

SELECTION CRITERIA

Qualifications

Essential

- PhD in the area of Immunology or Microbiology. PhD studies in other disciplines must be strongly justified in the applicant's response to the selection criteria.

Knowledge and Skills

Essential

- A strong knowledge and interest in immunology, microbiology and/or host-pathogen interactions.
- Strong experimental skills in at least one of the following:
 - (1) Biochemistry and molecular biology (molecular cloning, western blot, immunoprecipitation, mass spectrometry)
 - (2) Cell biology (cell culture, magnetic-activated cell sorting, over-expression by transfection/transduction, gene silencing by siRNA knockdown, confocal microscopy)
 - (3) Immunological assays (preparation of myeloid cells, ELISA, flow cytometry, assays for pyroptotic cell death and cytokine cleavage, macrophage activation assays)
 - (4) Host-pathogen interaction and microbiology (*in vitro* infection assays, murine *in vivo* infection assays, bacterial microbiology including bacterial complementation and the generation of bacterial mutants)

Desirable

- Skills in the remaining areas (biochemistry and molecular biology, cell biology, immunological assays and microbiology) as described above.

Experience

Essential

- A strong track record in Immunology/Microbiology, including first-author publications. The response to selection criteria must clearly outline the applicant's specific contribution to the design and execution of his/her published experimental work.

Desirable

- Prior experience in researching innate immune signalling pathways (e.g. inflammasome pathways).

Personal Qualities

Essential

- A strong desire to develop a successful and highly-productive research career in immunological research
- Ability to work collaboratively with colleagues.

- High level of communication and interpersonal skills.
- Ability to learn new experimental procedures.
- Attention to detail in carrying out experimental procedures.
- Careful documentation of experimental work.
- Excellent organisational and problem solving skills.