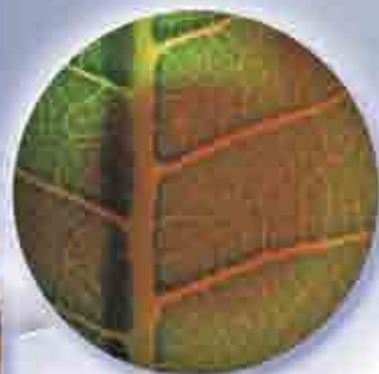





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2009/10



*Applying scientific thinking  
in the service of society*



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*The Academy of Science of South Africa (ASSAf) was inaugurated in May 1996 in the presence of then President Nelson Mandela, the Patron of the launch of the Academy. It was formed in response to the need for an Academy of Science consonant with the dawn of democracy in South Africa: activist in its mission of using science for the benefit of society, with a mandate encompassing all fields of scientific enquiry in a seamless way, and including in its ranks the full diversity of South Africa's distinguished scientists.*



*The Parliament of South Africa passed the Academy of Science of South Africa Act (Act 67 in 2001) which came into operation on 15 May 2002.*



*This has made ASSAf the official Academy of Science of South Africa, recognised by government and representing South Africa in the international community of science academies.*



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in the service of society*



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# ABBREVIATIONS & ACRONYMS

<b>AAS</b>	African Academy of Sciences
<b>AGM</b>	Annual General Meeting
<b>ASADI</b>	African Science Academies Development Initiative
<b>ASSAf</b>	Academy of Science of South Africa
<b>CHE</b>	Council on Higher Education
<b>COHORT</b>	Committee of Heads of Organisations for Research and Technology
<b>COSTIS</b>	Consortium on Science, Technology and Innovation for the South
<b>CSfPA</b>	Committee on Science for Poverty Alleviation
<b>CSPISA</b>	Committee on Scholarly Publishing in South Africa
<b>CSIR</b>	Council for Scientific and Industrial Research
<b>DANIDA</b>	Danish International Development Agency
<b>DST</b>	Department of Science and Technology
<b>GLP</b>	Good Laboratory Practice
<b>GMOs</b>	Genetically Modified Organisms
<b>GYA</b>	Global Young Academy
<b>HSRC</b>	Human Sciences Research Council
<b>IAC</b>	InterAcademy Council
<b>IAMP</b>	InterAcademy Medical Panel
<b>IAP</b>	InterAcademy Panel
<b>IBSS</b>	International Bibliography of the Social Sciences
<b>IOM</b>	Institute of Medicine
<b>IPCC</b>	Intergovernmental Panel on Climate Change
<b>ISI</b>	Institute of Scientific Information
<b>MDR TB</b>	Multi Drug-resistant Tuberculosis
<b>MRC</b>	Medical Research Council
<b>NACI</b>	National Advisory Council on Innovation



## Abbreviations & Acronyms

<b>NASAC</b>	Network of African Science Academies
<b>NECSA</b>	Nuclear Energy Corporation of South Africa
<b>NEPAD</b>	New Partnership for Africa's Development
<b>NGOs</b>	Non-government Organisations
<b>NRF</b>	National Research Foundation
<b>NSEF</b>	National Scholarly Editors' Forum
<b>NSI</b>	National System of Innovation
<b>NSTF</b>	National Science and Technology Forum
<b>R&amp;D</b>	Research and Development
<b>SADC</b>	Southern African Development Community
<i>SAJS</i>	<i>South African Journal of Science</i>
<b>SANPAD</b>	South African Netherlands Research Programme on Alternatives in Development
<b>SARUA</b>	Southern African Regional Universities Association
<b>SciELO</b>	Scientific Electronic Library Online
<b>SciELO-SA</b>	Scientific Electronic Library Online South Africa
<i>SfS</i>	<i>Science for Society</i>
<b>SPP</b>	Scholarly Publishing Programme
<b>S&amp;T</b>	Science and Technology
<b>STEM</b>	Science, Technology, Engineering and Mathematics
<b>TWAS</b>	Academy of Sciences for the Developing World
<b>TWOWS</b>	Third World Organisation of Women in Science
<b>UCT</b>	University of Cape Town
<b>UKZN</b>	University of KwaZulu-Natal
<b>UP</b>	University of Pretoria
<b>USNAS</b>	United States National Academies of Sciences
<b>WRC</b>	Water Research Commission



