be reduced. With this e-consultation service, the doctors at polyclinic have direct access to the assigned dermatologist for his or her opinion and discuss treatment options during clinic’s operating hour. For more accurate assessments, photos of the patient’s condition will be taken and shared with the consulting dermatologist. Both the attending physician and consulting dermatologist can then decide on appropriate treatments and the follow up recommendation for patient. This triaging will allow patients with simple skin problems to continue their treatment at the polyclinics, while saving appointment slots for those who are in genuine need of the appointments at NSC.

Tele-DERM benefits both institutions with its improved management of both the patients’ waiting time and their skin conditions, as a portion of the patients’ concerns can now be addressed more immediately within the same visit.

Training and Education

MOH HMDP VISITING EXPERT – PROFESSOR RODERICK HAY

Kings College Hospital’s Consultant Dermatologist Professor Roderick James Hay, who wears many hats – including Professor of Cutaneous Infection in Kings College London and Chairman of the International Foundation of Dermatology, visited NSC from 14 - 20 May to observe some of our clinics’ practices and to give a series of lectures to our doctors.

Prof Hay covered an array of topics in his lectures – ranging from recent trends in Staphylococcal infections of the skin, HIV relate of dermatoses, updates on fungal infections of the skin, new perspectives on scabies, to the estimating of global prevalence and disability of skin diseases and dermatological education from medical school to field study. Prof Hay admired the comprehensiveness of the EMR system and found the ability to upload photographic images into patient’s medical records helpful in the treatment and management of patients.
Quality Improvement

LAUNCH OF THE 25TH ANNIVERSARY BOOK – QUALITY@NSC

The first Quality Improvement Lunch of the year started on a positive note with the commemorative launch of the highly anticipated 25th Anniversary Book titled ‘Quality@NSC’. In her opening address, NSC Director A/Prof Tan Suat Hoon attributed the achievements of the Centre’s quality journey in the past 25 years to the joint effort of all NSC staff.

The audience was also invited to participate in two games—a puzzle piecing segment followed by a question-and-answer segment where answers could only be found in the Quality Book, resulting in a considerably lively atmosphere with staff actively flipping through the book for answers.

Ex-Consultant Dr Gavin Ong, then leader of Department of STI Control (DSC) Clinic’s Value Stream Mapping (VSM) project, presented his team’s initiatives aimed at streamlining current work processes and reducing patient waiting time. Since implementation of the “Urine Drop Box”, a box which allows patients to drop off urine samples without interrupting nurses’ treatments, workflow time has successfully been reduced by 44%. Patient satisfaction surveys conducted also showed increased satisfaction with DSC Clinic’s services.

Awards

NHG RECOGNITION AWARDS

Four of our own received NHG recognition awards at an awards ceremony held at Tan Tock Seng Hospital (TTSH) on 26 May. They have all made significant contributions and are fully deserving of their awards.

Prof Roy Chan, Senior Consultant, was presented with the NHG Distinguished Achievement Award, in recognition of both his invaluable work with the National Skin Centre, and his active participation towards the advancement of Dermatology and STI in Singapore and the evolvement of AIDS-related issues over the years.

A/Prof Chua Sze Hon, Senior Consultant, received the NHG Outstanding Citizenship Award for his numerous contributions to NSC as Deputy Director, Head of Medical Education Division, and Chief of Dermatological Surgery and Laser Unit.

Mr Peter Lee was presented with the NHG Distinguished Contributor Award for his dedication as member of the NSC Medifund Committee since April 1993 till present. He provided invaluable advice on ways to enhance administration of NSC Medifund assets.

A/Prof Ng See Ket, Senior Consultant, received the NHG Education Leader Award on Teachers’ Day 2014 for his contribution as lead teacher of Medical Officers, Residents, Visiting Clinical Fellows and Dermatology Senior Residents.
NATIONAL DAY AWARDS 2015

Eight of our staff were awarded at the National Day Awards this year, which acknowledges individuals who have made significant contributions to the public service. We are proud of the following well-deserving awardees for their recognition of their commitment and hard work!

The Efficiency Medal
Mr Eugene Lui, Senior Executive, Clinic Operations

Long Service Medal 2015
- Prof Roy Chan, Medical Advisor and Senior Consultant
- Ms Loo Swee Cheng, General Manager
- Mrs Tang Lee Foon, Head, Pharmacy
- Mr Mohd Adnan Bin Mahmud, Nurse Clinician
- Mr P Alfonsa Fernando, Senior Patient Service Associate
- Ms Bibi Miltit Kaur D/O S Tilok Singh, Senior Assistant Nurse
- Mr Siah Seck Yin, Medical Records Office (MRO) Administrative Assistant

NHG Teaching Excellence Awards
Six of our staff were awarded the NHG Teaching Excellence Awards 2015 for their commitment to teaching excellence and in promoting medical education.

NHG Teaching Award for Junior Clinicians
- Dr Aaron Tan Wei Min, Associate Consultant
- Dr Joel Lim Hua Liang, Senior Resident

NHG Teaching Award for Education Partners
Dr Goh Boon Kee, Visiting Consultant

NHG Outstanding Nurse Teachers 2015
Sister Tan Yoke Choo, Nurse Clinician, Phototherapy

NHG Teaching Award for Nursing Preceptors 2015
Mr Mohd Adnan Bin Mahmud, Nurse Clinician, DSC

NHG Teaching Award for Pharmacy Senior Preceptor 2015
Ms Elizabeth Tian, Principal Pharmacist Manager, Pharmacy Practice

A/PROF STEVEN THNG AWARDED THE SHBC SINGAPORE CLINICIAN- INVESTIGATOR AWARD

Senior Consultant A/Prof Steven Thng was presented with the top Singapore Clinician-Investigator Award at the Singapore Health and Biomedical Congress, held on 2nd-3rd October 2015.

For nearly 70% of vitiligo patients, twice-weekly phototherapy sessions of up to 10 minutes each can improve the condition within six months but many patients do not follow through with regular treatment due to the time taken to visit NSC. A/Prof Thng’s solution was to re-purpose a smaller, portable machine that uses ultraviolet light and loan it to vitiligo patients to take home, thus saving them the time and cost of coming to NSC for treatment.

A/Prof Thng performed a study of 44 patients and found that seven in 10 of those who underwent the regular institution treatment followed through, with the rest stopping halfway or going to the NSC only once a week. For the home phototherapy group, nine in 10 complied with the prescribed treatment sessions. 70% of those who went through the home treatment showed at least a 50% improvement in skin colour, compared with about half for the other group.

DR TEY HONG LIANG AWARDED THE NMRC TRANSITION AWARD

Consultant Dr Tey Hong Liang was awarded the highly coveted National Medical Research Council (NMRC) Transition Award, which aims to assist budding clinicians to foster their capability in research. The Transition Award will allow Dr Tey to dedicate 70% of his time to research, as well as provide funding support for Dr Tey’s research in the field of microneddles, neuro-dermatology, skin imaging and medical dermatology.

DR ETIENNE WANG AWARDED THE NMRC RESEARCH TRAINING FELLOWSHIP

Consultant Dr Etiennne Wang was awarded the National Medical Research Council (NMRC) Research Training Fellowship for his full time PhD in Cellular, Molecular and Biomedical Studies at Columbia University Medical Centre, New York, USA. The award will help Dr Wang in his training to become a Clinician Scientist in the field of hair biology and diseases.

Community Contributions and others

NSC JOINT COMMUNITY OUTREACH WITH NHG REGIONAL HEALTH TEAM TO LORONG LEW LIAN

In an effort to promote seamless and accessible patient and community care for Singaporeans, the National Skin Centre collaborated with the National Healthcare Group’s Regional Health Team to reach out to disadvantaged rental block residents to promote healthier living.

The Centre set up a skin assessment booth to check residents for any symptoms of skin diseases and arrange for necessary follow-up appointments at Polyclinics for further care and management. The volunteering staff also distributed goody bags filled with daily household necessities to those residents and paid house visits to those who were unable to come down on their own to receive them.

The event was part of the Centre’s purpose to give back to the community in ways that are meaningful and significant in improving the standard of living of the less fortunate.

