

Research Insights



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MESSAGE FROM THE CEO

Brenda Ainsworth

Welcome to The Skin Hospital's first Research Insights Report. This report is a snapshot of some of the key projects currently being undertaken by our research team across our facilities at Westmead and Darlinghurst. It is the first step towards providing a more comprehensive look into the outstanding work being undertaken by the research team.

Nearly 1 million people in Australia suffer from some type of long-term skin condition, equating to over 4% of the population. For this reason alone, research is paramount in finding better ways to treat these conditions and improve the quality of life for patients.

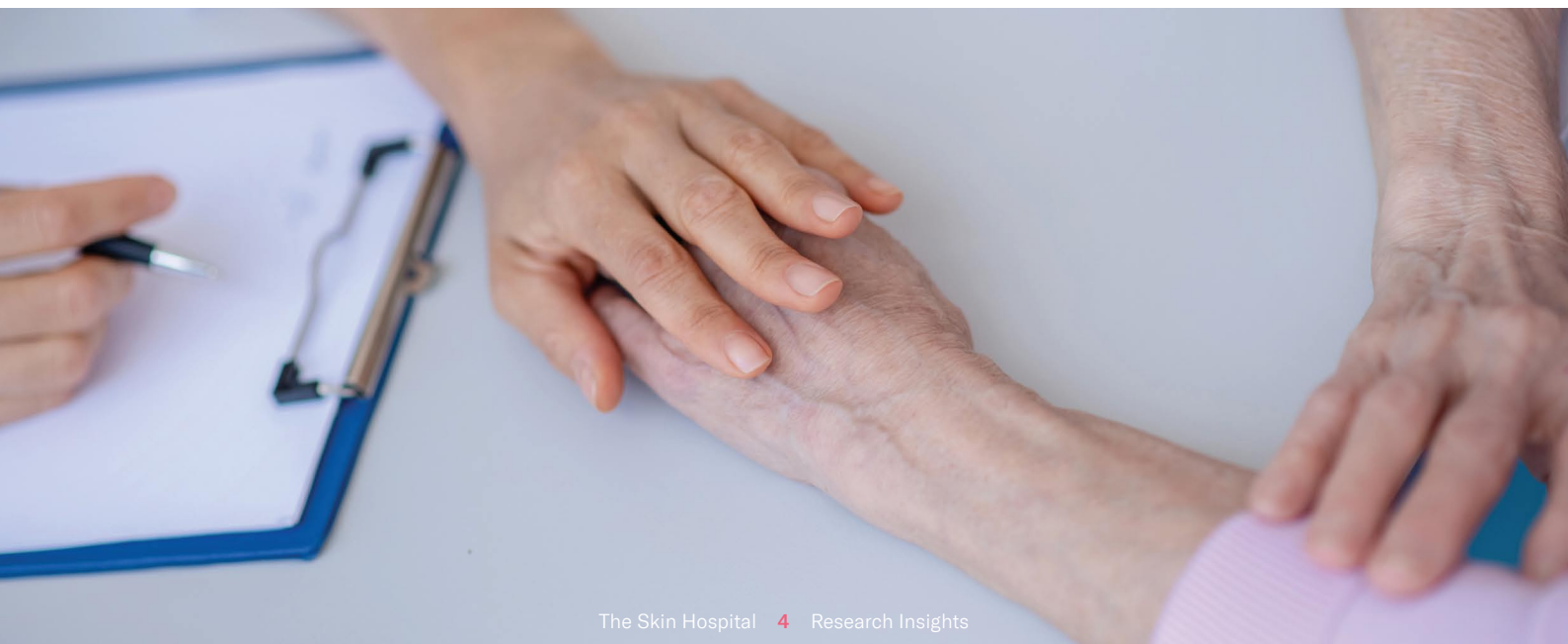
Our mission states that we will “be a centre of excellence in the provision of dermatology services, research and education.” Fostering and developing a world class research unit is central to achieving this and we are well on the way.

Front and centre to this is our team of highly skilled and exceptionally talented medical researchers, who are backed by their huge depth and breadth of clinical experience and knowledge.

We are fortunate to have Associate Professor Gayle Fischer as Head of Research. Dr Fischer brings with her over 30 years of experience in research and publishing in Dermatology and has made a significant contribution to medicine, recognised by receiving an OAM in 2017.

