Rotation Coordinator: Dr Richard Ward

Overall Objective:
Gain outpatient experience in the diagnosis and management of patients with Sickle Cell Disease, Thalassemia, and complex iron overload.

Specific Objectives:

1. Medical Expert
Gain exposure to the laboratory diagnosis of Hemoglobin variants and Thalassemias.

Understand the various techniques available for investigation of Hemoglobin disorders, their pros and cons, and their place in the diagnostic algorithm, including molecular diagnosis of alpha thalassemia.

Obtain a good working knowledge in interpreting the laboratory results for the common, clinically significant Hemoglobin variants and Thalassemias.

To understand the varying phenotype of Sickle Cell Disease and Thalassemias, and their genotype-phenotype correlations.

To gain an appreciation for the multi-system nature of Sickle Cell Disease and Thalassemia.

To understand the Pathophysiology of iron metabolism and overload, and the differences seen across diseases.

To gain experience in the management of patients with Thalassemia and Sickle Cell Disease, both new referrals, and longitudinal care.

- diagnosis, monitoring and therapy of transfusional iron overload.
- the role of Hydroxyurea and blood transfusion in Sickle Cell Disease
- see at least 1 inpatient with acute Sickle Cell complications
- see at least 1 patient attending chronic transfusion support on MSDU

Understand the evidence-based rationale, and their limitations, for treating patients with these disorders.
2. **Communicator**
Obtain and synthesize relevant history from patients and families.

Communicate with patients and their families in a compassionate and non-judgmental manner, and develop skills to communicate hematological concepts to the layperson.

Communicate impressions to referring and collaborating physicians and nurse practitioners in writing and orally.

3. **Collaborator**
To gain an appreciation for the benefits of working within a multi-disciplinary team.

4. **Manager**
Utilize outpatient resources effectively to maximize patient independence and quality of life.

Coordinate smooth transitions between primary, secondary and tertiary care for individual patients.

Understand the issues affecting allocation of resources in the treatment of Sickle Cell Disease and Thalassemia.

Formulate individualized, evidence-based, cost-effective care for patients

5. **Health Advocate**
Recognize the patients’ social circumstances and adapt management accordingly. In particular, to recognize the often socio-economic deprivation faced by a disenfranchised and poorly served community.

To recognize the barriers to healthcare delivery for patients with Hemoglobinopathies, in particular the lack of community Hematologist support and knowledge gap amongst Emergency Dept staff and Internists.

Support and encourage the individual patient and family members in treatment decision-making

Recognise and respect how differences in cultural background can affect decision-making by patients
6. Scholar
Use each patient as an opportunity to further your understanding and learning.

Critically appraise literature and apply it to clinical practice, understanding the limitations of the literature with respect to adult care provision.

Become familiar with the seminal clinical trials in Hemoglobinopathies.

Identify gaps in knowledge and expertise and recognize when experience dictates management.

Have the opportunity to develop a research project (e.g. quality assurance, observational) relevant to this Program.

7. Professional
Deliver high quality care with integrity, honesty and compassion.

Exhibit appropriate personal and interpersonal professional behaviours.

Practice medicine ethically consistent with the obligations of a physician.