NSC NURSING AND APEX HARMONY LODGE JOINT COLLABORATION TO PROVIDE BETTER SKINCARE FOR RESIDENTS

Following the successful first collaboration with Lions Home for the Elderly in 2014, the National Skin Centre (NSC) has partnered with Apex Harmony Lodge (AHL), a purpose built home for residents with dementia, to improve the quality of skin care for its residents. Since July 2015, half-day sessions were held monthly as NSC’s nurses conducted classroom education sessions, skin assessment and skin care planning for both AHL staff and residents.

The sessions were well received by both staff and residents alike. AHL staff was taught basic dermatological care so as to be able to address the residents’ skin care concerns, and residents saw a marked improvement in their skin conditions.
CARE AND COUNSELLING

On 20 November 2015, the Ministry of Health (MOH) launched the National Social Work Competency Framework (NSWCF). This serves as a guide for social workers to identify their roles and competencies at each job level according to national standards and chart their career and professional development plan. Medical Social Workers (MSWs) in the Care and Counselling department can now look forward to a more professional and structured career at NSC.

In collaboration with the Eczema Support Group, four eczema awareness events were carried out in 2015, with the highlight being the public forum in June, attended by over 100 participants.

CLINIC OPERATIONS

With the introduction of the Flexi-Medisave for elderly Singaporean patients at outpatient settings, our Medisave transactions increased from about approximately five to 50 on a daily basis.

The inclusion of Psoriasis under CDMP resulted in a high take-up rate of Medisave usage, mostly by patients from Psoriasis and...

LABORATORY

Over the past year, the laboratory observed a steady increase in the workload for our Mohs Surgery Testing every Tuesday and Wednesday. We have since installed a fully automated strainer in the lab to improve the turnaround time, as well as cope with the increase in workload.

In our Immunology Lab, a new ELISA reader – Tecan Nanoquant Infinite was installed to provide quicker and more efficient reading for ELISA testing like Desmoglein 1, BPI80, VDRL and Type VII Collagen.

In the DSC Lab, we have obtained full independent laboratory license and are able to provide a wider and more comprehensive range of services for both the DSC patients and those in external clinics. We have also started to run in-house HSV-PCR on the Roche Cobas 4800 to provide shorter turnaround time for Herpes Simplex Virus testing and to supersede the slower culture method.

New wireless temperature and humidity monitoring systems have been installed for all the laboratories, which employ software to monitor our fridges, incubators and cold room around the clock. It allows for automatic data back-up, gives real-time graphical displays and allows various options of alarm, all of which served to improve productivity and reduce cost.

MANAGEMENT INFORMATICS & TECHNOLOGY OFFICE

In 2015, the Management Information Support (MIS) department has been renamed to Management Informatics & Technology Office (MITO) to align to the current IT portfolio. MITO has accomplished three major milestones: the successful rollout of enhancements to the billing system to automate the processing of Medisave claims...
under the Chronic Disease Management Programme and Flexi-Medisave for the Elderly; upgrade of the database server of the Vesalius System (EMR); and the migration of NSC on-line appointment system and Patient Healthcare Portal to iHeS H-Cloud hosting. NSC has also changed the email domain to @nsc.com.sg from @nsc.gov.sg to align public health institutions under National Healthcare Group.

MITO actively supported the Tele-DERM programme initiated by A/Prof Tan Suat Hoon and led by Dr Heng Yee Kiat. The participating polyclinics take photos of patients’ lesions and upload them through the tele-DERM system for second opinion by the NSC doctor. The response is updated real-time and the polyclinic doctor receives the response immediately in this store-and-forward tele-dermatology.

NSC Medical Informatics & Healthcare Committee (MIHC) and a number of key NSC staff continued to be involved in the cluster wide EMR-Care Transformation Program. The team has been actively involved in the focus groups discussions and preparation for the request for proposal (RFP) document. While working on the cluster wide system, various enhancements were made on the existing EMR system to meet current requirements.

**NURSING**

**NURSING SERVICES**

In April 2015, the Phototherapy clinic acquired new machines - Dawland 1 series and Waldmann UVA700C for both UVB and UVA photo testing respectively. Waldmann UVA 700 emits higher irradiance of UVA light compared to the old machine, effectively reducing the shining time by about 15 minutes, halving the previous duration.

In March 2015, the STI trained nurses expanded their roles from merely running nurse-led services to being at the forefront of triaging to attend to approximately 300 patients per month with 50% expedited for same-day treatment.

In April 2015, the STI trained nurses had their jobs expanded this year to support direct nursing care, such as removal of wound dressing, medical scalp treatment and preparation of patch testing in clinics.

**COMMUNITY SERVICE**

In July and December, 20 of our nurses supported two health assessment and education events, organised by the Worldwide House of Transformation, Association of Diabetes Educators (Singapore) and Singapore Nurses Association, to promote awareness of STI control and Skincare. More than 100 migrant workers were directed for HIV screening at the Aid For Action mobile service, and a total of 800 male participants were guided on the proper control measures to prevent getting STI.

**PHARMACY**

As part of initiatives to address top gaps identified by the 2014 ISMP Self Assessment of baseline medication safety practices, a compulsory risk assessment for High alert medications (HAM) and the potential for error for look alike, sound alike (LASA) features was newly added to the listing process of new drugs by the Pharmacy & Therapeutics Committee.

Four small-scale RCAs were conducted to identify causes and address gaps in medication errors, resulting in adoption of an inhouse designed electronic prednisolone chart calculator on tapering doses, filling of the weekly dosing dispensing label as a forced function for methotrexate tablets, and keeping of a single brand of ciclosporin.

In line with MOH’s directive to review the safe use of multi dose vials (MDV) to avoid cross contamination, all MDVs in NSC were reviewed with the aim to be converted to single dose vials (SDV) in the smallest size available. Where SDV sizes were not available or practical, the MDV would continue with strict infection control practices.

15 PILs on medications were reviewed and updated; four new Product Guides were added, and 26 others with information on compositions and recommended use were updated. A new table of paediatric dosing for syrups was developed for the Pharmacy Notice board, with a useful in-built calculator by patient’s weight or age.

Pharmacists were involved in the dispensing and counselling of trial medications in six ongoing and three new drug trials.

The annual NSC Pharmacists’ CME Seminar this year was replaced by a Pharmacy Symposium on “The Dark Side of Light” as part of the biennial NSC Update in Dermatology and Venereology held on 5 and 6 September 2015. The pharmacists presented 2 topics in the Joint Teaching Symposium on “The Dark Side of Light” as part of the biennial NSC Update in Dermatology and Venereology held on 5 and 6 September 2015. The pharmacists presented 2 topics in the Joint Teaching Symposium on “The Dark Side of Light”, which was attended by more than 130 senior nursing managers and general nurses from healthcare institutions in Hong Kong.

Supported by the Nursing Fellowship Scholarships by Ego Pharmaceutical and Bioderma Laboratories, three nurses attended the British Dermatology Nursing Conference and Australian Dermatology Nursing Conference.
In March 2015, a publication “Quality @ NSC - 25 Years of Change in Dermatology and Venereology Care” was launched in collaboration with the Corporate Communications Department. This book provides a chronological highlight of the past twenty-five years of key quality milestones in NSC. Selected projects that were completed at different platforms such as Clinical Practice Improvement Programme (CPiP), Value Stream Mapping (VSM), Continuous Quality Improvement (CQI) and 6S were showcased in the book.

By customers in NSC retail pharmacy sustained a 92% reduction of unnecessary interruptions to cashiers.

Due to a change in business decision to use a different middleware, the LIVE date of the MOH funded Outpatient Pharmacy Automation Systems (OPAS) project targeted for end 2015 was postponed to mid-2016, to allow for interface integration enhancements between the robotic machine and our system to deliver a new closed loop process.

QUALITY

In Dec 2015, as part of a national movement to publicise clinical performance, a new indicator “Percentage of newly-diagnosed psoriasis patients started treatment in Psoriasis Clinic achieving at least 50% improvement in PASI (Psoriasis Area and Severity Index)” was added to the existing six subspecialty clinical performance indicators published since 2011.

In FY2015, a total of 261 Daily Improvement Suggestions were received, in a continuing staff suggestion scheme to encourage staff to submit ideas on improvement in work processes, safety matters and productivity.