Our award-winning and internationally recognised Research team is led by Director of Research, Dr Minal Dalvi, supported by Deputy Directors Dr Deshan Sebaratnam and Dr Phil Tong. Our talented and passionate Dermatologists Dr Matthew Lin & Dr Monisha Gupta are Head Investigators for several research projects. We are also fortunate to have on board two Dermatology Research Fellows: Dr Janice Yeon and Dr Chelsea Jones.

I am excited to see the growth and innovation of our research unit with the diversity of skills, knowledge, and passion evident in the research team. This is all made possible through the generous support from donors, patients and doctors allowing us to continue this vital work.



VISION

Our vision is to be a global leader in dermatology translational research, bringing together fundamental research and clinical practice

The Skin Hospital's Research unit is one of Australia's leading providers of dermatology clinical research in Australia. The expert research team, led by Professor Gayle Fisher and Dr Minal Dalvi, is dedicated to dermatology research that will make a significant contribution to the understanding and treatment of skin disease. This includes a commitment to fostering local and global collaboration that ultimately leads to improved patient outcomes. Central to this is translational research.

What is translational research?

Translational research is research that has a direct and immediate effect on clinical practice, as opposed to "basic research" which, although very useful for the understanding of the science behind clinical conditions, cannot be used in the management of them.

Translational research aims to make the findings from health and medical research usable in the treatment of patients in the health system as quickly as possible. Often referred to as 'bench-to-bedside' research, it is a type of medical research that focusses on 'translating' basic science discoveries from the laboratory into the clinic.

What makes The Skin Hospital special?

The Skin Hospital provides a unique platform for research. It operates clinical services in General Dermatology, Specialised Dermatology Clinics and Mohs Procedure across two locations, seeing more than 40,000 patients a year. The wide range and complexity of skin conditions seen by our specialists provides a unique and extensive resource base for research.

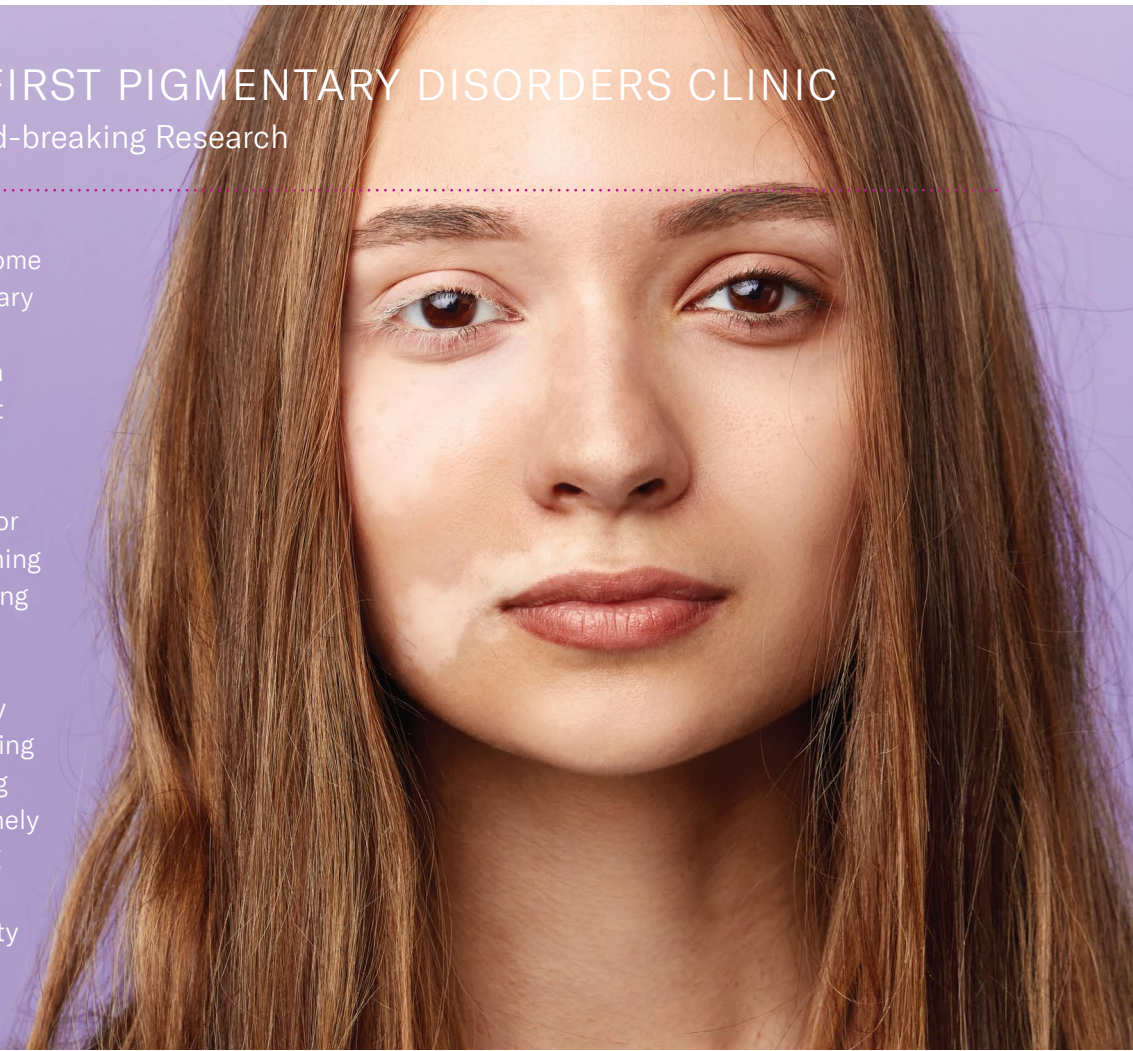
The Skin Hospital has a strategic partnership with Douglas Hanly Moir Pathology, a leading provider of pathology services in Australia and part of Sonic Healthcare. The skin pathology service, in which skin specimens are examined under a microscope, is on site providing a large catalogue of common and unique cases of skin pathology, proving to be an exceptional asset for research.