## MESSAGE FROM THE PRESIDENT

**N**ational Academies of Science are gaining increasing importance in the public life of the nations that they serve. This has been highlighted during the recent celebration of the 350th anniversary of the Royal Society of London that is recognised as one of the premier Academies in the world. The Society has evolved from a club of eminent gentlemen into an Academy of such stature that election to its fellowship is regarded as the ultimate recognition for a distinguished career. However, its public good does not rest solely on its recognition of excellence, but is dependent on its ability to offer carefully considered evidence-based advice to its government and the nation. In addition, it also has a small grant-making function. While it is debatable whether it is appropriate for an Academy to have the latter role, its advisory role is of critical importance in an age where the use of technology is critical to the well being and future of human survival. The choices that governments have to make are highly technical and complex, and the use of the skills embedded in Academies of Science is critical in assisting them to make informed decisions. A good example of this role at an international level, has been the request by the United Nations to the IAP, the global network of science academies, to undertake a review of the work of the IPCC on climate change.

The Academy of Science of South Africa, with a much shorter history of existence (14 years) in the family of global academies, has always conceived of its role as one of addressing the public good that has been referred to above. During the past year we have recognised another group of eminent scholars who have been elected to the membership of the Academy, thus fulfilling the role of giving recognition to individuals who excel in their disciplines with work that has an impact on society.

We have also been very active in undertaking studies on matters of national concern though the work undertaken by specially chosen panels of Members. The reports on these studies are contained in this annual review and demonstrate the potential benefit that can be gained from undertaking these activities.







## *Message from the President*

In addition, the Academy is developing a continental and global focus which is important in the development of a network of expertise that can be used to address both national and regional problems through collaboration between National Academies. International collaboration has been taking place in the areas of secondary education, water management and the development of national Academies of Science in countries in Africa where these institutions do not exist.

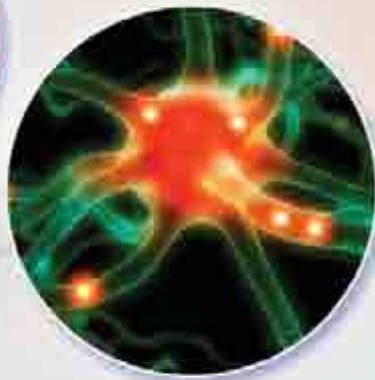


The Academy's international role was greatly enhanced by successfully hosting, together with the Department of Science and Technology, the Academy of Sciences for the Developing World's (TWAS) 11th General Conference and 20th General Meeting in Durban during October 2009. The meeting was notable for the presence of three ministers of Science and Technology from India, Brazil and South Africa who spent time at the conference and were able to engage in extended debate with the participants at the meeting.



In addition, President Jacob Zuma was presented with the TWAS presidential medal at a ceremony in Cape Town.

The role that an Academy can play in the public life of a nation is an evolving one that rests on the mobilisation of its members to provide the kind of advice that will guide decision-makers in the complex environment in which they have to make policy choices.



In ensuring that this role can be fulfilled, the Members and the Council of the Academy of South Africa are dependent on the Executive Officer and staff of the Academy to provide the support that is necessary for it to carry out its functions. In this respect, I would like to thank all the staff and my fellow Council Members for the support, advice and hard work that they have given to the Academy.

**Professor Robin Crewe**

**President: Academy of Science of South Africa**



## MESSAGE FROM THE EXECUTIVE OFFICER

This past year will be remembered as one of intense activity, which culminated in the hosting of the prestigious Academy of Sciences for the Developing World (TWAS) General Conference in Durban in October 2009. Whilst the TWAS conference was the major highlight of the year, it was certainly not the only noteworthy event on the Academy's calendar. A number of important milestones were achieved in this past year and have placed the Academy on a sound basis for further achieving its mission.

In accordance with its mandate to promote scholarly activity, the Academy vigorously pursued its endeavours in the ambitious Scholarly Publishing Programme. Significant achievements included the launch of the open access Scientific Electronic Library Online (SciELO) platform, the full implementation of the quality assurance system for South African journals, and the publication of the consensus study report on *Scholarly Books: Their Production, Use and Evaluation in South Africa Today*.

There were also noteworthy achievements in the Academy's two periodical publications. *The South African Journal of Science (SAJS)* was the pilot journal on the SciELO open access platform and also successfully transferred to the Open Journal System with online submission and tracking of manuscripts. The *Quest: Science for South Africa* magazine launched an interactive website that is aimed at attracting the youth market and providing useful supplementary material that is not able to be distributed through the quarterly print magazines.

Besides the periodical publications, there were a number of other significant Academy products. Chief amongst these was the book on *The State of Science in South Africa*, which was launched at the TWAS conference. The report of the consensus study on *Revitalising Clinical Research in South Africa* was published, as was the full-colour policy-makers' booklet called *Science in Action* on improving maternal, newborn and child health. A number of workshop proceedings reports were also published, as well as a statement on academic freedom. These publications are the tangible products of intense activity that involves the commitment of ASSAf Members who give of their expertise and time, and simultaneously, the commitment of the staff of the





## *Message from the Executive Officer*

Academy who work in the background to ensure that the various study panels and committees fulfill their objectives.

