Staff Achievements & Highlights



Dr Ahmed Adam, Registrar from the Department of Urology, was awarded the South African Registrar Association (SARA) 2012 National Award for Academic Excellence. This was in recognition for outstanding academic contribution, authorship, presentations and publications, in the national category of registrars. Received at the SARA Annual AGM Gala evening at the, Kivietz Kroon Country Estate in Kameeldrift, Pretoria, on the 16th February 2012

Dr Ryan Blumenthal, a Senior Specialist from the Department of Forensic Medicine, helped cowrite Chapter 3 of the sixth edition of Paul S Auerbach's Wilderness Medicine textbook. This classic textbook was published earlier this year. Dr Blumenthal was the only South African coauthor to have been invited to take part in this privilege. He described it as an honor to have been involved in this project.

Spotlight on Prof Izelle Smuts

Prof Izelle Smuts is an Adjunct Professor in the Department of Paediatrics and Child Health. She has recently been awarded her PhD in the field of Biochemistry of Mitochondrial Disease in Children. Izelle has been active in research in this area of medicine for many years.

Primary mitochondrial disorders (MDs) are a heterogeneous group of genetically inherited conditions resulting in impaired oxidative phosphorylation (OXPHOS) affecting energy metabolism. Patients suffering from these disorders are usually suspected clinically and confirmed with biochemical analyses and/or molecular evaluations. There are also numerous conditions, referred to as secondary MDs, in which mitochondrial dysfunction as a secondary phenomenon is implicated e.g. diabetes, bipolar disease, schizophrenia, transient ischaemic attacks, stroke, epilepsy, fibromyalgia

and neuropathic pain. Different classes of medications e.g. anticonvulsants, analgesics, anti-depressants, antipsychotic, cholesterol medication, diabetic medication and anti-retroviral drugs, emerge as significant causes of mitochondrial damage, which may explain the adverse effects of the specific drug.

Mitochondrial disorders were always regarded to be very rare, but it has become clear that they are much more common than originally estimated. Izelle has been able to document that the genetic origin of MD's in South Africa appears to be unique. Therefore findings from elsewhere can also not be applied directly due to the ethnic diversity of our unique patient population.

There is currently no routine facility available in South Africa to assist in the biochemical and genetic diagnosis of these disorders and the diagnostic facili-



Prof Izelle Smuts

ty developed by Prof Smuts, through the research performed in a collaborative project between the University of Pretoria and North-West University, is the only facility able to conduct diagnostic testing. Prof Smuts is thus at the forefront of developments in unravelling the clinical features and presentation of a group of disorders that may be more common than we think. Her research is set to reshape the future of metabolic diseases in South Africans.