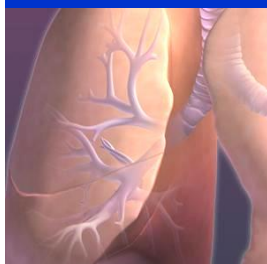


# LUNG INFECTION & IMMUNITY UNIT



## Division of Pulmonology, Department of Medicine

### University of Cape Town

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## MSc in Medicine Fellowship

### Purpose:

The Lung Infection and Immunity Unit, University of Cape Town has an opening for one student to take part in an innovative and multidisciplinary MSc project studying the transmission of drug-resistant TB, which represents a public health crisis that threatens to destabilise the healthcare system in South Africa.

The project involves using novel methods to isolate the cough aerosol droplets of TB patients. It will also study the various microbiological factors associated with someone being a probable “super-spreader” of TB status, such as dormancy, and transcriptomic profile. Students will be embedded within a larger project and will be supported by an existing team of scientists and clinical staff. Students will perform the culture of TB strains under different growth conditions, assist with cloning and protein purification work, and conduct assays, including staining techniques, to measure the metabolic state of bacilli both in the sputum and cough aerosol of TB patients.

### Eligibility and Academic Criteria:

- BSc Honours
- BSL-3 experience is advantageous but not mandatory
- Experience in TB or other infectious diseases and molecular biology would be advantageous but is not required
- Strong microbiological background and understanding of culture and molecular techniques.
- Ability to work under pressure
- Ability to communicate clearly

### Conditions:

The successful incumbent will be required to:

- Register for a full-time masters in the Department of Medicine at the University of Cape Town.
- Comply with the University’s approved policies, procedures and practises for the postgraduate sector.

Although successful candidates will be permitted to take up part-time employment (maximum 15 hours per week) they may not hold salaried/full-time employment concurrently.

No service will be required in return for the award.

**Value:**

The value of the fellowship is R80 000 – R100 000. The awardee will be assisted in applying for additional funding, which may supplement this fellowship.

The fellowships are tenable for one year and where **renewal** may be possible, that renewal for a further year will be considered on evidence of satisfactory academic progress and availability of funds.

The project has the scope to potentially be upgraded to a PhD.

**Application procedure:**

To apply please forward:

- a motivational letter describing one's suitability for the position
- a brief (2-3 page) CV
- and contact details of two referees  
to [pat.wileman@uct.ac.za](mailto:pat.wileman@uct.ac.za)

Queries for the infectiousness project may be directed to Dr Grant Theron (grant.theron@uct.ac.za).

Selection will take account of the University's approved policies and procedures.

UCT reserves the right to not fill the position.

***The closing date for applications is 5 January 2015***