



## 5th UPDATE IN ALTITUDE AND EXPEDITION MEDICINE Arusha, Tanzania and Mt Kilimanjaro

### 24<sup>th</sup> June Arusha

Arrive Arusha . Rest Day- Introduction to the Program. Q&A session

### 25<sup>th</sup> June Arusha

10:00 – 11:00 **Introduction to Altitude Medicine** – a brief history of high altitude exploration. A brief history of high altitude medicine.

11:00 – 12:00 **What is Mountaineering?** – an introduction to the world of mountains and its own unique terminology

12:00 – 13:00 Lunch Break

13:00 – 14:30 **Physiology of High Altitude**– Definitions. The physics you need to know. Physiological changes at altitude. The importance of HVR and HCVR. How do we begin to acclimatise? More physics. Effects of latitude. Chronic altitude exposure. Role of nitric oxide. Tissue and cellular adaptation. Latest research

14:30 – 15:00 **Altitude Nutrition** - Effects of altitude on metabolism. Optimising diet

15:00 – 16:00 **Heat Related Illness** – Heat syndromes including sunburn. Hypothermia. Frostbite. Field treatment vs Hospital treatment

16:00 – 17:00 – **Lightning Strike** – Physics of Lightning. Lightning injury. Prevention.

17:00 – 18:00 **Acclimatisation vs Adaptation** – Physiological responses. How to make sense of the research. High Altitude populations. The role of genetics. Why we all eventually deteriorate.

### 26<sup>th</sup> June Arusha

10:00 – 11:00 **High Altitude Syndromes Part 1** – Acute Mountain Sickness. Chronic Mountain Sickness.. High Altitude Cerebral Oedema Lunch Break

11:00 – 11:30 **Avalanche** – Avalanche mechanics. Avalanche safety. Avalanche related injury. Mechanism of death

11:30 – 12:30. **High Altitude Syndromes Part 2** – High Altitude Pulmonary Oedema.. Miscellaneous syndromes

12:30 – 13:30 . Lunch Break

13:30 – 15:00 **Expeditions** – Preparing for expeditions. Planning. The role of the expedition doctor. Insurance issues. Medical kits and equipment. Common problems.

15:00 – 16:00 **High Drugs** – Drugs for prophylaxis in altitude syndromes. Drugs for treatment. Diamox. Steroids. Sildenafil. Nifedipine. Salmeterol. Recent research into new drugs. Local remedies for altitude syndromes.

15:00 – 16:00 **Latest Research** – a summary of the significant research findings over the last 12 months

16:00 – 17:00 **Q & A Session** – an opportunity for delegates to ask questions on any aspect of altitude and expedition medicine, to clarify any issues discussed over the preceding days and to review the material presented

17:00 – 18:00 Trek Briefing

## **27<sup>th</sup> June Rest Day at Arusha**

## **28<sup>th</sup> June Camp One**

Depart the Lodge at 08:00. Drive to the Shira trailhead at 2800 m. Walk between 4 – 5 hours. Ascend 800m to our campsite at 3550m.

## **29<sup>th</sup> June Kili Camp Two**

**Other Medical Problems and Fitness to Ascend** - How to determine if your patient with CAL, IHD, Diabetes etc is fit to go to altitude or on an expedition. What about the very young, the very old, the pregnant woman? Other medical problems that can occur at altitude.

## **30<sup>th</sup> June Kili Camp Three**

Improvisation of Medical Care in the Expedition Environment – How to do a lot with very little and why sometimes less is best.

## **1<sup>st</sup> July Kili Camp Four**

High Altitude Case Studies

## **2<sup>nd</sup> July Kili Camp Five**

When Things Go Wrong – What happens when your expedition goes wrong? Why do some expeditions fail? Survival, search and rescue.

## **4th July**

Summit Day

## **5th July**

Arrive Arusha

Debrief in evening.

## **6<sup>th</sup> July**

Departures