THE SCAR FREE FOUNDATION

SUPERVISOR PROJECTS 2018

INTRODUCTION

In this paper there is a list of experienced academic clinicians and academics who are willing to act as supervisors. Some have offered projects, and some are happy to act as supervisors on student's projects.

Please note: the projects below are offered on a first come first served basis. It is not possible for two students to apply to undertake the same project.

If you are interested in applying for one of the below projects:

- Please contact the prospective supervisor a minimum of six weeks before the closing date.
- Please allow ample time before the deadline date to allow your proposed supervisor to review and sign-off your application.

If you have a project idea and are interested in approaching one of the below supervisors:

- Prior to contacting the supervisor, please 'work up' your idea and speak to your tutor about the project.
- Please contact the prospective supervisor a minimum of six weeks before the closing date with project information and an idea of the timescale for undertaking the project.
- Please allow ample time before the deadline date to allow your proposed supervisor to review and sign-off your application.

We ask that you make contact directly with the supervisor via email to discuss your interest rather than the Scar Free Foundation office.

PROJECTS

Dr Amber Young, Consultant Paediatric Anaesthetist, Lead Children's Burn Centre, Bristol Royal Hospital for Children, Clinical Lead for the Scar Free Foundation Children's Burns Research Team and Senior Research Fellow, University of Bristol & Dr Anna Davies, Senior Research Associate, Centre for Child and Adolescent Health, University of Bristol. amber.young1@nhs.net

1. How to diagnose clinically relevant burn wound infection: the ICon-B tool?

Infection is a leading cause of morbidity after burn injury and is linked to increased healing times and scarring. We currently lack a point of care device to diagnose 'clinically relevant' wound infection – otherwise known as 'critical colonisation'. In this way true infection can be diagnosed and treated earlier and the use of antibiotics can be rationalised for those not requiring treatment (colonisation only). This will aid in decreasing bacterial resistance.

It is important that the clinical community is clear as to the exact definition of 'clinically relevant' burn wound infection. We need to understand what this means in terms of patient symptoms and signs, laboratory tests and microbiological surveillance. Currently services use different diagnostic criteria to diagnose wound infection and on which to start intravenous antibiotics. A systematic literature review of burn wound infection diagnostic tools has been undertaken to identify criteria currently used to identify clinically relevant infection. The team (funded by an MRC grant) are about to start a consensus process to identify the most important and clinically useful criteria for

diagnosing presence of burn wound infection with expert British Burn Association members. This will involve a Delphi study to gain consensus about which are the most important. A short list of criteria will then be organised into a draft tool for piloting and refinement following feedback from potential users in the burns clinical community.

The elective student project would be to take part in the final parts of the Delphi consensus survey and the diagnostic tool development and design (ICon-B).

2. Core Outcomes for burn care research (COSB)

This project will be part of a larger NIHR funded project to agree a Core Outcome Set for burn care research.

Improved burn care has meant that fewer patients die, so we cannot use this alone to measure how good care is. We need additional measures of recovery to improve care. Currently, researchers use different endpoints to assess care quality and new treatments. Using the same endpoints that are important to patients, is vital to allow clinicians to be able to compare research. If we can compare research effectively, then clinicians can determine the best care for patients. Early measures of recovery include length of hospital stay, infection and healing time. Longer-term endpoints include problems with movement (contractures), cosmetic issues (scarring), pain and psychological health. The importance of different outcomes may vary with time after injury and with the patient's age.

A Core Outcome Set (COS) is a minimum set of recovery endpoints that are agreed, defined, measured and reported in a standard way. Aims of the larger project: To establish the most important recovery endpoints for burned patients, families, professionals and NHS for use in research (Core Outcome Set).

