Tom Williams (Medicine) – Internship in Geneva, Summer 2014

This summer I spent 2 months in Geneva working in PATH's Vaccine Access and Delivery (VAD) Program under the direction of Dr Dan Miller. Although PATH is not as well known by the wider public as many of the UN agencies based in Geneva, with over 1200 employees and an annual turnover in excess of $300m it is a major player in global health. One of my main motivations for taking part in the scheme was to see how scientific ideas are developed and taken to scale. PATH, which describes itself as an organisation 'driving transformative innovation to save lives', was therefore an ideal match. The VAD Program is situated towards the end of the development chain and includes a diverse set of projects designed to increase vaccine uptake and coverage.

The majority of my work was focused on the ongoing efforts to eradicate polio. Since 1988 huge progress has been made in reducing the annual number of poliomyelitis cases from over 300,000 to less than 300. As part of the 'polio endgame' a series of changes in the poliovirus vaccination schedule are planned to occur over the next two years. After the introduction of inactivated poliovirus vaccine (IPV) to the routine immunisation schedule, a switch from trivalent oral poliovirus vaccine (tOPV) to bivalent oral poliovirus vaccine (bOPV) will take place. The rationale for this switch is twofold, with bOPV both safer than tOPV and more effective against the remaining strains of wild-type poliovirus. However this switch is not without risk and presents huge organisational, logistical and communications challenges.

Whilst VAD is a member of several polio eradication working groups, it is not currently actively involved in the polio endgame. I conducted a literature review to examine the risks of switching from tOPV to bOPV with a view to determining whether VAD could make a beneficial contribution to the polio eradication program. I was particularly focused on identifying the challenges that might arise when communicating the risks of the switch to countries, a task that will be made especially difficult by the degree of uncertainty surrounding many of the risk estimates. From this work I produced an internal briefing document that was circulated both within the department and more widely to PATH employees with an interest in polio.

In addition to conducting a desk-based literature review, Dan and I met with the WHO's polio eradication communications lead and the director of the Extended Program for Immunisation to understand their current planning for the switch. I was also fortunate to be able to discuss the most recent risk modelling with a leading academic, Dr Kimberly Thompson, and it was interesting to hear her thoughts on what the key communications messages should be.

Towards the end of my internship I presented my work to a meeting of the VAD management team. Due to the busy year VAD faces expanding JE, MenA, Rotavirus and HPV usage and preparing for the potential introduction of the RTS,S malaria vaccine, it was decided that involvement in the polio eradication program was not feasible until the scale of current projects becomes clear. I was, however, able to collaborate with the WHO on a small piece that I hope will have some influence on the risk communication policy ultimately adopted.

I am very grateful to the college for their support in funding my internship this summer. I have certainly 'caught the global health bug' and although I remain unsure exactly what kind of medical career I want to have, I still hope to work internationally in the future.