In March 2015, a publication “Quality @ NSC” commemorative book was held on 21 October 2015 during which 31 staff were presented the Service Champion Award for their excellent service contributions. Five CQI projects were shared during the event. The winning project on “Pediatric patient: the patient for Walk - in assessment” from Nursing used the SBAR tool to improve the existing walk-in assessment form through clearer communication between individuals.

SUPPORT SERVICES

A total of three Preparation Rooms were set up for the administration of multi-dose vial (MDV) in the clinics in response to MOH’s directive to segregate preparation of MDV.

The patient holding room in the Centre’s lobby was converted into a second pharmacy office as part of the master plan to accommodate the proposed Outpatient Automation System (OPAS). An open corner at the main entrance was then converted into a patient holding room with a capacity for two bed trolleys.

To improve on fire safety, a new fire protection system was installed in the OSC Clinic. The safety system comprises of a network of heat sensors that are linked to a central control panel located at the main entrance. The control panel is able to identify the precise location of the heat detector which activates a fire alarm.

INFECTION CONTROL COMMITTEE

The infection control priorities for 2015 comprised four main categories:

1. Improving staff hand hygiene compliance rates
2. The prevention of sharps injuries amongst staff at NSC
3. Surgical site infection surveillance of Mohs micrographic surgery
4. Fast track/ isolation surveillance

In 2015, the NSC staff overall compliance rate for hand hygiene was 96%, which was above the target of 90%. NSC is one of the member institutions involved in the SHINE initiative, which aims to improve the quality of patient care and to reduce harm in healthcare institutions. The NSC team has chosen to focus on further improving hand hygiene as it is the single most effective measure to prevent healthcare-associated infections. Current interventions have been set in place and have shown a successful outcome. There were two sharps injuries sustained by staff in 2015. The centre continues its efforts to improve this. Our high quality of infection control was substantiated by a low infection rate for Mohs micrographic surgery. In 2015, a total of 161 procedures were done with only one surgical site infections (0.6%). For fast track/isolation surveillance, 100% of the MRSA, chicken pox and herpes zoster cases were fast tracked. For the scabies, the rate was 92%.

QUALITY ASSURANCE COMMITTEE

The Quality Assurance Committee (QAC) is the main steering committee at NSC that oversees issues with regard to quality improvement, patient safety and risk management. Members of the committee comprise leaders in management from different departments. The Director sits in the committee as the advisor.

The committee discusses and reviews matters pertaining to Enterprise Risk Management (ERM) which is directly under the purview of National Healthcare Group (NHG), Healthcare Performance Office (HPO) and Singapore Healthcare Improvement Network (SHINE) that are directly under the purview of the Standards & Quality Improvement Division (SQID), Ministry of Health. In 2015, the Centre chose to continue to participate in the Large Scale Initiative (LSI) on Hand Hygiene under the supervision and guidance of SHINE.

The committee meets quarterly to review, discuss and resolve issues arising, and prioritises quality improvement initiatives under the platform of key patient-centred standards, viz. International Patient Safety Goals (IPSG) and Healthcare organization management standards focusing on Quality Improvement and Patient Safety (QIPS) of the Joint Commission International (JCI). It also serves as a platform to facilitate cooperation between departments to resolve any lapses in delivering quality patient care, including facilitating the Root Cause Analysis (RCA) review process.

MEDICAL EDUCATION

NSC is actively involved in medical education and research activities to empower and add value to dermatological treatment and care. We organise courses in dermatology to update practitioners on the latest developments in clinical dermatology and our laboratory, while research facilities have been continually updated to complement our clinical teaching capabilities.
NSC is the main training centre for the National Dermatology Senior Residency Programme to groom residents into the next generation of dermatologists. This programme is designed to meet specific outcomes in the key competencies of patient care, medical knowledge, practice-based learning and improvement, interpersonal and communication skills, professionalism, system-based practice and development as future educators. It is preceded by broad-based clinical education via the Internal Medicine Residency Programme. The 3.5-year programme provides a continuous base of active participatory study and experience in dermatology and rotation through the various core dermatology subspecialties.

**SEAMLESS DERMATOLOGICAL TRAINING PROGRAMME**

This is an alternative route of dermatology specialist training with a focus on research. The 6.5-year programme aims to equip trainees with the basic dermatological sciences and research methodology with an intercalated year of research prior to starting clinical dermatology training. The outcome will be graduates who are well equipped to continue their career as a Clinician-Scientist / Researcher.

**MEDICAL EDUCATION FOR UNDERGRADUATES**

Undergraduates from the Yong Loo Lin School of Medicine, NUS, are trained in dermatology at NSC. Undergraduate medical education focuses on core curriculum of common dermatological diseases - their presentation and practical management. Clinical exposure at the clinics complements didactic lectures to provide foundational training in dermatology. Team-based learning during the posting reinforces key learning points. Formative mid-posting e-assessments and end-of-posting structured assessments are held to ensure competency and attainment of learning objectives. Year 3 undergraduates from the new medical school, Lee Kong Chian School of Medicine, NTU, also receive their dermatological education at NSC during their clinical training years. Elective postings are also open to students from Duke-NUS Graduate School of Medicine.

**UPGRADING OF PROFESSIONAL STANDARDS – DERMATOLOGY COURSES, FELLOWSHIPS, ATTACHMENTS**

As an education and research institution, NSC is actively involved in organising several teaching programmes in dermatology to familiarise medical practitioners with various clinical procedures and disease management. 27 participants from 4 countries graduated from the Graduate diploma in Family Practice Dermatology and another 23 doctors from Philippines attended the Clinical Dermatology Course for GPs.

The National Skin Centre, in collaboration with the Dermatological Society of Singapore, organises regular courses on commonly performed aesthetic procedures to familiarise participants with the well-established indications and the science underpinning the practice of aesthetic dermatology and equip them with the skills to perform aesthetic procedures safely. NSC hosted 44 overseas visiting fellows from 11 countries in general and subspecialties of dermatology. Of these, 10 were on the Stiefel Laboratories & NSC Dermatology Fellowship grant and the rest were on short term to long term attachments to our sub-specialty clinics.

**NSC UPDATE IN DERMATOLOGY & VENEREOLOGY 2015**

This biennial conference was held from 5-6 September 2015 at the Mandarin Orchard Hotel, Singapore. This meeting provided specialists, physicians and other healthcare professionals with up-to-date, impactful and informative educational opportunities. The keynote NSC Lecture was delivered by Professor Sean Whittaker, an eminent dermatologist at Guys and St Thomas’ and current President of the Royal Soc for Medicine. The keynote lecture was entitled “Dermoscopy: More than just papilloma viruses.

**SINGAPORE HEALTH & BIOMEDICAL CONGRESS 2015**

NSC participated in the Singapore Health & Biomedical Congress 2015 held on 2-3 October 2015 at the Max Atria @ Singapore Expo by holding dermatology tracks covering the topics of new skin imaging techniques, advances in paediatric dermatology, approach to adverse drug reactions, and vaccination against human papilloma viruses.

**CONTINUING MEDICAL EDUCATION**

A comprehensive range of CME activities were held throughout 2015 to ensure that doctors, nurses and allied health staff maintain their professional competency. These include in-house journal clubs, book clubs, peer review learning, interdisciplinary seminars and teaching sessions by visiting experts. Staffs are also sponsored to attend local and overseas conferences for the latest updates in their relevant fields.