Methodology to agree a burn care outcome long-list by:

1. Reviewing burn research to find all outcomes used.
2. Interviewing patients or parents of burned children, and staff (of different disciplines) about what matters during recovery from a burn and if this changes over time.
3. Turn this long-list into a shorter questionnaire to be set to 150 patients and 200 professionals and scored for importance. The results will be summarised and fed-back to participants who will be asked to complete it again taking into account the other group's views. This is called a Delphi survey. A shorter list will finally be produced of the most important recovery endpoints.
4. This shorter list will be taken to two meetings with professionals, and patients and families separately, to agree the final COS using anonymised voting.

The elective student project would be involved with the Delphi survey consensus methodology part of this project.

Mr Baljit Dheansa, Consultant Plastic Surgeon, Lead for Burns Queen Victoria Hospital, East Grinstead. B.dheansa@nhs.net

Please note: Mr Dheansa is able to support one student wishing to undertake one of the projects below.

Numbers of operations required to have a successful free flap breast reconstruction

It is well accepted that free flap breast reconstruction often provides the best aesthetic and long-term result compared to implant based techniques. It is also said that free flap reconstruction requires fewer revision procedures afterward. This project aims to look at three cohorts of patients who have had free flap breast reconstruction: bilateral cases, delayed reconstructions, immediate reconstructions. Looking to see how many procedures each of these had over a five-year period after their index operation will help future patients have a better idea of what to expect. It will also help highlight if there are any differences between the cohorts from a single unit.

Patient satisfaction and information retention afterwards rounds

It is often the case that patients see their doctors for a short period of time every day. Significant decisions are made during the daily ward round and this is the time that most patients will see most of their medical team at one time. Clearly information transfer is important and much has been done to promote this between doctors and nurses but less so for patients. This project aims to interview patients after the daily ward round to analyse their recall of what was said and what was expected. A simple technique to enhance this process will be tested to assess any change in information retention and also satisfaction with the ward round.

Steroid dose for scar injection

The literature regarding safe doses for steroid injection for hypertrophic and keloid scars is very limited and much of the safe doses mentioned do not have any clear evidence base. This project aims to look at practice around the country in plastic surgery and dermatology departments. 100 consecutive patient episodes of patients requiring general anaesthetic administration of steroids (as they are likely to have more extensive scars) will be analysed for adverse outcomes and relating any to dose of steroid administered. This may then help produce a practice based picture of steroid administration for extensive scars.

Analysis of adverse events after using WHO checklist

Although the WHO checklist has been in use for some time now there is little evidence of whether its widespread use has resulted in a significant reduction in adverse theatre events. This project aims to look at the adverse events that occurred both before and after its introduction in a hospital and analyse the findings.

SUPERVISORS

The following supervisors are happy to receive approaches from students wishing to undertake projects in the areas outlined below.

Mr Adam Reid, Senior Clinical Lecturer & Honorary Consultant in Plastic & Reconstructive Surgery, University Hospital of South Manchester & Blond McIndoe Laboratories University of Manchester Adam.Reid@manchester.ac.uk

Mr Reid is happy to hear from students wishing to undertake projects centred on limb trauma, peripheral nerve injury science, adipose stem cells.

Professor Peter Dziewulski, Clinical Director, Consultant Plastic and Reconstructive Surgeon, St Andrews Centre for Plastic Surgery and Burns, Chelmsford. Peter.Dziewulski@meht.nhs.uk

Professor Dziewulski is happy to support projects centred in burn wound imaging, risk prediction and burn scars.

Mr Andrew Williams, Locum Consultant Plastic Surgeon, Chelsea and Westminster NHS Foundation Trust Andrew.Williams@chelwest.nhs.uk

Mr Williams can support plastic surgery-related projects.

Professor Iain Whitaker Chair of Plastic & Reconstructive Surgery, Swansea University College of Medicine and Honorary Consultant Plastic Surgeon, The Welsh Centre for Burns & Plastic Surgery and Mr Thomas Dobbs, Clinical Lecturer, Swansea University

Please contact Thomas Dobbs tomdobbs@doctors.org.uk

Professor Whitaker and Mr Dobbs can support plastic surgery-related projects.