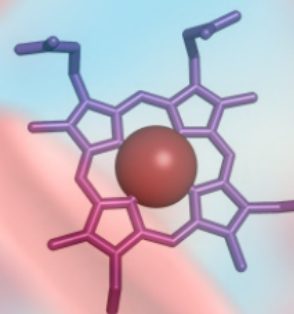


INTERNATIONAL SYMPOSIUM
UNRAVELING MYSTERIES
of **HEME METABOLISM**
 CAPE TOWN, SOUTH AFRICA



April 17-21, 2023

UMHM PRELIMINARY PROGRAMME

MONDAY, 17 TH APRIL 2023	
18:15 – 20:30	Welcome Reception at the V&A Aquarium (V&A Waterfront)
17:00 – 18:00	Registration at the Victoria Junction Hotel, ground floor
18:30	Buses depart from the Victoria Junction Hotel for the V&A Waterfront.
18: 45	Welcome drinks and canapes will be served with a cash bar facility. Limited beer and wine will be supplied. Enjoy local live entertainment while you network with friends and colleagues.
20:30 – 21:00	Buses depart V&A to return to the Victoria Junction Hotel
TUESDAY, 18 TH APRIL 2023	
08:00 - 10:00	Heme Biosynthesis Chair: <i>Dieter Jahn (Braunschweig University of Technology, Germany)</i>
08:00 - 08:45	Heme synthesis and regulation within a biotechnological framework, Martin Warren (Quadram Institute Bioscience, United Kingdom)
08:45 - 09:10	Heme synthase AhbD: Iron-sulfur clusters and radicals, Gunhild Layer (Institute of Pharmaceutical Sciences / University of Freiburg, Germany)
09:10 - 09:35	Molecular mechanisms of prokaryotic heme biosynthesis enzymes, Stefan Hofbauer (University Of Natural Resources And Life Sciences, Vienna, Austria)
09:35 – 09:55	A non-conserved histidine residue in the coproheme decarboxylase family: Phylogenetic difference and important factor for catalytic efficiency, Nikolaus Falb (University for Natural Resources and Life Sciences, Vienna, Austria)
10:00 – 10:30	Tea / Coffee break
10:30 - 12:30	Heme Trafficking Chair: <i>Molly Sutherland (University of Delaware, United States)</i>
10:30-11:15	Inter-Organ Heme Signaling, Iqbal Hamza (University of Maryland School of Medicine, United States)
11:15-11:40	Unraveling the mysteries of Mycobacterial heme utilization, Amit Reddi (Georgia Institute Of Technology, United States)
11:40-12:05	A heme trafficking protein conserved from yeast to mammals, Caiyong Chen (Zhejiang University, China)
12:05-12:25	Endothelial cells require functional FLVCR1a during developmental and adult angiogenesis, Francesco De Giorgio (University of Turin, Italy)
12:30 – 14:00	Lunch break
14:00 – 16:00	Hemoprotein Biochemistry Chair: <i>Ed Sturrock (University of Cape Town, South Africa)</i>
14:00-14:45	HemeKG and beyond: The multiple effects of labile heme on distinct proteins inside and outside the cell, Dianne Imhof (University of Bonn, Germany)
14:45-15:10	NosP: Discovery of an NO-responsive hemoprotein and its role in regulation of virulence and biofilm, Elizabeth Boon (Stony Brook University, United States)
15:10-15:35	Heme binding in bacterial cytochrome c biogenesis, Molly Sutherland (University of Delaware, United States)
15:35-15:55	Importance of amino acids in the active site of coproporphyrin ferrochelatase of listeria monocytogenes on substrate coordination, distortion, ferrous iron insertion and oxidation, Thomas Gabler (University of Natural Resources And Life Sciences, Austria)
Evening	At own leisure

