2010 promises to be a landmark year for dengue research in Viet Nam. In collaboration with Roche Plc and the Hospital for Tropical Diseases, we will conduct the first ever clinical trial of a small molecule anti-viral drug to treat adult patients with dengue. Although this is the first trial of its kind in dengue, we expect many more to follow as anti-viral drug development for dengue accelerates in the public and private sectors. Separately, a randomised controlled trial of methyl-prednisolone (a corticosteroid drug) in children will complete enrolment at the Hospital for Tropical Diseases. This trial will answer whether methyl-prednisolone is safe to use in dengue patients, and might tell us if early interruption of the host immune response to dengue virus infection can improve clinical outcomes. These two trials will give us critical information on the prospects for anti-viral or immunodulatory therapies in the management of dengue as well as provide important insights into pathogenesis.

Our basic research continues apace. The launch of the “Healthy children” birth cohort study has been a major success thanks to the efforts of Katie Anders and her team. Through this study we aim to better understand risk factors for dengue and other infections in the first year of life of infants living in HCMC and Dong Thap. We continue to make advances in understanding dengue pathogenesis and viral epidemiology. We have now sequenced the genomes of ~1000 dengue viruses from Viet Nam and are using these to understand virus transmission dynamics within and between communities. With the aim of understanding why some children develop severe dengue and others do not, we have commenced a genome wide genetic association study in 2000 children with severe dengue.

A highlight of our work is the success of our students. We have recently celebrated the successful completion of PhD’s by Tran Nguyen Bich Chau and Vu Ty Hang and very soon, from Nguyen Thi Phuong Dung, Hoang Truong Long and Vianney Tricou. All of these students have made major contributions to dengue research in Viet Nam.