The Skin Hospital continues to grow and build its reputation as a leading research centre. Our highly talented and motivated clinicians and specialists are providing innovative research projects aimed at improving patient outcomes.

AUSTRALIA'S FIRST PIGMENTARY DISORDERS CLINIC

is Undertaking Ground-breaking Research

The Skin Hospital is the home of Australia's first Pigmentary Disorders Clinic (PDC). Established by Dr Monisha Gupta for the management of skin conditions like vitiligo and melasma, the clinics provide treatment for disorders which are becoming more common in the growing multicultural population of Australia. Pigmentary disorders can be incredibly challenging to treat, requiring expert medical and nursing input. They are also extremely visible conditions meaning they can have a significant impact on a person's quality of life.



Treatments for Pigmentary Disorders & Patient Quality of Life

In Australia, there is little information on patients presenting with pigmentary disorders (PD). This provides challenges when it comes to evaluating the impact of treatments and a patient's quality of

life. To truly improve the outcomes for PD sufferers, more data is needed on patient demographics, their current quality of life, serological tests, and the types of treatments they have received.

What we are doing

The Skin Hospital has undertaken research to provide a complete analysis of the types of treatments, clinical characteristics, and serological investigations of patients in the Australian population and compared the same data from other countries. This research was partly funded by a grant received from the Vitiligo Association of Australia.

Examining 8 years' worth of data and encompassing 600 patients, the study assessed their prior treatments, current treatments, and the impact that the PDC has had on improving their quality of life. The findings of this study are now awaiting publication.

Evaluating Patient Satisfaction at the Pigmentary Disorders Clinic

The Pigmentary Disorder Clinic model provides a complete range of diagnostic and therapeutic options including phototherapy, excimer lamp, and surgical treatment for stable vitiligo, including melanocyte–keratinocyte transplant procedures. A nurse led camouflage clinic is also available.



What we are doing

The Skin Hospital research team has undertaken a study evaluating patient satisfaction from attending the Pigmentary Disorder clinics with the view to improving the service further. The aim was to assess factors/issues that contribute to patient satisfaction and to give a snapshot of the patients and referral sources.

The survey assessed the satisfaction, communication, doctor relationship and financial aspects of the clinic experience as well as collecting demographic information, diagnosis, referral source and distance travelled.

The results of the survey showed a high level of satisfaction overall and good satisfaction for most sub-categories.

The results highlight the need for a referral service not only for general practitioners, but also for dermatologists who may require assistance for difficult-to-treat cases and/or use of equipment not available in standard dermatology practices.

The Skin Hospital Protocol

The research team has established an innovative process for undertaking surgery for stable vitiligo. The melanocyte transfer protocol named “The Skin Hospital Protocol”, provides surgery in a cost-effective manner with minimal resources. This represents a modification of the more common cellular grafting technique.

This resulting research paper has been accepted for publication in an international journal.

Further, Dr Doolan is the recipient of the “Avant Doctor in Training Research” grant, awarded for supporting the melanocyte transfer research (The Skin Hospital Protocol).

