The Registrar,

Rhodes University

Re: Motivational letter to serve as the Dean of Science at Rhodes University

The main job objectives of the Dean of Science are to provide **intellectual, academic** and **management** leadership and where necessary to champion the needs of the faculty and various departments. I believe that I have the necessary skill set to meet the requirements of the position of the Dean of Science at Rhodes University. Below I provide clear evidence of my intellectual, academic and leadership qualities. A detailed copy of my curriculum vitae is attached:

Intellectual and academic leadership

Since obtaining my PhD in 1996, I have published 146 peer review science articles, the greater majority of which have been published in top international journals, 7 book chapters and have successfully supervised 35 MSc and PhD students. The success of my research track record and student supervision can be attributed to my ability to secure funding for novel research programmes that I have conceived and developed. I have reviewed articles for no less than 40 peer review journals, served as an external examiner for the Universities of Fort Hare, KwaZulu-Natal and Cape Town and reviewed both local and international research programmes. Additionally, I have acted as an examiner of dissertations from both local and international universities.

In recognition of the quantity and quality of my research outputs and my academic standing, I have been the recipient of a number of awards including the Mering Naude Gold Medal of the Royal Society of South Africa and the Junior and Senior Vice Chancellor's Distinguished Research Awards from Rhodes University. To my knowledge, I am only the second individual to have been awarded both the junior and senior research awards at Rhodes University. In 2008, I was elected a member of the Academy of Science of South Africa and subsequently was made a fellow of the Royal Society of South Africa in 2011. In recognition of my research standing, I was awarded a B3 rating by the National Research Foundation (NRF) in 2010. I am eligible for re-rating in 2015.

Management and leadership

I have been the Director of the Southern Ocean Group since 2008 and am currently serving my second term as the Head of Department of Zoology and Entomology. During my tenure as head, the department has consistently maintained high undergraduate pass rates, successfully graduated large numbers of postgraduates and been among the top three departments in terms of research output. In addition to the role as an academic leader, I have served as a chairperson for a number of selection committees at Rhodes University. Furthermore, I was the Chairperson for the South African Network for Coastal and Oceanographic Research (SANCOR) from 2007 to 2011 and the Convenor of the Animal and Veterinary ratings committee for the NRF from 2011 to 2013. Moreover, I have served as an external assessor for promotions committee's for Nelson Mandela Metropolitan University and the Universities of Cape Town and Kwa-Zulu Natal. Serving these roles has provided me with the management and people skills necessarily to perform the duties of the Dean of Science at Rhodes University.

I have been employed at Rhodes University since 1992 and am therefore, well acquainted with the university structures, both administrative and academic, and the challenges the institution and indeed the faculty face. Having served on a number of national committees and as an external examiner and assessor for a number of local tertiary institutions, I have confidence that I am well acquainted with the higher education sector within South Africa. I therefore, strongly believe that I have the necessary skills to provide the intellectual, academic and management leadership for the Faculty of Science at Rhodes University.

Yours sincerely

Professor PW Froneman

VISION AND STRATEGIC PLAN FOR THE FACULTY OF SCIENCE, RHODES UNIVERSITY: STRENGTHS AND MAJOR CHALLENGES

Research and teaching

Rhodes University has positioned itself as a research lead university and is committed to excellence in research and in maintaining and developing a research culture. This is imperative for the institutional reputation and has significant impacts on the approach and quality of undergraduate teaching as Rhodes values the scholar-teacher model of combining research with teaching and learning. The research culture undoubtedly contributes to the high through-put rates of undergraduates and successful supervision of large numbers of postgraduate students. In line of this, there is an expectation that all academic and research staff are to conduct research, supervise postgraduate students and disseminate the main findings of their studies through the publication of peer review journals, book chapters and popular science articles.