As always, ASSAf has been very active on the international front. The TWAS conference, as mentioned before, was the highlight of the year. The conference was judged by all who attended to have been a great success and propelled ASSAf into the international spotlight. The Minister of Science and Technology, Ms Naledi Pandor, officiated at the event. The initiation of TWAS and Third World Organisation of Women in Science (TWOWS) national chapters was announced at the conference and the plan is to host an annual young scientists' conference as the main activity of these national chapters.



The African Science Academy Development Initiative (ASADI) led by the United States National Academies of Sciences has continued to be ASSAf's most strategic partnership and has contributed in great measure to the growth and recognition of ASSAf. With the financial support has come mentoring, collaboration opportunities and confidence building. As we enter the final year of ASADI funding we are able to reflect on what a significant intervention this programme has been for ASSAf and how greatly we value the relationships that we have been able to establish with all the participating science academies.





## *Message from the Executive Officer*

ASSAf embarked on its own academy development initiative in conjunction with the Network of African Science Academies (NASAC) by hosting a workshop for the Southern African Development Community (SADC) region academies and representatives from universities in countries where academies do not exist. ASSAf is deeply committed to this initiative and has subsequently focused on raising awareness amongst government officials and university leadership within the region about the value of science academies. Plans are in progress to raise funding and to work together with specific countries on this exciting initiative.

During the past year, the Academy introduced its new corporate brand that is reflective of its growth as an organisation, redeveloped its website and introduced a number of media-related policies that will ensure that the profile of ASSAf becomes more firmly entrenched in its target audiences. A concerted effort has been made to increase the number of media releases on Academy activities and this will remain an important future imperative as the Academy strives to enhance its reputation and profile.

Internally, within the ASSAf secretariat, there were also many changes. For example, ASSAf's long-term relationship with the National Research Foundation (NRF) as the organisation responsible for all human resource related matters, including payroll, was phased out in favour of in-house policies and procedures reflecting ASSAf's maturity as an organisation. However, perhaps the most significant event was the relocation of ASSAf from the Department of Science and Technology (DST) building to its new rented premises in Perseus Park. Such a move from the DST building where all information technology, telephone, cleaning and security services were provided, requires significant planning. I owe a special debt of gratitude to Ms Susan Veldsman and her team for ensuring that the relocation took place smoothly and that computer links were restored in record time.

The activities and impact of the Academy are made possible by the excellent leadership provided by the ASSAf President, Professor Robin Crewe, and the Members of the ASSAf Council. Their dedication to Academy activities and willingness to serve is an inspiration to all and I am grateful for their strong support and guidance.

Finally, I would like to pay special tribute to all the staff of the Academy who have worked as a closely knit team and gone above the call of duty this year as a result of two major events, the TWAS conference and the relocation to new premises, on top of their normal workloads. Many people commend the Academy for its high level of activity and for its outputs. This would not be possible without a dedicated and competent secretariat and I thank each one of them for their contribution and commitment to the goals of the Academy.

**Professor Roseanne Diab**

**Executive Officer: Academy of Science of South Africa**



# INTRODUCTION: ACADEMY OF SCIENCE OF SOUTH AFRICA

- 1.1 Introduction
- 1.2 Strategic Intent
- 1.3 Vision
- 1.4 Mission
- 1.5 Objectives
- 1.6 Values

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# INTRODUCTION: ACADEMY OF SCIENCE OF SOUTH AFRICA

## 1.1 Introduction

The Academy of Science of South Africa (ASSAf), in its unique position as the only national science academy that is officially recognised by the South African government through the ASSAf Act (*Act 67 of 2001*), aims to provide evidence-based scientific advice on issues of public interest to government and other stakeholders. ASSAf regularly publishes its findings and recommendations and also acknowledges the achievements of South African scientists in order to develop the intellectual capacity of the nation and promote innovative scholarly thinking. The Academy enjoys regular interaction and knowledge exchange with other national science academies throughout the Southern African Development Community (SADC) region, the African continent, and the global scientific community.

## 1.2 Strategic Intent

The Academy will be acknowledged, both nationally and internationally, as a credible, professional and respected collective voice representing the national interests of the sciences, to policy- and decision-makers, the private sector, science community and the general public.

## 1.3 Vision

ASSAf aspires to be the apex organisation for science and scholarship in South Africa, internationally respected and connected, its membership simultaneously the aspiration of the country's most active scholars in all fields of scientific enquiry, and the collective resource making possible professionally managed generation of evidence-based solutions to national problems.