The Centre’s firm and rigorous commitment to Medical Education continues to affirm NSC as the region’s foremost dermatological training centre.
### EDUCATION ACTIVITIES FOR 2015

<table>
<thead>
<tr>
<th>Title of Programme</th>
<th>No. of Participants</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSC Update in Dermatology and Venereology 2015</td>
<td>471</td>
<td>5 &amp; 6 September 2015</td>
</tr>
<tr>
<td>Pre-Conference Workshop 1</td>
<td>60</td>
<td>4 Sep 2015</td>
</tr>
<tr>
<td>Pre-Conference Workshop 2</td>
<td>53</td>
<td>4 Sep 2015</td>
</tr>
<tr>
<td>Pre-Conference Workshop 3</td>
<td>48</td>
<td>4 Sep 2015</td>
</tr>
<tr>
<td>Pre-Conference Workshop 4</td>
<td>27</td>
<td>4 Sep 2015</td>
</tr>
<tr>
<td>Graduate Diploma in Family Practice Dermatology</td>
<td>29</td>
<td>5 Jan - 29 Nov 2015</td>
</tr>
<tr>
<td>Clinical Dermatology Course For GPs</td>
<td>12</td>
<td>6-10 April 2015</td>
</tr>
<tr>
<td>Yong Loo Lin-National University of Singapore Final Year Medical Students Clinical Posting</td>
<td>277</td>
<td>12 Jan - 27 Nov 2015</td>
</tr>
<tr>
<td>Lee Kong Chian School of Medical Year 3 Students Clinical Posting</td>
<td>17</td>
<td>12 Oct - 20 Nov 2015</td>
</tr>
<tr>
<td>Graduate Duke-NUS Year 3/4 Clinical Elective Posting</td>
<td>8</td>
<td>9 Feb - 18 Dec 2015</td>
</tr>
<tr>
<td>Elective Students Posting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Yong Loo Lin-National University of Singapore</td>
<td>5</td>
<td>9 Mar - 12 Jun 2015</td>
</tr>
<tr>
<td>b) Overseas</td>
<td>12</td>
<td>5 Jan - 25 Dec 2015</td>
</tr>
<tr>
<td>School Attachment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Tertiary Institution (Job Shadowing)</td>
<td>37</td>
<td>6 Apr - 30 Dec 2015</td>
</tr>
<tr>
<td>b) Nanyang Nursing Student Attachment</td>
<td>139</td>
<td>11 May - 19 Nov 2015</td>
</tr>
<tr>
<td>Specialized Dermatology Observership Attachment:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Dermatologic Surgery</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>b) Dermatology (Contact Dermatitis)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>c) Dermatology (Dermatopathology)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>d) Dermatology (Photobiology &amp; Phototherapy)</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>e) Dermatology (Pediatric)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>General Dermatology Observership Attachment: - Overseas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Self – Sponsored</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>b) Stelafi Laboratories &amp; NSC Dermatology Fellowship</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>c) Dermatological Society of Singapore (AAD Grant)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>General Dermatology Observership Attachment: - Local</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NHG Advance Internal Medicine</td>
<td>6</td>
<td>2 Jan 2015 - 31 Dec 2015</td>
</tr>
</tbody>
</table>

### Education Activities

<table>
<thead>
<tr>
<th>Event</th>
<th>No.</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSG Emergency Medicine</td>
<td>1</td>
<td>7 Dec - 31 Dec 2015</td>
</tr>
<tr>
<td>NSG Geriatric Medicine</td>
<td>1</td>
<td>1 Jul 2015 - 2 Aug 2015</td>
</tr>
<tr>
<td>NSG, Department of Pathology</td>
<td>1</td>
<td>3 Aug 2015 - 6 Sep 2015</td>
</tr>
<tr>
<td>NHG, Department of Pathology</td>
<td>2</td>
<td>19 Jun 2015 - 25 Sep 2015</td>
</tr>
<tr>
<td>NSC, Graduate Diploma in Family Practice Dermatology</td>
<td>1</td>
<td>5 Oct 2015 - 29 Oct 2015</td>
</tr>
<tr>
<td>NUH Paediatrics</td>
<td>1</td>
<td>30 Nov 2015 - 11 Dec 2015</td>
</tr>
<tr>
<td>SGH, Department of Pathology</td>
<td>1</td>
<td>2 May 2015 - 27 May 2015</td>
</tr>
<tr>
<td>Singapore, Department of Infectious Diseases</td>
<td>3</td>
<td>1 Apr 15 - 11 Jun 15</td>
</tr>
<tr>
<td>SNEC, Dept of Pathology</td>
<td>1</td>
<td>1 Feb 15 - 28 Feb 15</td>
</tr>
<tr>
<td>TCSH, Department of Pathology</td>
<td>2</td>
<td>5 May 2015 - 6 Sep 2015</td>
</tr>
</tbody>
</table>

### Visiting Clinical Fellowships: Overseas

<table>
<thead>
<tr>
<th>Periods</th>
<th>No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) PGIM (Sri Lanka)</td>
<td>2</td>
</tr>
<tr>
<td>b) Ministry of Health (Oman)</td>
<td>1</td>
</tr>
<tr>
<td>d) Victoria Faculty Fellowship (Australia)</td>
<td>3</td>
</tr>
</tbody>
</table>

### General Dermatology Clinical Attachment: Local

<table>
<thead>
<tr>
<th>Periods</th>
<th>No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>TTSH, Department of General Medicine</td>
<td>4</td>
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<tr>
<td>TTSH, Department of Internal Medicine</td>
<td>11</td>
</tr>
</tbody>
</table>

### Medical Practitioners' Seminar

<table>
<thead>
<tr>
<th>Periods</th>
<th>No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practice Approach To Eczema Management</td>
<td>116</td>
</tr>
</tbody>
</table>

### NSG Public Forum 2015

<table>
<thead>
<tr>
<th>Event</th>
<th>No.</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chinese Public Forum - 肌本问题, 基本护理</td>
<td>72</td>
<td>10-Oct-15</td>
</tr>
<tr>
<td>Eczema Support Group Public Forum</td>
<td>122</td>
<td>27-Jun-15</td>
</tr>
</tbody>
</table>

### Dermatology Nursing Course

<table>
<thead>
<tr>
<th>No.</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>24 Jul 2015 - 4 Sep 2015</td>
</tr>
</tbody>
</table>

### DSS-NSC Aesthetic Procedure Training Courses

<table>
<thead>
<tr>
<th>Event</th>
<th>No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Botox</td>
<td>17</td>
</tr>
<tr>
<td>b) IPL</td>
<td>13</td>
</tr>
<tr>
<td>c) Dermal Fillers</td>
<td>14</td>
</tr>
<tr>
<td>d) Chemical Peels</td>
<td>11</td>
</tr>
<tr>
<td>e) Laser Hair Removal</td>
<td>11</td>
</tr>
</tbody>
</table>
RESEARCH

2015 was a fruitful year for the Research team in NSC, with 8 new industry sponsored studies and 24 new initiated projects. We continued to have a successful publication output, with a total of 79 publications.

EXTRAMURAL GRANTS

There was a significant increase in the number of extramural research grants obtained.

<table>
<thead>
<tr>
<th>No</th>
<th>Project Title</th>
<th>NSC Lead</th>
<th>Name of Grant</th>
<th>Amount Awarded</th>
<th>Grant Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Keloids: Therapy with drug-free solid and steroid-laden hyaluronic acid dissolving Microneedles</td>
<td>Dr Tey Hong Liang</td>
<td>NMRC Transition Award</td>
<td>$375,000</td>
<td>12 May 2015 to 11 May 2018 (36 months)</td>
</tr>
<tr>
<td>2</td>
<td>Epidermal Stem Cells’ Response to Chronic Cell Loss</td>
<td>Dr Etienne Wang</td>
<td>NMRC Research Training Fellowship</td>
<td>$496,821</td>
<td>September 2015 - August 2018 (36 months)</td>
</tr>
<tr>
<td>3</td>
<td>Design and development of an algorithm that automatically segment and calculate the area and severity of vitiligo on the trunk of patients for assessment of extent of disease and response to treatment in patients with vitiligo</td>
<td>Dr Anjali Jhingan</td>
<td>NHG Small Innovative Grant 2015</td>
<td>$90,000</td>
<td>1 July 2015 to 30 June 2017 (24 months)</td>
</tr>
<tr>
<td>4</td>
<td>A left-right randomized double-blind placebo-controlled study to evaluate the efficacy of platelet rich plasma for the treatment of androgenetic alopecia</td>
<td>Dr Chua Sai Yee</td>
<td>NHG Small Innovative Grant 2015</td>
<td>$76,348</td>
<td>1 July 2015 to 30 June 2017 (24 months)</td>
</tr>
<tr>
<td>5</td>
<td>Double blind split face study to evaluate of the effectiveness of topical metformin as compared to placebo for the treatment of Melasma</td>
<td>A/Prof Steven Thng</td>
<td>NHG Small Innovative Grant 2015</td>
<td>$75,681</td>
<td>1 July 2015 to 30 June 2017 (24 months)</td>
</tr>
<tr>
<td>6</td>
<td>Genomic Profiling of Type III Hypersensitivity in Cutaneous Vasculitis</td>
<td>Dr Tey Hong Liang</td>
<td>NHG Small Innovative Grant 2015</td>
<td>$76,348</td>
<td>1 July 2015 to 30 June 2017 (24 months)</td>
</tr>
<tr>
<td>7</td>
<td>Efficacy of narrowband ultraviolet B versus combined ultraviolet A-narrowband UVB phototherapy in the treatment of atopic dermatitis: a randomised double-blind study</td>
<td>Dr Eugene Tan</td>
<td>NHG Clinician Leadership in Research Programme</td>
<td>$10,000</td>
<td>1 July 2015 to 30 June 2017 (24 months)</td>
</tr>
<tr>
<td>8</td>
<td>To develop a pilot tool to assess nurses’ competency in counseling patients with atopic dermatitis or psoriasis</td>
<td>Dr Mabel Leow</td>
<td>NHG- HOMER Grant</td>
<td>$4,300</td>
<td>22 April 2015 - 31 March 2016 (12 months)</td>
</tr>
</tbody>
</table>