In 2012, the combined accredited outputs contributed to a DHET research subsidy amounting to R73.43 million. In 2013, the faculty of science alone contributed 51% of the total accredited research output of the university despite the fact that it constitutes approximately 25% of all academic staff. The greater majority of the accredited research output is, however, demonstratively produced by <25% of academic staff within the faculty. The faculty and indeed university research performance therefore, rests heavily on a small number of academics resulting in a high concentration risk. While the observed skewed trend in research publication rates at Rhodes University is likely similar to other institutions, the comparatively small staff compliment suggest that the institute is particularly vulnerable to losses in subsidy due to the departure of productive staff. Such losses will have a significant impact on the future income stream of the university. There is therefore, an urgent need to both retain the highly productive staff and increase the proportion of academic staff producing accredited research outputs. There is considerable debate on whether research output could be increased through financial reward. There are a number of arguments to be made for and against such an approach at Rhodes University although this alone, is unlikely to reduce the vulnerability of Rhodes University to staff losses. Budgetary constraints suggest that the university will be unable to offer academics remuneration rates that are on a par with other research-led South African universities. One way to retain and attract prospective academics is to facilitate processes which create a culture and atmosphere of research and intellectual pursuit at the university. This can likely be attained in a number of ways:

- 1. Targeted research funding and resources in specific areas of research strength.
- 2. Targeted research funding and resources for young emerging researchers/academics.
- 3 Increased value of Post-doctoral Fellowships so that are on a par with those offered at the larger research-intensive universities.
- 4 Investment in research infrastructure and human capacity (instrument scientists) to maintain and run the equipment. Research is increasingly being driven by technology. In line of this, the university has been highly successful in acquiring state of the art scientific equipment through the NRF equipment grants. The acquisition of these equipment has contributed to Rhodes being a leader in a number of fields of study within southern Africa.
- 5 Actively pursuing and applying for additional SARChI chairs.

There is growing concern about the quality and skills base of undergraduate students entering tertiary institutions within South Africa. Rhodes University has among the highest undergraduate through-put rate of all universities in South Africa. This success can be attributed to the dedication of the academic staff, the relatively small size of the undergraduate classes and academic support provided within the different departments. The demand/need for academic support is likely to increase in the near future due to a poor performing secondary education system within South Africa. At present the academic support for the majority of departments is provided by postgraduate students. The weakness of such a system is that postgraduate students often have no formal training in education, often have insufficient time to dedicate themselves to the task or; have a paucity in theoretical and practical knowledge. A system incorporating a profession educator which would form a critical link between the diverse collection of students and lecturers at the faculty level may need to be considered in the future. Much of the debate on teaching can, however, only take place once a final decision is made whether the government will implement a four year undergraduate programme in South African universities.

Transformation

Although significant progress has been made in the transformation of the student body at the university, the institution has struggled to appoint academics from designated groups. This despite the recognition of the need for the academic body to adequately represent the diversity of South Africa. The rate of transformation of the academic staff at Rhodes University remains unacceptably low. At present, black academics comprise only 23% of all research and instructional staff at Rhodes University. The lack of significant progress in transformation can be likely ascribed to a number of both internal and external factors including amongst others 1. Limited pool of suitably qualified candidates; 2. Geographic location of the university; 3. Institutional reputation; 4. Failing infrastructure within the greater Makana district; 5. Low remuneration.

The lack of success in attracting candidates from designated groups suggests that the current recruitment strategy employed by the university to drive transformation has been inadequate and unsuccessful. Recent strategies such Next Generation of Academics Programme (NGaP) proposed by the DHET which seeks to recruit, support and retain black and female academic staff to address their underrepresentation at all levels within the higher education sectors may serve as a catalyst for transformation at Rhodes in the near future. In the interim, the university must develop its own strategy/ies to address the lack of transformation of the academic body. One such approach would be to identify prospective candidates from designated groups within the postgraduate school. The provision of development funding would not only provide financial security for the prospective candidate but will also ensure the timeous completion of the postgraduate degree. This approach would also ensure a steady stream of potential academics from designated groups.

Administration

There is a growing feeling amongst academics that the academic processes of the university are being driven by administration. This perception has contributed to an antagonistic relationship between academics and administration. Notwithstanding the effect that this has on the moral of the academic and administrative staff, the breakdown of a working relationship has contributed to a reduced efficiency and in some instances, delays in

implementation of academic processes. The recent appointment of Dr Sizwe Mabazela as Vice Chancellor of the university and the imminent appoint of a new Director of Human Resources may provide the faculty the unique opportunity to discuss the concerns of the faculty and to put into place strategies that would serve to lighten the administrative burden of academics.