## 1.4 Mission

The mission is summarised as follows:

- To become increasingly associated with the highest levels of scholarly achievement and excellence in the application of scientific thinking for the benefit of society;
- To consolidate its infrastructure and capacity;
- To expand and mobilise its membership to include scholars from the full disciplinary spectrum;
- To proactively and reactively embark on a programme of systematic studies of evidence-based issues of national importance;
- To develop a sound and robust methodology for constituting study panels, producing authoritative reports that are well-disseminated and have significant impact;



## *Introduction: Academy of Science of South Africa*

- To publish science-focused periodicals to promote an interest in the sciences to the nation;
  - *South African Journal of Science* – multidisciplinary scholarly journal of the highest quality and international standing;
  - *Quest: Science for South Africa* – science magazine that showcases the best of South African research to a wide national and international audience, particularly youth in secondary schools;
  - Strategic Reports – policy advisory reports that seek to influence national decision- and policy-making;
- To promote the development in South Africa of an indigenous system of research journals of internationally recognised quality and usefulness;
- To develop and maintain productive partnerships with government departments;
- To develop and maintain collaborative linkages with science councils, non-government organisations (NGOs), higher education institutions and other organisations, with a view to the building of capacity in science and its applications within the National System of Innovation (NSI);
- To create new and diversified sources of funding for the sustainable functioning of an independent national Academy;
- To communicate effectively with general and specific publics, as well as with partners and sponsors;
- To expand activities in partnership with national science academies of other countries, including the contracted partnership with the US National Academies;
- To play a significant role in the international science system, particularly in Africa.

The benefits that the Academy aspires to bring to South Africa (and the wider world) are the sustainable provision of a professionally managed organisation that can mobilise the best intellect, expertise and experience to investigate and provide evidence-based solutions to national problems; inspiration and example in science and technology, applied for the benefit of society; international connectedness at the highest level of knowledge and insight; and facilitation of public understanding of the nature, scope and value of the scientific and technological enterprise.

The relevance of the Academy in the context of national policy frameworks and initiatives is that it strives to achieve the purposes of its enabling Act of Parliament through a public-domain, multi-year strategic plan. It subscribes to the intentions and recommendations of the White Paper on Science and Technology and the National Research and Development Strategy, and the Ten-Year Innovation Plan.

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## 1.5 Objectives

The key objective of the Academy is to promote and apply scientific thinking in the service of society. To this end, the Academy shall:

- use the common ground of scientific knowledge and activity to remove barriers between people and obstacles to full development of their intellectual capacity;
- endeavour in every possible way to inspire, promote and recognise excellence in scientific and technical practice;
- investigate and publicly report on various matters, in its own discretion or at the request of government or organisations in civil society, in order to promote and apply scientific thinking in the service of society;
- promote science education and a culture of science in the population at large;
- maintain strict independence while consulting other organisations and individuals in the widest manner possible;
- endeavour to establish and develop close relations with scientific organisations in South Africa and with similar academies in other countries; and
- take any other action that it may consider necessary towards the attainment of its key objective.

## 1.6 Values

The values of the Academy are to:

- remain independent of government and sectoral lobbies;
- use best-available evidence and scientific knowledge as drivers towards generating recommended solutions to national problems;
- apply multidisciplinary and consilience in its approach;
- adhere to the highest ethical and moral standards;
- recognise the essentially developmental nature of our society and the importance of the natural environment, both for their own sake and from a human and utilitarian perspective.





## PROGRAMME ACTIVITIES

- 2.1 Administration and Governance Activities
- 2.2 Scholarly Publishing Programme
- 2.3 Evidence-based Study Projects
- 2.4 Liaison Activities
- 2.5 Communication and Publications

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The activities of the Academy are structured for budgetary and reporting purposes into five programmes:

- Administration and Governance Activities
- Scholarly Publishing Programme
- Evidence-based Study Projects
- Liaison Activities
- Communication and Publications

## 2.1 Administration and Governance Activities

### 2.1.1 Governance

The Academy is governed by a Council comprising 13 Members, of whom 12 are elected from the membership and one is appointed by the Minister as representative of the National Advisory Council on Innovation (NACI). The Academy has five office-bearers: the President, two Vice-Presidents, General Secretary and Treasurer.

The Council has constituted an Executive Committee comprising the office-bearers. The purpose of the Executive Committee is to streamline Council operations and to allow for decision-making on important matters in the intervals between Council meetings. The Human Resources and Audit Committees of Council continue to function effectively. Policies and guidelines for Academy projects and activities are carefully developed, published, and followed meticulously to ensure full transparency and accountability.

