UQ Summer Research Project Description - 2026

Project title:	**Developing and Piloting a Criteria-Based, Non-Clinician-Led Referral Pathway for the Omico CASP Program**
Hours of engagement & delivery mode	Hours of engagement: 20 hrs per week for 6 weeks between 12 January and 20 February 2026. Location: Princess Alexandra Hospital, Building 1, Dutton Park campus.
Description:	The Omico Cancer Screening and Prevention (CASP) program offers free comprehensive genomic profiling for eligible cancer patients across Australia, facilitating access to targeted therapies and clinical trials. Many patients who meet eligibility criteria are not currently referred, often due to clinician time pressures or low awareness of the program. This project aims to co-design, implement, and evaluate a criteria-based referral pathway that can be operated by non-clinicians (e.g., research coordinators or admin staff) to identify potential CASP candidates from clinic lists and prompt clinicians to initiate referrals. The student will work with the oncology service to develop a simple Trigger Checklist, a Referral Pack, and a Standard Operating Procedure (SOP), then pilot the workflow over 6 weeks to assess feasibility, adoption, and acceptability. Actionable results are common and matched therapy is feasible but under-delivered. In the foundational MSK-IMPACT cohort (>10,000 advanced cancers), ~37% of patients harboured a clinically relevant (actionable) alteration and ~11% ultimately received matched therapy. National Australian data show scale and real-world impact. Omico reports 25,584 referrals to its programs, 18,325 patients with CGP completed, 12,558 with a treatment recommendation (~68.5% of those profiled), and 1,836 patients who accessed a clinical trial or matched therapy (~10% of those profiled). These are exactly the outcomes CaSP is designed to enable. International trials demonstrate that genomics-guided care can deliver benefit across tumour types. Examples include NCI-MATCH (pan-cancer, signal-seeking substudies with multiple positive arms) and MOSCATO-01 (1,035 pts; ~199 treated on matched therapy; clinical-benefit signal using PFS2/PFS1>1.3). ESMO's 2024 update recommends routine tumour NGS in advanced non-squamous NSCLC and extends routine NGS to additional common and rare cancers; it also promotes tumour-agnostic biomarker detection (MSI-H/dMMR, TMB-high, NTRK fusions) using the ESCAT framework to prioritise clinically actionable targets. These guidelines are the current gold standard for when and how to implement NGS. Testing remains underused in practice. Even in NSCLC—the most mature indication for routine biomarker testing—real-world series show gaps; for example, US data show ALK testing rose from ~60% (2012) to ~84% (2019)

	with variable uptake for EGFR/ROS1 by 2020, indicating that system design (reflex/criteria-led processes) still matters. This project aims to develop a lightweight, criteria-led pathway that does not depend on physician bandwidth to close a known implementation gap: many patients meet criteria for CGP and receive a treatment recommendation (~60–70%), but only a fraction of patients are actually referred for profiling. This is typically due to the logistical burden of making the initial referral. A non-physician service built around clear triggers + prompt + pack + physician sign-off would target that bottleneck directly.
Expected learning outcomes and deliverables:	Aims: 1. Design and validate a criteria-based, non-physician-led referral pathway to flag and prepare CaSP referrals for physician approval. 2. Pilot the pathway over 3-4 weeks and quantify feasibility, adoption, and early activity (referrals/clinic-week vs baseline). 3. Document barriers/enablers and produce an SOP and tools for sustained use post-pilot. Specific objectives and endpoints: Primary endpoint: Feasibility—Proportion (%) of profile eligible patients referred for testing on the OMICO/CASP program which involved the non-physician trigger + prompt process (target ≥80%). Key secondaries: Acceptability - Proportion (%) of physicians who would utilise this new process (target ≥80%). Sustainability - median time taken to prepare and refer a patient for OMICO/CASP is < 5minutes. Exploratories: Proportion of CaSP CGP results generating a recommendation (target 60%), and downstream access to treatment (referrals that progress to trial/therapy; Omico benchmark ~10%). Deliverables: 1. Build a Trigger Checklist aligned to CaSP scope (≥16y; advanced/incurable or poor-prognosis cancers; considering next-line therapy; tissue or blood CGP feasible; treating physician available as referrer). 2. Create a Referral Pack (1-page physician guide; specimen tips referencing Omico requirements; cover sheet for “Proceed/Decline”). 3. Run a micro-training for clinic admin/research staff (5–10 minutes) and a 10-minute huddle for physicians. 4. Operate the trigger → prompt → pack workflow in selected clinics; log exposure/fidelity and aggregate weekly referral counts (student never accesses identifiable data). 5. Compare baseline vs pilot aggregate referrals; summarise physician feedback; hand over SOP v1.0 + tools. 6. Collect data on feasibility, acceptability and sustainability endpoints.
Suitable for:	This project is suited to pre-med students with some clinical experience and with a background in biomedical science or related fields. Applicants should have strong communication skills, professionalism, and the confidence to engage with physicians, nurses, and administrative staff in a busy clinical environment. Attention to detail, good organisational skills,

	and the ability to follow a structured workflow are essential. An interest in oncology, molecular profiling, and precision medicine is highly desirable, as is curiosity about health service improvement. Prior exposure to research, quality improvement projects, or clinical settings is advantageous but not required. Proficiency in basic data recording (e.g., Excel or Google Sheets) and creating concise visual materials (PowerPoint or Canva) will be helpful. Above all, applicants should be motivated to contribute to equitable access to advanced cancer diagnostics and demonstrate adaptability, initiative, and a collaborative mindset.
Primary Supervisor:	Dr Aaron Hansen aaron.r.hansen@health.qld.gov.au
Further info:	The supervisor CAN be contacted by students prior to submission of an application. This project requires evidence of vaccination or non-susceptibility for vaccine preventable diseases: Metro South VPD and TB risk assessment.