Dr Paida Gwiti Maastricht Pathology 2018 report

I was privileged to receive a generous travel bursary from the BDIAP to attend the joint BDIAP and PathSoc summer meeting in Maastricht, Netherlands.

I arrived on the 18th of June with stratospheric expectations for this amazing opportunity to be part of one of the greatest pathology conferences. I was anxiously excited to be presenting my poster entitled "*Fatal Haemoperitoneum, Multifocal Hepatic Kaposi Sarcoma and Systemic HHV-8 Positive, EBV Negative Intravascular Plasmablastic Lymphoproliferative Disorder in a Renal Transplant Patient - a Case Report and Literature Review".*
Prof Heike Grabsch gave the welcome address to an expectant auditorium and set the ball rolling.
On Day 1 I attended Lung symposium, which was chaired by Prof Nicholson. Dr Thunnisen (Amsterdam, NL) highlighted practical challenges and limitations of the 2015 classification of lung cancer – specifically the difficulties differentiating in-situ neoplasia from frankly invasive carcinoma. He also shared the agony faced by pathologists differentiating papillary variant adenocarcinoma from adenocarcinoma in situ especially in collapsed resection specimens.
Following this, I attended Prof RB Buttner's (Germany) presentation on the impact of molecular diagnostics in lung cancer. He highlighted the ever-expanding list of mutations known to occur in lung cancer, some of which such as EGFR, ALK, ROS, and MET are actionable. He presented German data on the PDL-1 harmonisation study, which stratifies the likelihood of patients benefiting of pembrolizumab monotherapy and or in combination with conventional chemotherapy based on the percentage of neoplastic cells expressing PDL-1. Prof Kerr followed on this with his presentation on the significance of tumour mutation burden in predicting response to immunotherapy. Mid-morning I attended the trainees' symposium on non-gynae cytology featuring great talks on EBUS samples and the use of NGS on limited cytological material.
Prof Fleming (Dundee) gave the Kristin Henry lunchtime lecture on "The impact of Genetics on renal cancer classification" where his unparalled work in renal tumour pathology was recognised. His investigative work on the role of HIF-alpha interaction with VHL in the pathogenesis of renal cell carcinoma left the audience on awe.
In the afternoon I attended the symposium on obesity – a worldwide pandemic. Dr Houben (Maastricht), Prof Mary Sheppard (UCL), Dr Alpers (Seattle), Prof Goldin (Imperial) and Prof Trautwein dissected the pathophysiology of obesity related organ disease including some rather brilliant translational research. The first day concluded with a tour of the famous Bonnenfanten museum.

Day 2 started with a GI symposium where Prof Carneiro (Porto) gave an instructive talk on the importance of phenotype and genotype in GI neoplasia, particularly on hereditary syndromes including hereditary diffuse gastric cancer, familial intestinal gastric cancer among others.
Following on this, Prof Sugai (Japan) gave an outstanding demonstration of the molecular carcinogenesis of colorectal cancer elucidating the molecular differences between right and left sided CRC undertaken using primo crypt isolation techniques, analysing the differences in somatic copy number alteration, BRAF, KRAS, PIK3CA and MSI.
In the afternoon symposia, I attended the renal symposium. Dr Alpers presented new insights into the pathogenesis of diabetic nephropathy with his fantastic BTBR mouse models on the reversibility of diabetic nephropathy, specifically reconstitution of podocyte numbers with leptin replacement in knock out mice. This was followed by case presentations, which varied, from unusual infections (candida), monoclonal gammopathy of renal significance and C3 glomerulopathy. Also included in the renal symposium was the renal EQA discussion (Circulation U1), which, as a renal pathology enthusiast I actively take part and was looking forward to get some feedback on my responses.
The highlight of the day was the networking boat trip down the Maas on a stunning summer day. This was very well organised and met some brilliant trainees, renowned academics and scientists from reputable institutions.

Day 3 for me started with a lively discussion on the trainee slide competition cases, which were quite a good mix of challenging but stimulation cases. I am pleased to report that I won the first prize. Later that morning I attended the dermatopathology symposium. The highlight was the talk on new melanoma syndromes including highlights on BAP-1 inactivation and the practical

challenges in calling invasive melanoma vs. dysplastic naevi for epithelioid melanocytic proliferations. In the afternoon I attended the plenary oral presentations which featured speakers from diverse background covering wide ranging topics including in vitro 3D modelling to investigate the role of fibroblasts in breast cancer models, novel molecular characterisation of sarcomas using copy number signatures and the significance risk reduction salpingectomy in BRACA carriers. Prof JE Martin gave the keynote talk on "Discovery pathology and new approaches to treatment". She narrated the amazing course her career has taken from simple observations that neurones could be phagocytic and the role of translational research using micro-beads to the current stage where anticancer drugs are being trialled for a possible safer targeted delivery using this novel technique.
The social highlight of the conference was the dinner at the elegant Grotten van Kane in Belgium. The buffet dinner did not disappoint and I got a chance to chat to brilliant pathologists and scientist on the way to and from the venue. I sat at a heterogeneous table with people from across the globe including keen medical students, academic pathologists, a DPhil candidate and a trainee pathologist.

On the last day on the conference, Prof Wild presented on the future of cancer management with emphasis on the often-neglected prevention strategies. He also highlighted astounding inequalities in global cancer survival rates. His take on the impact of secondary prevention by way of screening, using the well publicised the success of the HPV screening methods in cervical cancer was outstanding.
Following on that was a titanic presentation by the noble laureate Prof Hausen (Germany) who presented a novel proposal on the role of plasmid-like organisms he termed bovine meat/ milk factors (BMMF) and their interaction with heritable mutations and or random mutations in colorectal cancer. Another star presentation during the morning session was delivered by Prof Verfaille (Belgium) who demonstrated the challenges and explored the potential for using pluripotent stem cells in the modelling of liver disease and therapy using extremely clever induction of multipotent stem cells to become hepatocytes, stellate cells and endothelial cells in vitro. Their brilliant work on genetic and metabolic engineering demonstrated the enormous potential in exploring potential therapeutic targets.
Prof Quirke's talk on the outstanding work they have done in Leeds to impact survival in colorectal cancer by ensuring high quality imaging, surgery and pathology is unparalleled.

Overall, this was an extremely well organised conference in a fantastic city and full of world leading high quality pathology, translational medicine and outstanding science. It was an honour to be part of it and contribute in my own small way. Thank you BDIAP for making this possible.