Several human resource policies were approved by Council, viz. Staff Leave Policy and a Travel Policy. In addition, Council approved a Media Release Policy and a Rapid Response Policy.

The Academy's activities are guided by the ASSAf Act (*Act 67 of 2001*) and a set of established regulations. An additional regulation covering the establishment and operation of an Executive Committee was approved by Council during the 2009/2010 financial year. Minor amendments to other regulations were also approved.

During the reporting year, Council Members have received growing support from the ASSAf secretariat through efficient administration, documentation and logistical arrangements, timely distribution of Council meeting documentation and professional minute-taking.

Full fiduciary responsibility for the Academy's reputation, integrity and financial probity was obtained.





## Council Composition



**Robin Crewe** is the President and Chairperson of ASSAf Council. He is Vice-Principal of the University of Pretoria (UP). He obtained degrees in chemistry and biochemistry from the University of Natal in Pietermaritzburg and was awarded a PhD in entomology from the University of Georgia, USA, where he developed an interest in chemical communication and social organisation in social insects. He is the former Director of the Communication Biology Research Group, University of the Witwatersrand (Wits), a position that he held for ten years. In addition, he was Dean of the Faculty of Science at Wits and then Dean of Natural and Agricultural Sciences at UP.

Crewe has been active in the development of professional registration of natural scientists and the promotion of learned scientific societies. He was recently elected as President of the Entomological Society of Southern Africa. His accolades include a Gold Medal from the Zoological Society of South Africa, honorary membership of the International Federation of Beekeepers' Associations (APIMONDIA), and he is a Fellow of the Royal Entomological Society. He is a Fellow of the Academy of Sciences for the Developing World (TWAS) and a *Chevalier de l'Order National du Mérite* (France).



**Patricia Berjak** is the Vice-President of the Academy and is Emeritus Professor and Senior Research Associate at the University of KwaZulu-Natal. She is a Fellow of the University of KwaZulu-Natal and of TWAS.



**Jonathan Jansen** is the Vice-President of the Academy and is the Vice-Chancellor of the University of the Free State and is also an Extraordinary Professor of Education at the University of the Witwatersrand.



**Wieland Gevers** is the General Secretary and is Emeritus Professor of Medical Biochemistry and Life Fellow at the University of Cape Town. He is a TWAS Fellow and the recipient of many awards including a Special Gold Medal awarded by ASSAf for meritorious work, and the National Order of Mapungubwe in Silver.



**Francis Petersen**, Treasurer of the Academy, is Dean of the Faculty of Engineering and Built Environment at the University of Cape Town. He was Head of Strategy at Anglo Platinum Corporation and a former Executive Vice-President: Research & Development (R&D) at Mintek.



## The ASSAf Council comprises the following Members:



**Rob Adam** is Chief Executive Officer of the Nuclear Energy Corporation of South Africa (NECSA). He previously served as Director-General of the Department of Science and Technology (DST).



**Njabulo Ndebele** was Vice-Chancellor and Principal of the University of Cape Town. Earlier positions include Vice-Chancellor and Principal of the University of the North, Vice-Rector of the University of the Western Cape, Chair and Head of the Department of African Literature at the University of the Witwatersrand, Pro-Vice-Chancellor, Dean, and Head of the English Department at the National University of Lesotho.



**Hoosen Coovadia** is Emeritus Professor of Paediatrics and Child Health, Emeritus Victor Daitz Professor of HIV/AIDS Research, University of KwaZulu-Natal. He is also a Director: HIV Management, Maternal Adolescent and Child Health Unit [MatCH], University of the Witwatersrand and Commissioner, National Planning Commission, Presidency, South Africa.



**Priscilla Reddy** is Professor and Director of the Health Promotion Group, at the Medical Research Council (MRC).



**Manfred Hellberg** is Emeritus Professor of Physics and Senior Research Associate at the University of KwaZulu-Natal (UKZN). He was Professor and Head of the Department of Physics, Dean of Science and was twice Pro-Vice-Chancellor at UKZN.



**Peter Vale** is Nelson Mandela Professor of Politics in the Department of Political and International Studies at Rhodes University and Visiting Professor in the Humanities, University of Johannesburg.



**Daniel Ncayiyana** is Honorary Professor of Obstetrics and Gynaecology at the Universities of Cape Town and KwaZulu-Natal. He serves as Advisor to the President of the Human Sciences Research Council (HSRC). He was Vice-Chancellor at the Durban University of Technology, Deputy Vice-Chancellor at the University of Cape Town and Acting Vice-Chancellor at the University of Transkei.