WEDNESDAY, 19TH APRIL 2023

08:00 - 10:00	Heme Cell Biology Chair: <i>Diane Ward (University of Utah School of Medicine, United States)</i>
08:00 - 08:45	Murine ALAS-deficient hepatocytes are heme replete and challenge the current paradigm, Makiko Yasuda (Icahn School of Medicine at Mount Sinai, United States)
08:45 - 09:10	Sexual dimorphism and spatial zonation of liver heme biosynthesis, Bruce Wang (University of California San Francisco, United States)
09:10 - 09:35	The Role of Mitochondria-ER Junctions in Heme Trafficking, Amy Medlock (University of Georgia, United States)
09:35 - 09:55	The inhibition of heme synthesis/export system in specific liver cell subpopulations modulates their metabolic state, Giorgia Ammirata (University of Turin, Italy)
10:00 - 10:30	Tea / Coffee break
10:30 - 12:30	Heme in Pathogenesis Chair: <i>Richard Hift (University of Kwazulu-Natal, South Africa)</i>
10:30-11:15	Heme: The Missing Link In the pathogenesis of severe malaria, Miguel Soares (Fundação Calouste Gulbenkian - Instituto Gulbenkian de Ciência, Portugal)
11:15-11:40	Mycobacterium abscessus biofilms are altered by exogenous heme and hemoglobin, Rebecca Donegan (Barnard College, United States)
11:40-12:05	The heme detoxification pathway in the malaria parasite: Predictive models and the effect of inhibitors, Katherine de Villiers (Stellenbosch University, South Africa)
12:05-12:25	Inactivating mutations in the heme exporter FLVCR1a cause a severe microcephaly/hydranencephaly syndrome by disrupting ER-mitochondria contact sites and calcium fluxes, Francesca Bertino (University of Turin, Italy)
12:30 - 14:00	Lunch break
14:00 - 16:00	Disorders of Heme Metabolism I Chair: <i>John Phillips (University of Utah, United States)</i>
14:00-14:45	Role of the bilirubin/biliverdin reductase axis in neuroprotection, Bindu Paul (Johns Hopkins University School of Medicine, United States)
14:45-15:10	The effect of ALAD inhibition by porphobilinogen in acute porphyrias, Oscar Millet (Cic Biogune, Spain)
15:10-15:35	The erythropoietic porphyrias as overproduction disorders. Implications for treatment and iron metabolism, Jasmin Barman-Aksözen (Municipal Hospital Zurich, Switzerland)
15:35-15:55	The effect of sex hormones on protoporphyrin IX in patients with erythropoietic protoporphyria: a cohort study and a case report, Mitra Nekouei Shahrak (Erasmus University Medical Center, Netherlands)
Evening	At own leisure

THURSDAY, 20TH APRIL 2023

08:00 - 10:00	Disorders of Heme Metabolism II Chair: <i>Peter Meissner (University of Cape Town, South Africa)</i>
08:00 - 08:45	Erythroid heme synthesis disorders: false starts and bad endings, Mark Fleming (Boston Children's Hospital, United States)
08:45 - 09:10	Clinical and social aspects of Erythropoietic Protoporphyria, Janneke Langendonk (Erasmus University Medical Center, Netherlands)
09:10 - 09:35	Acute porphyria - new findings from the Swedish cohort, Eliane Sardh (Karolinska University Hospital, Sweden)
09:35 - 09:50	Analyzing tapering and stopping givosiran treatment in Dutch and Swedish recurrent AIP patients; an international multicenter case series, Niels Veldhoen (Erasmus University Medical Center, Netherlands, Netherlands)
09:50 - 10:05	The effects of supportive care and afamelanotide on serum 25-OH vitamin D in EPP patients: a multicenter cohort study, Louisa Kluijver (Erasmus University Medical Center, Netherlands)
10:05 - 10:30	Tea / Coffee break
11:00 - 15:30	Symposium delegates depart for wine tasting tour at Groot Constantia (including lunch and a complimentary drink/refreshment at lunch.
18:00	Delegates depart for the gala dinner to Webersburg Wine Estate
18:00 - 22:00	Gala Dinner at Webersburg Wine Estate where you will be entertained and a 3-course meal will be supplied with limited drinks. A Cash bar will be available
22:00	Transport will be provided and will return to Victoria Junction Hotel

PORPHYRIA FOR PATIENTS AND REFRESHER FOR PROFESSIONALS: A separate programme has been developed for patients and professionals. A gathering of local and select international Porphyria experts will be engaging with both patients and health care professionals (specialists and trainee/registrar specialists) on the understanding, diagnosis and care of porphyria patients.