KEY ACHIEVEMENTS

We continued to derive new knowledge and important insights from our clinical and epidemiological research projects. For instance, research projects conducted in the research-intensive subspecialty clinics, namely the Eczema, Psoriasis, Skin Cancer and Pigment Disorder clinics, have allowed faster turn-around of research projects, which have yielded clinically relevant information. For example, the Eczema team completed a large study that found a very high prevalence of corticosteroid induced cutaneous adverse effects in adult patients with moderate to severe AD. More importantly, it found that dermoscopy was a valuable tool that enabled the detection of subclinical atrophy, which may allow for earlier intervention and prevention of these complications. Additionally, our large patient database and comprehensive research facilities have enabled us to attract industry drug trials which have given our patients access to cutting edge treatment options in psoriasis, vitiligo, melasma and atopic dermatitis.

There are several completed and on-going research projects evaluating the use of new and innovative non-invasive skin imaging to improve clinical care. For instance, the recently developed and validated automated digital image scoring system for melasma has recently developed and validated automated digital image scoring system for melasma has the potential to make a significant impact in the clinic as it provides an objective, consistent and convenient method for the evaluation of a very common disease. This scoring system may also guide treatment and determine treatment response. The research done using optical coherence tomography is new and innovative and has identified new clinical applications that are being further explored across a range of different skin conditions. Additionally, L’Oreal located their skin imaging laboratory in NSC which has provided new funding and manpower resources for further collaborative studies using state of the art imaging systems.

We launched a competitive NSC Research Studentship for Medical Students to spark their interest in academic dermatology. We attracted 17 applicants, from which two students were chosen.

Finally, we are proud of our clinicians who are breaking new ground with their research work. Consultant Dr Tey Hong Liang was successfully awarded the highly coveted NMRC Transition Award while Consultant Dr Chua Sai Yee received the NHG Clinician Scientist (Junior) Award. These talent development programs will allow them to spend 70% and 20% of their time, respectively, in research. Dr Tey’s research is in the field of microneedles, neuro-dermatology, skin imaging and medical dermatology. Dr Chua is involved in pigment and skin imaging research, focusing on in-vivo confocal microscopy. We are also proud of Dr Yew Yik Weng, who recently completed the Masters in Epidemiology & Biostatistics at Harvard School of Public Health and will be involved in health outcome and epidemiological research in high burden skin conditions such as Eczema and Acne.
RESEARCH AWARDS

<table>
<thead>
<tr>
<th>Name of Awardee</th>
<th>Award</th>
<th>Study / Presentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>A/Prof Steven Thng</td>
<td>SHBC Singapore Clinician Investigator Award – First Prize</td>
<td>Bringing Therapy To The Patient. A Study On The Efficacy, Compliance And Cost Effectiveness Of Home Based Phototherapy As Opposed To Institution Based Phototherapy For The Treatment Of Patients With Focal Vitiligo</td>
</tr>
<tr>
<td>Dr Tey Hong Liang</td>
<td>SHBC Singapore Clinician Investigator Award - Fifth Prize</td>
<td>Three-Dimensional Automated Segmentation Of Skin Layers In In-Vivo High-Definition Coherence Tomography: Redefining The Pathology Of Miliaria Profunda And Provision Of A Novel Treatment</td>
</tr>
<tr>
<td>Dr Dwi Pramono Sarengat</td>
<td>SHBC Best Poster Award - Basic Science/Translational Research - First Prize</td>
<td>Specific Knockdown Of Long Thymic Stromal Lymphopoietin (TSLP) Variant Using Antisense Oligonucleotide</td>
</tr>
<tr>
<td>Dr Wong Yisheng</td>
<td>NSC Dermatology &amp; Venereology Update 2015 - Best Poster</td>
<td>Frequent Low Fluence, Large Spot Size Qs Ndyag Laser Treatment Induced Hypopigmentation</td>
</tr>
<tr>
<td>Dr Wang Ding Yuan</td>
<td>NSC Dermatology &amp; Venereology Update 2015 - Best Clinical &amp; Research Papers</td>
<td>Hidradenitis Suppurativa: A Human Leucocyte Antigen Gene Association Study In Singaporean Chinese Patients</td>
</tr>
<tr>
<td>Cao Ruoxi</td>
<td>NSC Dermatology &amp; Venereology Update 2015 - Best Clinical &amp; Research Papers</td>
<td>Clinical And Histopathological Predictors Of Systemic Disease In Adult Henoch-Schönlein Purpura</td>
</tr>
<tr>
<td>Sophie Cai</td>
<td>Dermatological Society of Singapore Annual Scientific Meeting 2015 - Best Research Study</td>
<td>Topical tacrolimus in endogenous eczema and cancer association.</td>
</tr>
<tr>
<td>Brian Chia KY</td>
<td>Dermatological Society of Singapore Annual Scientific Meeting 2015 - Best Case Report</td>
<td>Central anhidrosis secondary to intracranial haemorrhage</td>
</tr>
</tbody>
</table>

CLINICAL TRIALS

This year was a busy year for clinical trials in NSC, with several new and ongoing collaborations.

