



Dear Friends,

It gives me great pleasure to introduce POLAROID, our “instant snapshot” and quarterly update for POLARIS (Personalized OMIC Lattice for Advanced Research and Improving Stratification). Supported by A*STAR’s Biomedical Research Council Strategic Positioning Fund, POLARIS represents a concerted effort by Singapore to venture into stratified medicine through a consortium of A*STAR Research Institutes and public healthcare centres.

POLARIS was officially launched in Jan 2013. In the past three months, we have been extremely busy on multiple fronts. Our first task was to establish our administrative structure. The POLARIS Core leadership team now comprises Patrick Tan (Genomic Assays), Chris Wong (Operations and Business Development), Tony Lim (Pathology and Molecular Diagnostics), and Pauline Ng (Bioinformatics and Information Technology). We meet every week to oversee progress, prioritize activities, and to provide strategic direction. Operations teams have also been assembled to handle different pillars of POLARIS, ranging from infrastructure procurement and project management to clinical reporting, and assay development. Some of our “pioneer” team members include Hui Hoon, Aisha, Xiu Bin, Peiling, and Yi Fang, who have been hard at work. At BTI, Ho Ying Swan has been working with Tony Lim and Damien Tan on the metabolomic profiling of hepatobiliary lesions, to distinguish between incidental and bona-fide premalignant lesions. This is an emerging growth area and the results should prove exceptionally interesting, building upon expertise both at A-star and the local clinical community. A critical part of this effort involves our clinical Disease Champions (Daniel Tan, Iain Tan, and Eranga Vithana) who have provided invaluable guidance and ensured clinical relevance.

As a key institutional stakeholder in POLARIS, the constant and unwavering support of Singhealth has been, and will continue to be, crucial. Working with Enny Kiesworo, John Coe, and Issac Chua, a legal agreement formalizing POLARIS between Singhealth and A-star is being drafted for vetting by both sides. IRB and Ethics approvals for the different POLARIS projects have been obtained. Our Bio-IT team has established a working framework with Singhealth IT regarding data exchange and laboratory integration for assays developed under the POLARIS umbrella. We are providing feedback to SGH Pathology on their building plans for the SGH POLARIS lab, scheduled to be developed in mid-late 2013 when SGH Pathology moves into their new facilities in the Academia Building at Outram Road.

At A-star, multiple POLARIS activities have also been initiated. Renovations for the new POLARIS lab, housed on the 4th floor of GIS, are underway and should be completed at the end of March (photographs by Herve Thoreau, POLARIS Lab Manager. L to R : Feb 2013; March 2013).



Procurement tenders for clinical-grade high-throughput sequencing machines and sample tracking software, for deployment at both A-star and Singhealth, have been issued and are under evaluation. We have adopted a strategy of bundling multiple equipment items into one tender to obtain significant discounts from vendors, resulting in cost-savings to our funders. Once these critical items have been selected, POLARIS will shift into a more technical phase where our assay development teams will start assay design and technical validation.

In summary, we believe that POLARIS is off to a good start, but there is a significant amount of work to do. Challenges are inevitable, but they are surmountable provided we have a unified vision and keep lines of communication clear and open. We should always be reminded that the goal of POLARIS is to improve healthcare outcomes for patients in Singapore and the region. In this regard, I would point you to a recent article in the New York Times where patient genome sequencing is becoming increasingly common. We firmly believe that this is the right track and we look forward to similar examples emerging from POLARIS!

Best regards,



Patrick Tan
(On behalf of the POLARIS Team)

