Pammy Yeoh, 08 6457 0800

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To Pammy Yeoh in the Business Information and Performance team,

I wish to apply for your advertised role of a Data analyst in Nedlands, WA. I can provide your team with my years of experience in research. I am experienced in data analysis in a research context and am an enthusiastic student of biostatistics. I can provide the Business Information and Performance team with my experience in processing biological data. I am capable of processing datasets in Excel, R, python, and am very comfortable using the unix command line and various CLI tools such as grep/ripgrep, awk, and vim.

The skills I can bring to your team include:

- Experience in using R, python, the unix terminal, and building simple static websites
- Experience accessing and processing data from online databases using APTs
- Experience of processing complex population genetics datasets
- Knowledge of Biostatistics and associated technical knowledge of study design.
- Experience in translational medical research including cell culture, molecular biology, and animal husbandry

I am interested in this role as I wish to pivot into an analysis and data focused role.

I have experience working with university, research institute, and NHMRC bureaucracies.

Your team can also draw on my diverse experience as a science communicator, quality control technician, and as a biology tutor.

Additionally, I was recently responsible for setting up and managing a research program in precision medicine at the Hunter Medical Research Institute. This included setting up support programs and a conference (Cancer and Precision Medicine Program 2022).

See below for my response to criteria.

Yours Sincerely,

Adam Graham

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Essential Selection Criteria

1. Considerable experience in the delivery of measurement, analysis and evaluation, together with the retrieval of data.

My career in research has often involved setting up experiments, collecting data, and analysing the results. I have done this in a variety of wetlab and computational contexts. I have used everything from machine specific tools (plate readers and FlowJo software) to excel, and into coding languages such as R, Python, bash scripting. Additionally I have utilised bioinformatics toolsets to achieve my goals and help research students to perform their lab work.

2. Demonstrated ability to understand and interpret client information requirements, and to develop and generate appropriate reports / products.

I have been responsible for setting up and managing a research program in precision medicine at the Hunter Medical Research Institute. This included setting up funding support programs and a conference (Cancer and Precision Medicine Program 2022). As the program leadership were busy, it was up to me to interpret the goals that they had conveyed to me. I made sure to provide concise and clear emails to the leadership team so that they could quickly understand what I was planning to do, get their input, and ensure I was on the right track.

Beyond the research program, both of my Research Assistant roles required I help PostDocs and research students with their projects. Which required that I understand their requests.

I have also helped with research grant applications for my previous supervisor Murray Cairns. This required I understand the project he wished to apply for, and then help him write the grant application. Often I was required to clarify and pick a specific direction for the proposed project.

3. Well-developed verbal, written and interpersonal communication skills with the ability to liaise, consult and present information to a diverse range of clients and customers in a variety of contexts.

I have presented both technical and non-technical information to a variety of audiences. Technical talks have included tutorials on bioinformatics tools, and medical research, while non-technical talks have included entertaining science outreach presentations. Both of my Research Assistant roles required extensive communication with individuals from clinical, research, and adminstration backgrounds.

4. Well-developed conceptual, analytical and research skills, with the ability to provide innovative solutions to complex problems.

As a research student and later research assistant I have been involved in generating data, processing it, and then analysing it. I have used R, Python, and Excel for the latter steps. I

have accessed large databases using APIs but have limited experience working internally with SQL databases. In my previous Research Assistant role I worked with two large datasets; the UK Biobank and the Australian Schizophrenia Research Bank. I wrote scripts that made filtering these datasets for specific variables (user selectable) based on the specific way the dataset was setup on our local research computer. You can view the repo for these scripts here. I also used genetics specific tools such as plink and SAMtools to analyse these datasets.

Additionally, I did some bioinformatics work to find specific point mutations in the human genome to help less technical students do their labwork. I used SAMTools and VCFtools to filter the data and then used a bash script to find the specific mutations.

You can view some of my personal projects at my github pages site here.

5. Well-developed organisational skills, together with the ability to plan and prioritise workloads to meet timeframes and deadlines.

As detailed above, I was recently responsible for setting up a new Research Program in Precision Medicine and Cancer at HMRI. This required a lot of work and considerable organising both for setting up support funding for members but also for organising meetings, taking minutes, hiring a new program manager, and organising a conference.

Desirable Selection Criteria

1. Previous experience in WA Health.

None. I do have experience working in research adjacent to NSW Health.

2. Possession of or progress towards a relevant tertiary qualification, including Health Sciences, Mathematics and Statistics.

I am currently studying a Masters of Biostatistics at the University of Sydney. I have a Bachelor of Science (Honours) in Biotechnology.

3. Current knowledge and commitment to Equal Opportunity in all aspects of employment and service delivery.

I am committed to equal opportunity in all aspects of employment and service delivery.