

MATHEMATICAL SCIENCES EARLY CAREER FELLOWSHIPS

Background: The National Graduate Academy for Mathematical and Statistical Sciences (NGA(MaSS)) has secured a grant from the Oppenheimer Memorial Trust to support early career academics in the mathematical sciences (mathematics, statistics and data sciences). The grant will be deployed, together with matching funding from the Department of Higher Education and Training's University Capacity Development Programme grant managed by the University of Pretoria, to implement activities within the Pathways to a Successful Career Programme of the NGA(MaSS) that was launched in January 2020. The Fellowships will be for 12 months and will support two cohorts of participants, the first in 2021 and the second in 2022.

Eligibility: In order to qualify for the fellowship, an applicant has to be

- A South African citizen or permanent resident of South Africa;
- A full-time academic employee (or someone on a fixed term full-time contract continuous for at least 3 years) at any of the universities that have signed a Memorandum of Understanding (MoU) with the University of Pretoria (UP) which is the Lead Institution for the University Capacity Development Programme Grant (UCDP-MSS) awarded by the Department of Higher Education and Training (DHET);
- Anyone satisfying the conditions above **and** at least one of the following:
 - Academics within five years after completion of PhD (not earlier than 1 July 2017) which will exclude any periods away from academia interrupted by, for example, employment outside academic sector, family and other career responsibilities or prolonged ill-health, etc.
 - Academics less than 35 years old who have completed their PhDs;
 - Academics who will complete their PhDs within twelve months of receiving the fellowship.

Objectives: The main objective of the Fellowship is to help early career academics in the mathematical sciences to develop a short-to-medium term Academic Career Development Plan; and to support them in meeting the requirements for career progression, especially promotion through the different academic levels: for example lecturer to senior lecturer or senior lecturer to associate professor. In particular the Fellowship are targeted at

- those that are in their final year of a PhD to complete and submit within twelve months of the award;
- those that have completed their PhDs and supporting them to submit competitive applications for existing grants like the Black Academics Advancement Programme (BAAP) jointly funded by the National Research Foundation and the First Rand Foundation, or Thuthuka Programme (post-PhD track) or the DHET-funded Future Professors Programme (FPP).

Requirements: Applicants receiving the Fellowship will be required to participate in **all the activities** organized under the auspices of the Pathways to a Successful Academic Career Programme (PSACP). They will have an input on the themes to be covered for the workshops as well as the timetable for the various activities. Those that have already had exposure or experience in any of the topics can serve as facilitators or advisors to other participants. Each applicant will be required to ensure that they familiarise themselves with the promotion requirements at their home institutions and that their Academic Career Development Plan responds to these requirements. It will be expected that they discuss their Academic Career Development Plan with the Head of Department. Cooperation of Heads of Departments will be critical to the success of implementing the PSACP, especially creating space for the applicant to take time off for the international placement component of the PSACP. Applicants will be expected to identify major centres of research activity in their area of research interest where they would prefer to spend time on a research visit.

Financial support

- (a) Applicants will be fully funded for all the activities that are organised within the PSACP and no matching funding will be expected from their home institution;
- (b) Each applicant will receive a once off personal grant of up to R50 000.00 - an initial R15 000 discretionary grant; and subsequently will be funded for items that should be **fully motivated** in a personal budget that they will be expected to submit which will be approved by the Head of Department or Dean of Faculty at their institution. Items to be funded could include, but not restricted to, data supplementation; IT upgrades; students assistant; contribution towards hosting a collaborator or mentor;
- (c) The home institution will receive a maximum of R150 000.00 for the period that the applicant is permitted to take time off to concentrate on certain aspects within their Academic Career Development Plan. This will be in instances where they would normally be required to take official (paid or unpaid, sabbatical, research) leave;
- (d) Each applicant can apply for up to R50 000.00 for local research visits of at least one week in duration and a maximum of R150 000.00 for international research visits of at least six weeks at a reputable research institution overseas¹.
- (e) Alternatively, a group of participants (at least two) can apply for up to R200 000 to host international research visitor(s) and/or senior local mentor(s). The main objective will be to assist in the establishment of, and designing a research programme for, a local research group consisting of the host early career academics and their postgraduate students².

Expected outcomes: Early career academics who are recipients of the fellowship who have already completed their PhDs will

¹ The grant will be available for use up to the end of December 2022

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- Clarify and map out their individual career objectives, aspirations and develop a career plan;
- Build essential academic skills, especially becoming an effective lecturer/teacher and start building a teaching portfolio;
- Develop a Research Statement for their short-to-medium research activities;
- Be provided with skills and competency to write grant-winning research proposals;
- Be exposed to academic networks locally, and also be provided with an opportunity to be exposed to global research networks;
- Be knowledgeable about the promotion requirements at their institutions for the different academic categories, and familiarise themselves with what they need to do to meet the promotion requirements for their next level of academic development;
- Work towards meeting the requirements for an NRF-rating

Early career academics who are in the final year of their PhDs will be expected to

- submit their theses for examination within twelve months of receiving the award;
- Prepare for publication, if they have not already done so, articles for publication from their PhD research;
- Participate in workshops geared at submitting grant applications for the National Research Foundation's BAAP and Thuthuka Programme (post-PhD track) and DHET's Future Professors Programme.