

STUDENT RECRUITMENT

Project title: Impact of Diabetes on TB disease and Treatment Outcome in Ghana

Acronym: **TB-DM**

Host Department: Bacteriology, NMIMR

Positions: Two PhD and one Master students

Background: Tuberculosis (TB), which has killed more humans than any other infectious disease is still a major global health problem. Established risk factors for TB include the HIV pandemic and the occurrence of strains resistant to anti-TB drugs. Diabetes mellitus (DM) is increasingly becoming a worldwide chronic health condition, which can be attributed to increases in obesity, changing patterns of diet and physical activity as well as ageing. DM has been associated with reduced T cell response and neutrophil functional activity. Reports of many studies in different parts of the world indicate a higher DM prevalence among newly diagnosed TB cases compared to the general population. Our proposed study aims to determine the effect of DM on incidence and treatment outcome of TB in Ghana. We are therefore looking for highly motivated and hardworking prospective students for employment on this project.

Proposed student thesis areas (modifications/enhancements may be done)

- The first PhD student (Microbiology): Will look at the association of TB-DM and drug resistance and evolution of distinct TB lineages. .
- The second PhD student (Pharmacology), the pharmacokinetics of anti-TB drugs in TB-DM and effect on evolution of drug resistance
- The MPhil student (Clinical Microbiology/pulmonologist) will assess the impact of DM on incidence and treatment outcome of TB in Ghana.

Minimum qualifications and required skills (PhD students)

Potential applicants must;

- Be enrolled in a PhD program in Biological Sciences/pharmacy/pharmacology and successfully completed the first-year course work.
- Have at least two years laboratory experience, with expertise in microbiology and or molecular biology, pharmacology and related expertise.
- Have experience in the conduct of, and be available for field work.
- Have the ability to work over long periods, develop new techniques and adjust quickly to changing environments.

- Have good communication skills, including oral presentations and scientific writing.
- Be capable of working very well within a team and independently with minimal supervision when necessary.
- basic knowledge in a statistical software such as R, Stata and/or GraphPad Prism will be an added advantage.

Job description (PhD students)

- Strictly follow and implement study protocols to perform project-related laboratory experiments.
- Participate fully in all project training and seminar sessions.
- Support project-related field activities.
- Give periodic updates (monthly) on progress of work.
- Maintain study documentation, provide accurate reports and publish at least two peer-reviewed manuscripts.
- Complete and submit a PhD thesis by the end of the third year.
- Perform any other project-related duties assigned by the Principal Investigator.

Minimum qualifications and required skills (MPhil student)

Potential applicants must;

- A good first class degree in the biological sciences, preferably MBChB holder, registered with Ghana Medical and Dental Council

Job description (Masters)

- Strictly follow and implement study protocols on clinical documentations
- Participate fully in all project training and seminar sessions.
- Support project-related field activities.
- Give periodic updates (monthly) on progress of work.
- Maintain study documentation, provide accurate reports and publish at least one peer-reviewed manuscript.
- Complete and submit an MPhil thesis by the end of the second year.
- Perform any other project-related duties assigned by the Principal Investigator.

TERMS OF EMPLOYMENT:

- Contract studentship positions in the Bacteriology Department, NMIMR.
- Contract is renewable every year based on satisfactory performance.
- Contract period:
 - **PhD** – three (3) years, beginning from 1st September 2020, with a probation period of 3 months.

- **MPhil** – One and a half (1.5) years, beginning from 1st January 2021, with a probation period of 3 months.
- Remuneration will be in line with current UG contract staff policy and will include school fees over the contract period.

Qualified persons should submit their **applications** with a **CV** and a **on- page statement indicating why they are interested in the position** by email to Dyeboah-manu@noguchi.ug.edu.gh by 5pm on Tuesday 25th August 2020.

Please note that only shortlisted applicants will be contacted for interview on **Friday 31st August 2020**.