

Drug Discovery Training Programme Call for 2014

1. Background

In December 2008, the NRF and Emory University (USA) entered into an agreement for the development of a Drug Discovery Training Programme (DDTP). The programme is in line with national priorities to mitigate against the devastation caused by HIV/AIDS and other communicable diseases, through the creation of viable vaccine development and biopharmaceutical industries as identified by the South African National Research and Development Strategy of 2002. The programme is intended to contribute to the production of high-quality human resources, generation of internationally competitive research, as well as the development and transfer of this new knowledge to ensure tangible benefits to society.

The purpose of the programme is to support and accelerate pharmaceutical research in South Africa through capacity building and knowledge transfer. It is envisaged that it would facilitate the broader South African research community to be proactively involved in establishing and sustaining a needs-driven research agenda for economic and social development. The DDTP includes postdoctoral fellowships, research advancement training, short-term exchange visits as well as the doctoral sandwich programme in the field of Drug Discovery. This funding call is for sandwich doctoral and postdoctoral fellowship programmes only.

2. Objectives and Outcomes

The objectives of the programme are:

- increase the number of doctoral and postdoctoral qualifications obtained by South African researchers;
- increase the quantity and quality of collaborative projects between researchers in the USA and in South Africa; and
- enhance knowledge acquisition, including specialised techniques and skills, by South African researchers.

The expected outcomes of the programme are:

- increased human capacity to undertake internationally competitive research in SA that is relevant to local needs and which could feed into existing programmes in SA;
- contribution to increased vaccine and pharmaceutical research knowledge transfer;

- improved development of cost-effective products and processes to address SA and Africa's health needs contributing towards poverty eradication;
- expanding research networks to contribute to the sustainability of the Drug Discovery programme.

3. Programme Structure

The doctoral (PhD) programme, is a three (3) year Sandwich doctoral programme that requires students to spend one third ($\frac{1}{3}$) of their doctoral training time at Emory University. The students will be required to be registered and be based at a South African public university. In addition to spending time at Emory University, the students will be jointly supervised by academic supervisors at Emory University and counterparts at a South African Institution where the candidate will be registered.

The postdoctoral fellowship is also a three (3) year programme that requires candidates to spend one (1) year of their fellowship at Emory University.

4. Areas of Support

Applications from candidates intending to pursue doctoral studies or a postdoctoral fellowship in the following specific areas will be considered:

Biochemistry, Pharmacology, Toxicology, Molecular modelling, Medicinal chemistry, High throughput screening, Drug design, Bioinformatics, Genetic, Vaccine Development Immunology, and other disciplines aligned to drug discovery.

In 2014, the following areas of scientific study are available at Emory University through this programme:

- High throughput screening
- Biochemistry
- Pharmacology
- Toxicology
- Medicinal chemistry
- Molecular modelling
- Formulation
- Assay development
- Pharmacokinetics
- Lead optimization



- Molecular biology
- Vaccine development
- Drug discovery and design
- Genetics
- Bioinformatics
- Immunology
- Animal or human health drug development in the fields of chemistry, biology, biochemistry, Drug Metabolism and Pharmacokinetics (DMPK), and analytic service.

In addition to the scientific training aspects of the program, Emory University will provide additional educational opportunities in the fields of business and/or entrepreneurship and, intellectual property. These opportunities may take place in a small group setting and/or in a traditional classroom environment.

5. Value of the Award

For postdoctoral fellowships, the NRF will award the successful candidate an amount of R355 000.00 for the year spent in the US. This value includes travel, visa, and course fees (where applicable). A scholarship value of R240 000.00 per annum (for two years) will be provided for the years spent in South Africa.

For doctoral studies, the NRF will award the successful candidate an amount of R240 000.00 for the year spent in the US. This value includes travel, visa, and course fees (where applicable). A scholarship value of R100 000 per annum (for two years) will be provided for the years spent in South Africa. Shorter lengths of stay not stipulated above will be considered under special circumstances. In addition, the NRF and Emory will share the defense costs at 50% each in the final year of study.

The Emory University will cover the cost of research expenses, accommodation and monthly stipends for the duration of their stay in the USA.

6. Eligibility Criteria for Selection

In selecting applicants for consideration, the following criteria will apply:

Sandwich Postdoctoral Fellowships

- Applicants must either be South African citizens or in possession of South African permanent residency.
- Applicants must have obtained their doctoral degrees in drug discovery or a closely related field in the last five (5) years or expect to have met these requirements by the time that the fellowship will commence.
- Successful applicants may not concurrently hold the fellowship with another NRF postdoctoral fellowship or any other postdoctoral fellowship from a South African government source.

Sandwich Doctoral Programme

- Applicants must either be South African citizens or in possession of South African permanent residency
- For doctoral students, applicants must have a master's degree and will be able to register for a doctoral degree at any South African public university.
- Individuals who are in the process of completing the requirements for a master's degree may apply. However, applicants must have successfully completed the required degree to be admitted into the programme.
- Successful applicants may not concurrently hold the study support with another NRF scholarship or any other scholarship from a South African government source.

7. How to apply for funding

Applicants can apply by following the steps below:

- Applications must be submitted through an online application process to the National Research Foundation (NRF).
- **Applicants can apply for the Drug Discovery Training Programme Call for 2014 by accessing the link: <https://nrfsubmission.nrf.ac.za/>**
- **Register/ Login using your ID number and password.**
- Select create new application from the list of existing calls.
- Select the call for which you are applying to: **Drug Discovery Training Programme Call for 2014.**

- Remember to complete all sections of the application.
- Please attach the necessary documents in **one PDF file in the following order: ID document, proof of permanent residence (if applicable) and certified academic transcripts, proof of registration (if applicable).**
- Should you not follow the guidelines for attaching the necessary documents your application will not be considered.
- Remember to **submit** your application on completion.
- Complete applications will go to the host institution for verification before being forwarded to the NRF for further processing.
- Incomplete applications will not be considered.
- Applications that do not meet the eligibility criteria will not be considered (please refer to call document for details on eligibility for the Drug Discovery Training Programme).
- Please contact your institutional office or research office if you have any queries.
- The closing date for submitting applications is **30 April 2014.**
- **Please take note of your institutions internal closing dates as these may be set before the actual call closing date.**

8. Contact Details

For funding instrument related enquiries, please contact:

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