**James (Jimmy) Volmink** is Professor of Community Health in the Faculty of Health Sciences and Deputy Dean (Research) at the University of Stellenbosch. He is also Director of the South African Cochrane Centre.

The appointment of advisors to ASSAf's Council is executed in terms of Regulation 8 of the Academy of Science of South Africa.



**Sunil Maharaj** advises on the financial management of ASSAf's activities. Prof Maharaj holds a National Research Foundation (NRF) Research Chair in the School of Mathematical Sciences at the University of KwaZulu-Natal.



**Hester Vorster** is a special advisor to the Council and Professor and Research Director of the Africa Unit for Transdisciplinary Health Research, at the University of North-West.

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### ASSAf Council Role & Function

As the Accounting Authority of the Academy, the ASSAf Council is governed in terms of the stipulations of Chapter 6 of the Academy's Parliamentary Act (*Act 67 of 2001*). As such, the Council is responsible for ensuring that the objectives of the Academy are actively pursued and achieved, within a given reporting period. In addition, the Council manages the overall operations and strategic direction of the Academy.

### ASSAf Council Evaluation & Performance

The Council met four times during 2009/10. Office-bearers' attendance of the 2009/10 Council meetings averaged 80% (see Record of Attendance at ASSAf Council meetings), while the average attendance rate of non-office-bearers was 54% (including the advisors to Council).

### Record of Attendance at ASSAf Council Meetings

Council Member	Council
Rob Adam	1
Patricia Berjak	3
Hoosen Coovadia	4
Robin Crewe	4
Wieland Gevers	4
Manfred Hellberg	4
Jonathan Jansen	2
Sunil Maharaj	3
Daniel Ncayiyana	3
Njabulo Ndebele	-
Francis Petersen	1
Priscilla Reddy	-
Peter Vale	4
James (Jimmy) Volmink	2
Hester Vorster	2



## ASSAf Council Remuneration of Members

Council Members do not receive any remuneration for their involvement in governing the activities of the Academy. Funds are allocated to cover Council Members' travel and logistical costs associated with Council meetings, in addition to office-bearers' ASSAf-related business costs.

### 2.1.2 Membership

Members are the core asset of the Academy and give of their time and expertise voluntarily. Only actual expenses incurred while engaged on Academy business are covered or reimbursed.

The current membership of the Academy is 338. A total of 25 new Members was elected during this past year. Another round of nominations and elections will be conducted in mid-2010. New ASSAf Members are:

NAME	DISCIPLINE	AFFILIATION
Narend Baijnath	Education	University of South Africa
Gregory L Blatch	Biochemistry	Rhodes University
Jennifer Case	Chemical Engineering	University of Cape Town
Thulani H Dlamini	Nanotechnology	Council for Scientific and Industrial Research
Irma Eloff	Education	University of Pretoria
Alan Flisher	Psychiatry & Mental Health	University of Cape Town
Hendrik Geyer	Theoretical Physics	Stellenbosch University
Christopher Henshilwood	Archaeology	University of the Witwatersrand
Jozeph Johannes Henning	Law	Free State University
John Anthony Higgins	Humanities	University of Cape Town
Guy Franklin Midgley	Ecology	South African National Biodiversity Institute
David Mycock	Biotechnology	University of the Witwatersrand
Deborah Posel	Sociology	University of the Witwatersrand
David Mark Richardson	Biology	Stellenbosch University
Christopher Saunders	History	University of Cape Town
Roland Schulze	Hydrology	University of KwaZulu-Natal
Vikash Sewram	Oncology	Medical Research Council
Frans Swanepoel	Agriculture	Free State University
Keyan Gray Tomaselli	Cultural and Media Studies	University of KwaZulu-Natal
Leana Uys	Health Sciences	University of KwaZulu-Natal



NAME	DISCIPLINE	AFFILIATION
Andries Johannes van der Walt	Constitutional Property Law	Stellenbosch University
Albert van Jaarsveld	Environmental Studies	National Research Foundation
Willem Heber (Emile) van Zyl	Microbiology	Stellenbosch University
Renuka Vithal	Education	University of KwaZulu-Natal
Laurence Stuart Wright	Literature	Rhodes University

During the reporting period, ASSAf actively sought greater representivity in respect of race, gender and disciplines that are currently still under-represented (e.g. social, human, agricultural, mathematical, economic and technological sciences). Of the 25 new Members, five are women and four are black.

Broader Member participation was enabled by the initiation of seven new consensus and forum studies, as well as ongoing activities of other committees. A volunteer system of Academy service by Members was successfully implemented in the past year. Members were also given an opportunity to provide input into public statements on important science-based topics issued by the Academy.

