**Statement of Purpose**

**Student Name**: Kiran Franklin

**Course Title**: Doctor of Philosophy

**University**: University of Queensland, Brisbane, Australia

**Introduction**

Greetings! I am Kiran Franklin, a seasoned bioinformatics engineer driven by an insatiable curiosity for unraveling the complexities of omics data and contribute to personalized medicine world. The Purpose of penning down this statement is to articulate my desire to embark on a transformative academic journey as a doctoral student at University of Queensland, Australia. Under the esteemed mentorship of Dr. Nic Wadell at QIMRB, I am eager to delve into the intricate realm of cancer Neoantigen prediction.

Raised in a nurturing environment by my father, Mr. Gnana Prakash, a dedicated Dairy Farmer, and my mother, Mrs. Nirmala Mary, a compassionate homemaker, I have been instilled with the values of diligence and perseverance. I’m fortunate to have two elder brothers who stand as beacons of inspiration for me. The eldest is engaged as Fatigue and Damage Tolerance detailed analysis engineer in Airbus, Hamburg, Germany and elder as a Transactional Risk Investigator in the Catalogue Discovery Abuse Department at Amazon, Bangalore, India.

**Academic Background, Employment History and English Proficiency**

When everyone in pre-university was aspiring to build career in medical professional, my inquisitive nature diverged towards roots of disease diagnosis and treatment, which led me to choose Engineering in Biotechnology for my undergraduate program at Dayananda Sagar College of Engineering, VTU affiliated, Bangalore, India. During my freshman year, on a journey exploring different corners of biotechnology and its application, I was captivated Bioinformatics, an intersection of biology, mathematics and computer science and immersed myself into this new world.

An early foray into a minor project in bioinformatics during my second year opened doors to a plethora of tools, techniques, and databases. Fueling my passion, I presented research at international and national conferences, earning accolades like the "Best Poster" award. Additionally, I enrolled in workshops and online certifications to upskill Omics and Data Science technology. This journey paved the way for a Research Intern role at Boltzman Labs, where I contributed to build an AI-enhanced drug discovery studio for designing novel molecules. Progressing from a Research Intern to a Bioinformatics Engineer, I honed my skills in drug discovery, analytics, AI-based computational methods, and team management.

Transitioning to Excelra Knowledge Solutions as a Senior Research Associate marked a pivotal step. Here, I diversified my expertise in bioinformatics, delving into Omics pipeline development using Nextflow, software engineering, data engineering, and subject matter expertise. Beyond service-related skills, my passion for research persisted, leading me to contribute to in-house projects, Drug combination synergy prediction using deep learning, cheminformatics, and Omics. Additionally, I was also involved in developing project proposals with the Business unit.

My English language proficiency, as validated by an IELTS examination in December 2022, reflects a band score of 7.0 with 6.0 in speaking, 6.0 in writing, 6 .5 in listening and 8.5 in reading.

**Motivation and Purpose:**

My desire to contribute biology was instilled from the time I joined my undergraduate program however the focus on Cancer and onco-informatics is because cancer is a leading cause of death worldwide, accounting for nearly 10 million deaths in 2020. The most common cancers in 2020 were breast (2.26 million cases) and lung (2.21 million cases). And had a personal experience in seeing my neighbour died in early 30’s within a couple months after giving birth to girl baby, due to breast cancer has inspired me to contribute to oncology. Thanks to recent advances happening in AI which is helping to unravel the black of complex biology world and I’m eager to gain more knowledge and expertise in this area. I strongly believe that this opportunity to work with esteemed researchers of QIMRB will help me to reach my goal of building personalized and generalized oncology tools for effective diagnosis of cancer and suggesting treatment as a combination or individual therapy.

**Why Australia, why not India?**

Australia’s commitment to scientific excellence and cancer research resonated deeply with my aspiration. QIMR Berghofer, specifically, stands out as one of global leader in medical research and contributes to Australia to rank in top 10 world medical research. Their efforts in both discovery and translation research with real patient setting focusing on different diseases and conditions inspire me and a perfect place to meet my goals. Specifically, pioneering work on immuno-informatics focusing on neoantigens conducted by Dr. Nic Wadell, perfectly aligns with the research interests. On the other side, India is also contributing excellently to health research but the opportunities in specialized fields like neoantigen research is limited compared to global research hubs like Australia.

My expertise in deep learning, omics pipeline building and analysing, software development enthusiasm for learning advanced prediction algorithms, coupled with my eagerness to collaborate and expand my knowledge make me confident in my ability to significantly contribute to this project.

My decision to pursue this Ph.D. in Australia transcends just academic opportunities. The diverse cultural atmosphere and the global reputation of Australian universities offer a unique and enriching experience. Moreover, being away from my home country will further hone my independence and adaptability, essential qualities for a budding researcher.

Also, I’m fully aware that my bachelor’s degree might seem unconventional for Ph.D. admission. However, I am confident that my strong academic background, relevant research experience, unwavering passion for the field, and willingness to bridge knowledge gaps through additional coursework demonstrate my preparedness for the rigors of a Ph.D. program.

**Why Queensland University?**

Primarily, Queensland University is a renowned institution ranking 43rd position in the world in the QS world in 2024 and has won more national teaching awards than any other Australian Universities. This denotes their quality of education and strong focus on practical and applied research. They provide opportunities for collaboration with industry and healthcare providers. Furthermore, access to advanced computational resources and collaborative opportunities with established researchers at QIMR Berghofer and Queensland University present an unparalleled environment for my academic and professional growth.

**Future Plans**

Post my Ph.D. from Queensland university, I would like to utilize the skills and knowledge that gained to contribute to Oncology in possible ways. I would like to start seeking an opportunity to work in healthcare sectors in India, either in academia or industry who primarily focus on personalized medicine and building personalized and generalized oncology tools for effective diagnosis of cancer and suggesting treatment as a combination or individual therapy. Also, I would like to collaborate with other researchers in India and around globe to contributing to developing open-source pipelines, packages and building databases for better predictive modelling and analysis. Finally, I would seek opportunities to mentor and train young scholars by passing knowledge I have and keep open my doors to learn from them as well.

**Financial Details:**

I am pleased to inform you that I have been granted the Medical Genomics PhD Scholarship of $32,300 p.a. and Graduate Scholarship. These scholarships will cover my course fees and living expenses throughout my entire tenure as a Ph. D candidate. In addition, I have a saving of INR 150,000 which is equivalent to XXXX. This fund may be utilized to cover my travel costs and initial living expenses.

**Student Visa Conditions:**

I am applying for Visa subclass 500, and I understand and agree/need to follow the below mentioned points:

* I need to maintain a full-time study load.
* I should maintain good academic progress.
* I should be completing my degree within three years six months’ timeframe.
* I should maintain my OSHC for the entire duration of my student visa.
* I can work part-time up to 40 hours per fortnight during my study period.
* I should notify the university of my new address within seven days of my arrival and if it changes later.
* I should notify the university of any changes to my visa.

I am eagerly anticipating joining the April 2024 cohort and respectfully request your approval of my student visa application. This opportunity will enable me to advance my research skills and broaden my capacity for providing quality care. I sincerely appreciate your consideration of my application and thank you for taking the time to review my statement.

Yours sincerely,

Mr. Kiran Franklin