THURSDAY, 20TH APRIL 2023	
10:30 – 12:00	<p>Porphyria 101 – disease education for South African patients</p> <p>◆ Introduction to Porphyrins and Porphyria ◆ How does porphyria affect me? ◆ Porphyria in a South African context ◆ Treatment and lifestyle changes if I have porphyria ◆ Global and local resources for patients (Introducing United Porphyrias Association & the SA Porphyria Foundation) ◆ Panel of experts answer your queries</p>
12:30 – 14:00	Lunch break - opportunity to mingle & meet the 'experts'
14:00 – 16:00	<p>Porphyria Refresher – disease and diagnostic education for health care professionals (patients welcome to listen in)</p> <p>◆ The SA context ◆ Getting the diagnosis right ◆ Current approaches to treating the acute porphyric attack ◆ Current approaches to treating the skin disease of the porphyrias ◆ Emerging therapies in the porphyrias ◆ Q&A</p>

FRIDAY, 21ST APRIL 2023	
08:00 - 10:00	<p>Heme in Human Disease States</p> <p>Chair: <i>Amy Medlock (University of Georgia, United States)</i></p>
08:00 - 08:45	Heme dynamics in pathophysiology: insights from basic research, Emanuela Tolosano (University of Torino, Italy)
08:45 - 09:10	Discovery of the enzyme responsible for bilirubin reduction to urobilinogen by the human gut microbiome, Brantley Hall (University of Maryland, United States)
09:10 - 09:35	Heme function in lung cancer, Li Zhang (UT Dallas, United States)
09:35 – 09:55	Targeting the heme synthesis-export system to counteract lung and pancreatic cancer, Anna Lucia Allocco (University of Turin, Italy)
10:00 – 10:30	Tea / Coffee break
10:30 - 12:30	<p>Interesting Biology of Tetrapyrroles</p> <p>Chair: <i>Felix de Rooij (Erasmus University Medical Center, Netherlands)</i></p>
10:30-11:15	Thiol-facilitated formation of NO-ferroheme regulates canonical intravascular NO signaling, Anthony DeMartino (University of Maryland School of Medicine, United States)
11:15-11:40	Mechanisms linking mitochondrial membrane architecture and heme metabolism, Oleh Khalimonchuk (University of Nebraska, United States)
11:40-12:05	RBC metabolism in normal and EPP, James Cox (University of Utah, United States)
12:05-12:25	Activation of the NRF2-ARE pathway in endothelial cells upon exposure to protoporphyrin IX and light, Isabella Suijker (Erasmus University Medical Center, Netherlands)
12:30-12:45	Closing and Thanks
12:45– 14:00	Closing Lunch break and time to bid farewell to friends and colleagues

SOCIAL FUNCTIONS (FULL CONFERENCE DELEGATES ONLY)

WELCOME COCKTAIL PARTY

I & J Ocean Exhibit, V&A Aquarium, Victoria and Alfred Waterfront

Monday, 17th April 2023

19h00 TO 21h00

Dress code: Smart casual

Delegates are invited to join us for a memorial evening of networking and catching up with colleagues and friends. Transport will leave the Victoria Junction Hotel at 18h15 and will return at 20h30. Delegates must please register first and collect their badge in order to gain access to the Welcome function.

The evening includes limited wine, Beer and soft drinks will be provided followed by Canapes and entertainment. A Cash bar will be available.

WINE TASTING TOUR AND LUNCH AT GROOT CONSTANTIA WINE ESTATE

Groot Constantia Wine Estate

Thursday, 20th April 2023

11h00 TO 15h30

Dress code: Comfortable, relaxed

Delegates will leave (by coach) from the Victoria Junction Hotel at 11:00am for a scenic tour to Groot Constantia Wine Estate where you will enjoy a wine tasting, followed by a scrumptious lunch. There will be an opportunity to explore the Manor House after lunch. The coaches will depart from 16h00 and return to the Vic Junction Hotel to allow guests the opportunity to freshen up before the Gala Dinner.

The tour Includes a wine tasting, lunch time refreshment and lunch. All extras are for delegate's own account.

GALA DINNER

Webersburg Wine Estate, Stellenbosch

Thursday, 20th April 2023

18h00 TO 22h00

Dress code: Smart / formal

Delegates will leave (by coach) from the Victoria Junction Hotel at 18:00am to Webersburg Wine Estate. Webersburg is a historic Cape Dutch homestead and boutique winery nestled on the slopes of the Helderberg Mountain in Stellenbosch (approx. 40 minutes travel time).

Webersburg warmly invites you to their elegantly restored Cape Dutch Homestead, boutique winery and elite wedding & events venue nestled against the slopes of the Helderberg Mountain in the heart of the Stellenbosch Winelands. The historic, stylish venues and surrounding grounds combined with award winning wines, mouth-watering cuisine and dedicated service will make your special day an unforgettable experience

The evening Includes limited wine, beer and soft drinks, a sit down dinner and entertainment. There will be a cash bar available once bar limit is reached.

Coaches will depart at 22:00 to return to Cape Town.

SYMPOSIUM SECRETARIAT DETAILS:

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