RESEARCH TEAM

Principal Investigator: Dr Monisha Gupta

Sub-investigator: Dr Brent Doolan

Dermatology Nurses: Glenda Newham, Michelle Weaich, Sarah Morgan



IMPROVING THE POST-SURGERY PATIENT EXPERIENCE

after Mohs Micrographic Procedure

The Skin Hospital has been performing Mohs procedure since 1991. Operating the largest Mohs centre in the southern hemisphere and training more Mohs practitioners than anywhere else in Australia, we are recognised as a Mohs centre of excellence. The Skin Hospital has 17 Mohs practitioners conducting more than 2,500 procedures annually. They are supported by outstanding Mohs nurses and Mohs technicians, dedicated to delivering the best patient outcomes.

Mohs Micrographic procedure, used for the treatment of skin cancers, is on the rise and for good reasons.

It has the highest cure rates and best cosmetic results for many forms of skin cancer.

Mohs procedure is the most effective procedure for removing Basal Cell Carcinoma (BCC) and Squamous Cell Carcinoma (SCC) - the two most common forms of skin cancer. Because Mohs procedure provides extremely precise removal of cancerous tissue, healthy tissue is spared and because of its high cure rate, it is now recommended as the treatment of choice for high-risk non melanoma skin cancers on the head and neck.

Understanding Patient Concerns

Ensuring that patients have the best possible patient experience when having Mohs procedure is a high priority for The Skin Hospital.

What we are doing

To better understand patient perioperative concerns and queries, Dr Matthew Lin and Dr Kevin Phan are investigating patient-initiated communication following Mohs procedure. By understanding this we can better address patient needs.

Scarring from Surgery

Scarring is an inevitable consequence of excisional skin cancer surgery. Ensuring patients are appropriately educated on scarring is therefore extremely important.

What we are doing

Mohs Practitioner, Dr Matthew Lin and Research Fellow, Dr Janice Yeon are currently investigating patient scar expectations following skin surgery with a view to improving patient education prior to surgery.

Non-surgical Treatments for Early Skin Cancers

Early skin cancers can be treated in a variety of non-surgical ways to achieve the best possible cosmetic result. There are non-invasive methods to manage some early skin cancers, including laser, photodynamic therapy, cryotherapy, and immunomodulatory creams.

What we are doing

Dr Matthew Lin and Dr Chelsea Jones are currently evaluating the cure rates and cosmetic results for patients who have had these treatments for early skin cancers on the face.

RESEARCH TEAM

Principal Investigator: Dr Matthew Lin

Dermatology Research Fellows: Dr Janice Yeon, Dr Chelsea Jones, Dr Kevin Phan



CREATING GUIDELINES TO HELP AUSTRALIAN WOMEN with Lichen Sclerosus

Lichen sclerosus (LS) is a chronic inflammatory skin condition that predominately occurs in women and children and affects the genital area. It is not known how common the disease is as often it is underdiagnosed and impacted by referrer bias. However, it has been reported to have a prevalence of 3% in women over 55 years of age, making it as common as diabetes in this group.

LS can severely impact a patient's quality of life and people often live with constant discomfort and pain. If left untreated LS presents a 50% risk of scarring and a 3-5% risk of developing vulval cancer. Unfortunately, it may also be diagnosed at an advanced stage of the disease or when cancer is already present.

RESEARCH TEAM

Principal Investigator: Prof Gayle Fischer

Dermatology Research Fellow: Dr Janice Yeon

What we are doing

There are currently no national guidelines in Australia for the management of LS. Recognising this knowledge gap, The Skin Hospital is undertaking a research project aimed at providing guidelines for diagnosis and management. Led by Research Fellow, Dr Janice Yeon, the project is coordinating a team of experts who are experienced in diagnosing and managing LS with the aim of providing a consensus approach to LS management.

The research promises to help Australian women suffering from this chronic condition by providing comprehensive guidelines for medical professionals to enable more accurate diagnosis and treatment of the condition. It will also be applicable to LS patients worldwide placing Australasia at the forefront of research in the management of this skin condition.

RESEARCH TEAM

Prof Gayle Fischer

MBBS, MD, FACD

Head of Research



Dr Minal Dalvi

PhD, MIP

Director of Research



Dr Deshan Sebaratnam

MBBS (Hons), MMed (Clin Epi), FACD

Deputy Director of Research



Dr Phil Tong

MBBS (Hons), PhD, FACD

Deputy Director of Research



Dr Janice Yeon

BMedSc, MBBS, MIPH

Dermatology Research Fellow



Dr Chelsea Jones

MD, BHIthSci (Hons)

Dermatology Research Fellow