<table>
<thead>
<tr>
<th>No</th>
<th>Project Title</th>
<th>NSC Lead Principal Investigator</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A left-right randomized double-blind placebo-controlled study to evaluate the efficacy of platelet rich plasma for the treatment of androgenetic alopecia.</td>
<td>Dr Chuah Sai Yee</td>
</tr>
<tr>
<td>2</td>
<td>Double blind split face study to evaluate of the effectiveness of topical metformin as compared to placebo for the treatment of Melasma</td>
<td>A/Prof Steven Thng</td>
</tr>
<tr>
<td>3</td>
<td>Efficacy of narrowband ultraviolet B versus combined ultraviolet A-narrowband ultraviolet B phototherapy in the treatment of atopic dermatitis: a randomized double-blind study</td>
<td>Dr Eugene Tan</td>
</tr>
<tr>
<td>4</td>
<td>A Phase 3 Confirmatory Study Investigating the Efficacy and Safety of Dupilumab Monotherapy Administered to Adult Patients with Moderate-to-Severe Atopic Dermatitis</td>
<td>A/Prof Mark Tang</td>
</tr>
<tr>
<td>5</td>
<td>Atorvastatin in active vitiligo: a bicentric prospective randomized trial</td>
<td>Dr Chuah Sai Yee</td>
</tr>
<tr>
<td>6</td>
<td>Keloids: Therapy with drug-free solid and steroid-laden hyaluronic acid dissolving Microneedles</td>
<td>Dr Tey Hong Liang</td>
</tr>
<tr>
<td>7</td>
<td>Efficacy of photodynamic therapy using topical 10% 5-aminolaevulinic acid and intense pulsed light in the treatment of moderate to severe acne vulgaris</td>
<td>Dr Lucinda Tan</td>
</tr>
<tr>
<td>8</td>
<td>An Asian, Phase 3, Multicenter, Randomized, Double-Blind, Placebo-Controlled 14-Week Study Of DS-5565 In Patients With Post-Herpetic Neuralgia Followed By A 52-Week Open-Label Extension</td>
<td>Dr Pan Jiun Yit</td>
</tr>
<tr>
<td>9</td>
<td>Use of Photoacoustic Imaging for Diagnosis and Delineation of Non-melanoma skin cancer</td>
<td>Dr Chuah Sai Yee</td>
</tr>
<tr>
<td>10</td>
<td>Efficacy, tolerability and safety of brimonidine gel for rosacea in Asians</td>
<td>Dr Hazel Oon</td>
</tr>
<tr>
<td>11</td>
<td>Clinical Study to Evaluate the Performance of the Picoway Dual Wavelength Picosecond Laser for Treatment of Melasma and Skin Rejuvenation</td>
<td>Prof Goh Chee Leok</td>
</tr>
<tr>
<td>12</td>
<td>Database and tissue bank for patients with atopic dermatitis at National Skin Centre</td>
<td>A/Prof Mark Tang</td>
</tr>
<tr>
<td>No.</td>
<td>Project Title</td>
<td>NSC Lead Principal Investigator</td>
</tr>
<tr>
<td>-----</td>
<td>-------------------------------------------------------------------------------</td>
<td>--------------------------------</td>
</tr>
<tr>
<td>1</td>
<td>The role of in vivo reflectance confocal microscopy imaging in assessing the stability of vitiligo vulgaris prior to cellular grafting</td>
<td>A/Prof Steven Thng</td>
</tr>
<tr>
<td>2</td>
<td>Skin Pigmentation Using Non-invasive Optical Devices</td>
<td>A/Prof Steven Thng</td>
</tr>
<tr>
<td>3</td>
<td>Genomic analysis of Ageing: Transcriptome comparison of old versus young skin of Singapore female Chinese population</td>
<td>A/Prof Mark Tang</td>
</tr>
<tr>
<td>4</td>
<td>Genomic Profiling of Type III Hypersensitivity in Cutaneous Vasculitis</td>
<td>Dr Tey Hong Liang</td>
</tr>
<tr>
<td>5</td>
<td>Design and development of an algorithm that automatically segment and calculate the area affected by vitiligo on the trunk of patients for assessment of extent of disease and response to treatment in patients with vitiligo</td>
<td>Dr Anjali Jhingan</td>
</tr>
<tr>
<td>6</td>
<td>Genotype-phenotype correlations of human leucocyte antigen-C with psoriasis and metabolic syndrome in a Singapore population: a prospective cohort study</td>
<td>Dr Eugene Tan</td>
</tr>
<tr>
<td>7</td>
<td>Establishment of Basal Cell Carcinoma Cell Lines</td>
<td>Dr Evelyn Tay</td>
</tr>
<tr>
<td>8</td>
<td>DNA mutation analysis for the diagnosis of genodermatoses</td>
<td>Dr Madeline Ho</td>
</tr>
<tr>
<td>9</td>
<td>Efficacy of two different liquid nitrogen cryotherapy regimes in the treatment of plantar viral warts: a prospective comparative study</td>
<td>Dr Eugene Tan</td>
</tr>
<tr>
<td>10</td>
<td>Immunofluorescence mapping for the diagnosis of congenital epidermolysisbullosa</td>
<td>Dr Madeline Ho</td>
</tr>
<tr>
<td>11</td>
<td>Trends in Standard Series Allergens 2009-2013</td>
<td>Dr Suzanne Cheng</td>
</tr>
<tr>
<td>12</td>
<td>Epidemiology study on contact allergy seen at National Skin Centre in Singapore, between 2004-2014</td>
<td>Prof Goh Chee Leok</td>
</tr>
<tr>
<td>13</td>
<td>Chronic pruritic and dyshidrotic conditions managed in the Itch Clinic of the National Skin Centre Singapore: Characterisation and Response to therapy.</td>
<td>Dr Tey Hong Liang</td>
</tr>
<tr>
<td>14</td>
<td>Patch test characteristics of patients referred for contact dermatitis of the hands and face compared to other sites. A 10 year cross sectional study at the National Skin Centre, Singapore</td>
<td>Prof Goh Chee Leok</td>
</tr>
<tr>
<td>15</td>
<td>Adverse drug reactions associated with oral ciclosporin use in dermatology outpatients</td>
<td>Benny Li</td>
</tr>
<tr>
<td>16</td>
<td>Treatment of primary palmar hyperhidrosis using glycopyrrolate iontophoresis: dosing of electrical current, efficacy, and side effects</td>
<td>Dr Mabel Leow</td>
</tr>
<tr>
<td>17</td>
<td>Characterisation of inpatient dermatological diseases: a retrospective analysis</td>
<td>Dr Tey Hong Liang</td>
</tr>
<tr>
<td>18</td>
<td>Retrospective review of lichen planus pigmentosus, erythema dyschromicum perstans and ashy dermatosis? risk factors, clinicopathologic features, and treatment outcomes</td>
<td>Dr Chuah Sai Yee</td>
</tr>
<tr>
<td>19</td>
<td>Efficacy of Q-switched Neodymium-Doped Yttrium Aluminium Garnet Laser in treating xanthelasmas in Asian skin</td>
<td>Dr Tan Wee Ping</td>
</tr>
<tr>
<td>20</td>
<td>Retrospective review of late-onset and pregnancy-onset vitiligo at the National Skin Centre</td>
<td>Dr Kong Yan Ling</td>
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<tr>
<td>21</td>
<td>Retrospective Review of the Clinico-Epidemiological Profile of Childhood Vitiligo</td>
<td>Dr Evelyn Tay</td>
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<tr>
<td>22</td>
<td>Adult Acne in a Multiracial Asian Population</td>
<td>Dr Hazel Oon</td>
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<tr>
<td>23</td>
<td>Effects of Proteinase-Activated Receptor-2 Inhibitor on Cowhage-induced Pruritus</td>
<td>Dr Tey Hong Liang</td>
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<tr>
<td>24</td>
<td>The Association Between Quality of Life and Self-care in Singaporeans Living with Psoriasis</td>
<td>Chua Rongyue Ryan</td>
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<tr>
<td>25</td>
<td>Rosacea in a Multi-ethnic Southeast Asian Population</td>
<td>Dr Hazel Oon</td>
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<tr>
<td>26</td>
<td>Counselling needs of patients with atopic dermatitis or psoriasis</td>
<td>Dr Mabel Leow</td>
</tr>
<tr>
<td>27</td>
<td>An open-label study of Dupilumab in patients with atopic dermatitis who participated in previous Dupilumab clinical trials</td>
<td>A/Prof Mark Tang</td>
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<tr>
<td>28</td>
<td>Research study on evaluation of the role of microbes in dandruff and sebhorroic dermatitis</td>
<td>A/Prof Steven Thng</td>
</tr>
<tr>
<td>29</td>
<td>A validation study of the patient-oriented SCORAD (PO-SCORAD) scale in Atopic Dermatitis</td>
<td>A/Prof Mark Tang</td>
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<tr>
<td>30</td>
<td>Double blind placebo controlled trial to evaluate the effectiveness of a dietary supplement rich in colourless carotenoids for skin lightening and evenness</td>
<td>A/Prof Steven Thng</td>
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<tr>
<td>31</td>
<td>A Phase 3, Randomized, Double Blind Placebo-Controlled Study Investigating The Efficacy And Safety Of Multiple Dupilumab Dose Regimens Administered As Monotherapy For Maintaining Treatment Response In Patients With Atopic Dermatitis</td>
<td>A/Prof Mark Tang</td>
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<tr>
<td>32</td>
<td>Counselling needs of patients with atopic dermatitis or psoriasis</td>
<td>Dr Mabel Leow</td>
</tr>
<tr>
<td>33</td>
<td>Keloids: Therapy with drug-free solid and steroid-laden hyaluronic acid dissolving Microneedles</td>
<td>Dr Tey Hong Liang</td>
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<tr>
<td>34</td>
<td>The Association Between Quality of Life and Self-care in Singaporeans Living with Psoriasis</td>
<td>Brenda Lim</td>
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</tbody>
</table>
## Statistics 2015