Members were invited to become part of an ASSAf Rapid Response Panel, the aim of which is to increase the Academy's involvement in public debate on topical scientific and scholarly issues.

ASSAf aimed to enhance the development of communication channels between its secretariat and membership base, with the end goal being to keep Members informed of Academy activities and for Members to provide input on Academy contributions to society. As the nucleus of the Academy's intellectual capability, Members were duly acknowledged and kept informed of ASSAf activities and planned events, through receipt of complimentary copies of the Academy's quarterly newsletter (*Science for Society*), the internationally recognised multidisciplinary science journal, the *South African Journal of Science* and the popular science magazine, *Quest: Science for South Africa*, all ASSAf study and corporate reports, the minutes of all Annual General Meeting (AGM) meetings, as well as the website.

Academy Members were given the opportunity to nominate candidates for Academy awards, and to participate in the Academy's national and regional lectures.

The Academy held its Annual General Meeting on 6 October 2009 at the Council for Scientific and Industrial Research (CSIR) International Convention Centre. The event was preceded by the second annual symposium organised by the Academy and the annual Academy Awards Ceremony at which the Minister of Science and Technology, Ms Naledi Pandor, was the main speaker. The symposium theme was "PhD Production in South Africa".

The Academy recognised some of South Africa's top scientists and a leading young scientist in the annual Awards Ceremony.

A full Member register containing Members' information and contact details was published on CD and was distributed to all Members.





## 2.1.3 Infrastructure – Personnel and Physical

The secretariat of the Academy is managed by an Executive Officer, Prof Roseanne Diab, supported by the Chief Operations Officer, Dr Xola Mati.

The staff of the Academy was stable during 2009/10. There was one resignation during the year, necessitating the appointment of a new Membership Liaison Officer. An additional Project Officer, with specialist skills in the environmental field, was appointed and three new staff members joined the Scholarly Publishing Unit to provide ASSAf with the professional support required for its range of activities.

The management team is well-established and functions effectively to provide strategic guidance to the Executive Officer and Chief Operations Officer, and leadership in each of their respective sections. The staff complement at the end of the 2009/2010 financial year is as follows:

<b>Executive Officer:</b>	Professor Roseanne Diab
<b>Chief Operations Officer:</b>	Dr Xola Mati
<b>Financial Manager:</b>	Mr Morakeng Malatji
Administration Officer – Finance:	Mr Justice Baloyi
Administration Officer – General:	Ms Lebo Makgae
<b>Liaison Manager:</b>	Mr Takalani Rambau
Liaison Officer:	Ms Mutheu Ngila
Membership Liaison Officer:	Ms Philistas Masinga
<b>Project Manager:</b>	Dr Nthabiseng Taole
Project Officer:	Ms Phakamile Mngadi
Project Officer:	Ms Zuki Mpiyakhe
Project Officer:	Ms Zarina Moolla
<b>Communication Manager:</b>	Ms Patricia Scholtz
Communication Officer:	Ms Andrea Meyer
Assistant Editor, <i>SAJS</i> :	Dr Linda Fick
Publications Coordinator:	Mr Patrick Nemushungwa
<b>Director: Scholarly Publishing Unit:</b>	Ms Susan Veldsman
Systems and Database Manager:	Mr Tawanda December
Metadata Librarian:	Ms Louise van Heerden
Project Officer:	Mr Thabo Radebe
Project Officer:	Mr Zwelibanzi Ndayi

The periodical publications of the Academy, viz. the *South African Journal of Science* and *Quest: Science for South Africa* magazine are staffed by part-time contract editors who are supported in their editorial function and in the production of the journals by the full-time staff of the ASSAf secretariat.

ASSAf relocated to its new rented premises in Persequor Park in July 2009. This was necessitated by the DST's need for more space in the DST building. Funding for the relocation, including funds for the purchase of furniture and equipment, was provided by DST.



## 2.2 Scholarly Publishing Programme



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## 2.2 Scholarly Publishing Programme

The Scholarly Publishing Programme (SPP), overseen by the Committee on Scholarly Publications in South Africa (CSPiSA) moves ahead apace. The strategic goal of this programme is to help develop and maintain a vibrant National System of Innovation (NSI) that will contribute materially to the sustainable prosperity of all South Africa's people.

The SPP strategy simultaneously addresses two main objectives of the NSI: enhancement of the national capacity to produce and especially to publish research, on the one hand, and increasing the quality and visibility of South African research publications, on the other.

During the reporting period progress was made in obtaining an integrated approach and synergy between the ten recommendations of the ASSAf 2006 consensus report and the different activities and projects. Activities conducted are feeding into the Scientific Electronic Library Online (SciELO) platform, whilst changing and influencing open access scholarly publishing in South Africa. The appointment of three more staff members to the programme is contributing to its effective implementation.

