

CURRICULUM VITAE

MAY MANNA WANYA, RPh, MS Bioinformatics

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PROFESSIONAL SUMMARY

Pharmacist and Bioinformatician with strong proficiency in Python, R, Linux, SAS, and SQL for computational biology, genomics workflows, and scientific data analysis. Experienced in protein secondary structure prediction, health analytics, and large-scale field research across PNG. Skilled in building and troubleshooting computational pipelines, interpreting biological datasets, and communicating scientific findings. Fulbright Scholar integrating pharmacy, genomics, and computational methods to advance biomedical research and public health.

TECHNICAL SKILLS

Programming & Data Science

Python • R • Bash/Linux • SAS • SQL •
Pandas • NumPy • ggplot2 • matplotlib •
Jupyter • Git • WSL • HPC environments

Bioinformatics Tools & Databases

bcftools • samtools • EMBL-EBI • GenBank •
Protein Data Bank • DSSP • AlphaFold •
FASTA/VCF handling • sequence alignment
concepts

Computational Biology & Statistics

• PCA • Machine Learning for
Bioinformatics • Protein Secondary Structure
Prediction • regression models • clustering •
feature extraction • predictive modeling • QC
workflows(Qaulity Control).

CORE COMPETENCIES

Scientific communication • technical writing •
research design • data interpretation • clinical
pharmacy expertise • project coordination •
stakeholder engagement • leadership &
volunteer management • multi-tasking in
high-pressure environments.

EDUCATION

Master of Science in Bioinformatics

University of North Carolina–Charlotte, USA | 2024–2026

Bachelor of Pharmacy

University of Papua New Guinea | 2012–2016

RESEARCH EXPERIENCE

Research Assistant – Guo Lab, UNC Charlotte (2025)

Investigation of Protein Secondary Structure Prediction Desai, N., Wanya, M., & Guo, J-T.

- Applied Python and R for feature extraction, model evaluation, and structural prediction analysis.
- Contributed to computational workflow development and research documentation.

Researcher – PNG Department of Health (2018)

Compliance to Good Pharmacy Practices in Hospital Pharmacies (NCD)

- Evaluated pharmacy operations and regulatory compliance.
- Analyzed data to identify gaps in drug storage, dispensing, and workflow efficiency.

Researcher – UPNG (2016)

Pharmaceutical Waste Management in Wewak & Yangoru Saussia Districts

- Assessed waste handling processes and environmental risks.
- Developed recommendations for safer pharmaceutical waste disposal.

PROFESSIONAL EXPERIENCE

Research Assistant – Guo Lab, UNC Charlotte (Jan–Dec 2025)

- Conducted computational biology research using Python, R, and Linux.
- Processed protein datasets and evaluated prediction models.
- Prepared scientific summaries and contributed to lab presentations.

Pharmacist/Manager – City Pharmacy Limited (Nov 2022 – Apr 2024)

- Managed pharmacy operations, inventory, and commercial performance.
- Used PRONTO software for stock control and reporting.
- Delivered patient care and supervised staff.

TB Community Treatment Support Supervisor – World Vision PNG (Oct 2021 – Nov 2022)

- Coordinated TB project activities across communities.
- Led data collection, analysis, and reporting.
- Managed volunteers and partner organizations.

Pharmacist – Paradise Private Hospital (Jun 2018 – Apr 2021)

- Delivered clinical pharmacy services and drug-use consultations.
- Strengthened inventory management using Excel.
- Procured quality medicines from multiple suppliers.

LEADERSHIP & COMMUNITY ENGAGEMENT

- Vice President of Events – Pacific Australia Youth Association (PAYA, 2024)
- Regional Coordinator – PAYA (2023)
- Team Member – PAYA Youth Leadership Summit, Tonga (2023)
- Organizing Committee – PNG Pharmaceutical Society Biennial Scientific Conference (2022)
- Organizing Committee – PNG Assemblies of God National Youth Conference (2022)
- Participant – UNDP/NDoH Reproductive & Maternal Health Surveys (2016, 2017)
- Participant – Essential Drugs Availability Survey (2013)

AFFILIATIONS

Fulbright Scholar • PNG Pharmaceutical Society • Pacific Australia Youth Association • PNG Pharmacy Board

REFEREES:

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