### TOP TEN DISEASES

<table>
<thead>
<tr>
<th>Disease</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
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<tbody>
<tr>
<td>DERMATITIS / ECZEMA</td>
<td>1 22,047</td>
<td>1 20,537</td>
<td>1 19,307</td>
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<tr>
<td>ACNE</td>
<td>2 7,212</td>
<td>2 6,786</td>
<td>2 6,486</td>
</tr>
<tr>
<td>BENIGN TUMOURS</td>
<td>3 7,931</td>
<td>3 6,720</td>
<td>3 6,441</td>
</tr>
<tr>
<td>VIRAL INFECTIONS</td>
<td>4 5,042</td>
<td>4 4,601</td>
<td>4 4,550</td>
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<tr>
<td>PIGMENTATION DISORDERS</td>
<td>5 4,654</td>
<td>5 4,231</td>
<td>5 3,976</td>
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<tr>
<td>HAIR DISORDERS</td>
<td>6 3,831</td>
<td>6 3,172</td>
<td>6 2,930</td>
</tr>
<tr>
<td>FUNGAL SKIN INFECTIONS</td>
<td>7 2,795</td>
<td>7 2,700</td>
<td>7 2,407</td>
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<tr>
<td>URTICARIA</td>
<td>8 2,916</td>
<td>8 2,517</td>
<td>8 2,398</td>
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<tr>
<td>NAEVI</td>
<td>9 2,361</td>
<td>9 2,173</td>
<td>9 1,878</td>
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<tr>
<td>PSORIASIS</td>
<td>10 1,836</td>
<td>10 1,745</td>
<td>10 1,664</td>
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### LABORATORY WORKLOAD

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<tr>
<th></th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
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<tbody>
<tr>
<td>MICROBIOLOGY</td>
<td>44,762</td>
<td>41,825</td>
<td>39,322</td>
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<tr>
<td>HISTOPATHOLOGY</td>
<td>143,987</td>
<td>139,971</td>
<td>131,667</td>
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<tr>
<td>IMMUNOLOGY</td>
<td>114,517</td>
<td>114,691</td>
<td>121,486</td>
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<tr>
<td>BIOCHEMISTRY</td>
<td>67,153</td>
<td>67,955</td>
<td>68,423</td>
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<tr>
<td>HAEMATOLOGY</td>
<td>53,605</td>
<td>54,320</td>
<td>54,894</td>
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<tr>
<td>OTHERS</td>
<td>2,012</td>
<td>2,170</td>
<td>2,417</td>
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<tr>
<td><strong>Total</strong></td>
<td>426,036</td>
<td>420,172</td>
<td>418,209</td>
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### WORKLOAD AND STAFF

#### PATIENT ATTENDANCE

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Non-Subsidised</th>
<th>Subsidised</th>
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<tbody>
<tr>
<td>2015</td>
<td>306,159</td>
<td>124,393</td>
<td>181,766</td>
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<tr>
<td>2014</td>
<td>308,560</td>
<td>130,251</td>
<td>178,309</td>
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<tr>
<td>2013</td>
<td>301,847</td>
<td>132,059</td>
<td>169,788</td>
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#### SURGICAL OPERATIONS OR PROCEDURES

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Outpatients</th>
<th>Day Surgery Patents</th>
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<tbody>
<tr>
<td>2015</td>
<td>154,080</td>
<td>140,230</td>
<td>13,850</td>
</tr>
<tr>
<td>2014</td>
<td>156,999</td>
<td>141,383</td>
<td>15,616</td>
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<tr>
<td>2013</td>
<td>171,000</td>
<td>154,990</td>
<td>16,010</td>
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#### STAFF

<table>
<thead>
<tr>
<th>Year</th>
<th>Medical</th>
<th>Nursing</th>
<th>Allied Health</th>
<th>Admin</th>
<th>Ancillary</th>
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<tbody>
<tr>
<td>2015</td>
<td>75</td>
<td>60</td>
<td>81</td>
<td>53</td>
<td>115</td>
</tr>
<tr>
<td>2014</td>
<td>64</td>
<td>62</td>
<td>76</td>
<td>87</td>
<td>85</td>
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<tr>
<td>2013</td>
<td>51</td>
<td>58</td>
<td>73</td>
<td>49</td>
<td>105</td>
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</tbody>
</table>
**Medical Staff Listing**

**DIRECTOR / SENIOR CONSULTANT**

Clinical Assoc Prof TAN Suet Hoon
MBBS, MMed (Int Med), Dip. RC Path (DMT), FAMS
Clinical Interests: Cutaneous Lymphomas, Dermatopathology

**SENIOR CONSULTANTS**

Clinical Prof CHAN Kum Wah, Roy
MBBS, MRCP (UK), FRCP (Lond), Dip. Derm (Lond), Dip. Ven (Lond), FAMS
Clinical Interest: Sexually Transmitted Infections & HIV, Hair

Dr CHIO Tze-Wei, Martin
MB ChB (Bristol), MSc (Lond), MRCP (UK), FRCR (Lond), FAMS
Clinical Interests: Skin Cancers, Sexually Transmitted Infections & HIV

Adjunct Assoc Prof CHONG Wei Sheng
MBBS, MRCP (UK), FRCR (Edin), FAMS
Clinical Interests: Dermatopathology, Psoriasis

Clinical Assoc Prof CHUA Sze Hon
MBBS, MRCP (UK), FRCP (Edin), MAMS
Clinical Interests: Dermatological & Laser Surgery

Clinical Prof GOH Boon Kee
MBBS, MSc (Occup Med), FAMS
Clinical Interests: Skin Cancers, Cutaneous Lymphomas, Dermatopathology

SENIOR CONSULTANTS

Clinical Assoc Prof NG See Ket
MBBS, MMed (Int Med)
Clinical Interest: Medical Dermatology

Dr LEOW Yung Hian
MBBS, MMed (Int Med), FAMS
Clinical Interest: Contact & Occupational Dermatitis

Dr LIM Yen Loo
MBBS, MRCP (UK), FAMS, FRCR (Edin)
Clinical Interests: Immunodermatology, Eczema, Drug Enquiries
(From 1 August 2015)

Clinical Assoc Prof NG See Ket
MBBS, MMed (Int Med)
Clinical Interest: Medical Dermatology

Dr CHAN Wai Sze, Agnes
MBBS, MPH (Harvard, USA)
Clinical Interest: Contact & Occupational Dermatitis

Clinical Assoc Prof GIAM Yoke Chin
MBBS, MRCP (UK), M Med (Int Med), FRCP (Edin), FAMS
Clinical Interest: Dermatological & Occupational Dermatitis

Clinical Assoc Prof TANG Boon Yang, Mark
MBBS, MRCP (UK), M Med (Int Med), FRCP (Edin), FAMS
Clinical Interests: Wound & Ulcer Management, Cutaneous Lymphoma, Eczema

Clinical Assoc Prof THNG Tien Guan, Mark
MBBS, MRCP (UK), FAMS
Clinical Interests: Dermatological & Laser Surgery, Cutaneous Lymphoma, Skin Cancer

Clinical Assoc Prof TAN Kian Teo
MBBS, MRCP (UK), FAMS
Clinical Interests: Skin Cancer, Contact and Occupational Dermatitis

Clinical Assoc Prof YAM Yoke Chin
MBBS, MMed (Path), FAMS
Clinical Interests: Paediatric Dermatology

Dr LEE Siong See, Joyce
MBBS, MRCP (UK), M Med (Int Med), FAMS, Dip Dermatopathology (ICDP-UEMS)
Clinical Interests: Dermatopathology, Skin Cancers

Dr CHUAH Sai Yee
MB ChB (Glascow), MRCP (UK), Dip In Derm (RCPath), MRCP (Glasc)
Clinical Interest: Pigmentary Disorders (From 1 September 2015)

Dr HENG Yee Kiat
MBBS, MRCP (UK), M Med (Int Med)
Clinical Interests: Photodermatology, Psoriasis, Drug Eruptions

Dr HO Giao Yun, Stephanie
MB ChB (Edin), MRCP (UK)
Clinical Interests: Dermatological & Laser Surgery

Dr HO Sheun Ling, Madeline
MBChB (Edin), MRCP (UK), MMed (Int Med), MRCS (Edin), MAMS
Clinical Interest: Paediatric Dermatology

Dr OON Hwee Boon, Hazel
MD (Toronto), MRCP (UK), M Med (Int Med), GDFM, FAMS
Clinical Interests: Photodermatology, Psoriasis

Dr PAN Jian Yit
MBBS, MRCP (UK), Dip Derm (RCPath), Dip Derm (RCP                                                            Glas), Dip Derm (RCP (Edin), FAMS
Clinical Interests: Cutaneous Infections, Photodermatology, Psoriasis

Dr TAN Sem Ting, Eugene
MBBS, FAMS
Clinical Interests: Photodermatology, Psoriasis, Paediatric Dermatology
(From 1 July 2015)

Dr TAN Siny, Lucinda
MBBS, MRCP (UK), M Med (Int Med)
Clinical Interest: Paediatric Dermatology, Immunodermatology
(From 1 August 2015)

Dr TAN Wee Ping, Melissa
MBBS, MRCP (UK), M Med (Int Med)
Clinical Interests: Dermatological & Laser Surgery, Cutaneous Lymphoma, Skin Cancer

Dr TEE Shan-Ian
MBBS, MRCP (UK), FAMS, Dip Dermatopathology (ICDP-UEMS)
Clinical Interests: Dermatopathology, Cutaneous Lymphomas, Urticaria

Dr Tey Hong Liang
MBBS, MRCP (UK), MRCPs (Glasc), GDQM, FAMS
Clinical Interests: Neurodermatology, Inpatient Dermatology

Dr WANG Cho Ee, Etienne
MBBS
Clinical Interest: Hair
(From 1 July 2015)

Dr YONG Ann, Angelina
MBBS, MRCP (UK), MRCS (Edinburg), Dip. Derm (RCP), DPD (Cardiff), MRCPs (Glasc), FRCP (Edinburg), FAMS
Clinical Interests: Dermatological & Laser Surgery, Skin Cancers
(From 12 August 2015)

ASSOCIATE CONSULTANTS

Dr CHAN Ellen
FACS/SH, Grad Dip Med (STD/HIV)
Clinical Interests: Pigmentary Disorders

Dr CHEN Qiping
MB (Fudan, China), MSc, MRCP (UK)
(From 1 August 2015)

Dr CHU Poh Chong, Roland
BSc (Honours), MBChB (Edin), MRCP (UK)
(From 20 July 2015)

Dr CHAN Winston, Steven
MBBS, MRCP (UK)
Clinical Interests: Dermatological & Laser Surgery

Dr CHAN Keen Loong
MBBS, MRCP (UK)
Clinical Interests: Paediatric Dermatology

Dr CHEN Yiping, Emily
MBBS, MRCP (UK), M Med (Int Med)

Dr KER Xhor Jia
MBBS, MRCP (UK)
Clinical Interests: Dermatological & Laser Surgery, Cutaneous Lymphoma, Skin Cancer

Dr LIAM Welting, Michelle
MBBS, MRCP (UK), FRCP (Edin), FAMS
Clinical Interests: Photodermatology, Psoriasis, Paediatric Dermatology
(From 1 July 2015)

Dr LOW Melvin, Lynette Charlene
MBBS (London), MRCP (UK), FAMS

Dr TAN Wai Min, Aaron
MBBS
(From 15 June 2015)

Dr TAN Wai Sheng
MBBS

Dr YEO Koon Wee, Benson
MBBS

RESIDENT PHYSICIAN

Dr Anjali JHANGAN
MBBS, MRCP (UK)

VISITING CONSULTANTS / SPECIALISTS

Dr ANG Chia Chun
MBBS, MMed (Int Med), MRCP (UK)

Dr CHAN Keen Loong
MBBS, MMed (Psy)

Dr CHIA Min Wee, Paul
MBBS, MMed (Int Med), FRCP (UK), FAMS

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MBBS, MMed (Occup Med), MSc (HFE)

Dr FONG Poh Him
MBBS, MMed (Surgery), FRCS (Edin), FAMS (Plastic Surgery)

Dr GAN Shok Lin
MBBS, MSc (Occup Med), FAMS

Dr GOH Boon Kees
BSc (Hons), MB ChB (UK), MRCP (UK), FRCR (Edin), FAMS

Dr GOH Sang Geok, Nicholas
MBBS, FRCPA, FAMS (Pathology)

Dr KOH, Jean Aan, Mark
MBBS, MRCPCH, FAMS, Dip (Family Practice Dermatology), Dip Pract Derm (Cardiff), Dip Dermatopathology

Dr KHOO Rosalind
MBBS, MRCP (UK), Dip Derm (Lond), FAMS

Adjunct Prof Birgitte LANE
BSc (UK), PhD (Lond), FAMS

Dr LIM Kar Seng
MBBS, MRCP (UK), FAMS

Dr Ng Pel Lai, Patricia
MBBS, MRCP (UK), FAMS

Dr Priya Rani SEN
MBBS, MRCP (UK)
(From 1 April 2015)

Dr SHIM Weng Hoh, Timothy
MBBS, MRCS, M Med (Surg)
(From 24 February 2015)

Dr SIM Chee Seng
MBBS, FRCPA

Dr TAN Hock Hee
MBBS, MRCP (UK), FRCP (Edin), FAMS

Dr TAN Kian Teo
MB ChB (Hnl), MRCP (UK), FAMS

Dr TAN Kong Chong
MBBS, MRCP (UK), FAMS

Adjunct Assoc Prof TAN Soo Yong
MBBS, DMJ (UK), MRC Path (UK), D Path (UK), PhD (UK)

Dr TEO Tzu Li, Sylvia
MBBS, MMed (Card), Dip (Gardinic Med)

Assoc Prof WONG Mee Lian
MBD, MBBS, MMed (Malay), FPH (UK), FAMS

Dr WONG Siew Ngoc
MBBS, MRCP (UK), Dip. Derm (Lond)

Dr CHONG Yi Rui, Tricia
MB BCh BAO, LRCP & SI
(National U of Ireland)
(From 1 July 2015)

Dr KONG Yan Ling
MBBS
(From 1 July 2015)

Dr LEE Hee Chyen
MBBS, MRCP (UK)

Dr Lim En-En, Charmaine
MBBS

Dr LIU Wen Chun, Conil
MBBS, FRCP (UK), MMed (Int Med)

Dr TAY Yuxin, Evelyn
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Dr YEO Koon Wee, Benson
MBBS

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Dr FONG Poh Him
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MBBS, MSc (Occup Med), FAMS

Dr GOH Boon Kees
BSc (Hons), MB ChB (UK), MRCP (UK), FRCR (Edin), FAMS
**Board & Key Committees 2015**

**GOVERNANCE AND LEADERSHIP**

**MEDICAL STAFF COMMITTEE**

Seated left to right:
- Mrs Tang Lee Foon
  Head, Pharmacy

A/Prof Chua Sze Hon
Deputy Director, NSC

A/Prof Tan Sut Hoon
Director, NSC

Dr Colin Theng
Head, Subspecialty Division
Chief, Psoriasis Unit

Ms Loo Swee Cheng
General Manager, Ex-Officio

A/Prof Steven Thng
Deputy Head, Medical Education Division

A/Prof Tay Jam Chin
Head of Department, General Medicine, TTSH

Absent from photo:
- Prof Leo Yee Sin
  Head, Department of Infectious Diseases, TTSH
  Clinical Director, Communicable Disease Centre, Singapore

**MEDICAL STAFF COMMITTEE**

Standing from left to right:
- Ms Theresa Soon
  Manager, Department of STI Control

Mr Eric Goh
Manager, Quality

Mrs Alice Chew
Head, Medical Affairs

A/Prof Tan Sut Hoon
Director, NSC

Ms Brenda Lim
Head, Nursing

Mr Johnny Foo
Manager, Clinic Operations

Mr Lee Sau Chuen
Manager, Laboratories

Ms Rosemary Soong
Head, Human Resource

Mdm Kay Kuok
Chairman, NSC Board
Chairman, National Healthcare Group

Prof Philip Choo
Director, NSC Board
GCEO, National Healthcare Group

A/Prof Tan Sut Hoon
Director, NSC

A/Prof Chua Sze Hon
Deputy Director, NSC

Ms Theresa Soon
Manager, Department of STI Control

Mr Eric Goh
Manager, Quality

Mrs Alice Chew
Head, Medical Affairs