### 2.2.1 National Scholarly Editors' Forum (NSEF)

The third annual forum of editors was held in June 2009 and was attended by 89 delegates. The database of journals/editors was completed and updates continued. To enhance services and dissemination of information to editors, blog training was organised and was attended by all ASSAf project staff. A fully operational blog can be viewed at <http://www.assaf-interactive.org.za/>. Members can now participate and comment on activities reported on the blogs and discussion groups.

A proposal for a National Scholarly Publishers' Forum is being pursued.

### 2.2.2 Editors' Incentives

The ASSAf Council approved the establishment of a panel to examine "Ways to Enhance Incentives for Scholarly Journal Editors in South Africa". ASSAf was successful in obtaining funding from the Shuttleworth Foundation to support this activity. The draft report was tested and refined during May 2009 in a series of informal and regional Focus Group meetings that culminated in a formal presentation and debate at the Scholarly Publishing Committee meeting and the Editors' Forum in June 2009. A final report was submitted to the Shuttleworth Foundation in September 2009. ASSAf has been requested to elevate the study to a fully fledged evidence-based report that would influence policies and practices within institutions, government and the scholarly publishing system in general.

### 2.2.3 Quality Assurance System for South African Journals

In the reporting period the system was conceptualised and criteria and process guidelines were approved. Draft reports on the completed peer review process for the first two disciplinary groups (Social Sciences and Agriculture) were presented to the Scholarly



Publishing Committee in February 2010. Journals of four additional disciplinary groups (Law, Health Sciences, Humanities, Theology and Religious Studies) that would take part in the peer review process were identified and questionnaires have been sent to all editors. Panel members have been identified and were approved by Council in March 2010.

## 2.2.4 Online Scientific Writing

The establishment of a web-based online scientific writing service for graduate students and young academic staff continued. Preparatory meetings were held with institutional experts at the University of Cape Town, Witwatersrand University, Stellenbosch University and the South African Netherlands Research Programme on Alternatives in Development (SANPAD).

## 2.2.5 Book Study

The report of the Consensus Study on "A Strategic Approach to Scholarly Publishing in Books in South Africa" was finalised during the reporting period. The report addresses issues relating to production, use and evaluation of scholarly books in South Africa and was commissioned by the National Department of Education to assist them with the recognition of books and chapters in books as a component of the research output of higher education institutions. The report, which makes 11 recommendations to enhance the quality and quantity of such works, has been submitted to the Department of Higher Education and Training and other stakeholders for their information and consideration. A press release was sent to media contacts. A summary of the report has also been published.





## 2.2.6 Open Access National Platform

Significant progress was made towards the the implementation of the Open Access National Platform for high-quality South African scholarly journals in this reporting year. Publication of journals in open access format unlocks peer-reviewed scholarly works in their entirety to the end-user. The articles are in digital format, available online at no cost and, although free from most licensing restrictions, still copyrighted. The project is inspired by the international trend to the implementation of online journals, pioneered by the SciELO project, based in Brazil. This fully indexed platform has been successfully implemented in eight countries, mostly in Latin America, with others being in the developmental phases. SciELO-South Africa is the first site of this growing system on the African continent.

During the reporting period eight pilot journals were established on the SciELO platform to establish a blue print to determine workflow, and technical, indexing and publishing requirements. A permanent site for SciELO SA in South Africa has also been established and server space was secured, the web server established, and personnel have been recruited and trained. The SciELO platform has been successfully installed on the ASSAf infrastructure and the Brazilian and South African platforms are currently being run in parallel to facilitate supervision by the Brazilian team and a smooth transition to the local platform.

Criteria for inclusion in the pilot phase are that journals must be accredited by the Department of Education (now Department of Higher Education and Training) and/or IBSS/ISI listed.

Investigations were also initiated on the publishing of the *South African Journal of Science* on an open access content management system, and a decision has been made regarding the software to be used. During the investigations and recommendations, insights have been gained regarding the business model and costs of both a paper-based publishing system and an open access system. This has enabled the SPP to advise other scholarly publishers in South Africa on such models, to redirect current monies into an open access model, as well as gain insights into a phased approach to publishing in a fully open access mode.

The digitisation of back issues of *SAJS* has also been investigated.

## 2.2.7 Institutional Repositories

The SPP continued to promote and advocate open access and institutional repositories amongst scholars, editors and institutions, with the cooperation of the National Research Foundation (NRF), higher education institutions and research councils. The SPP is in the process of establishing a repository for its own publications, as well as for TWAS to showcase research being done by both organisations.





## 2.3 Evidence-based Study Projects



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## 2.3 Evidence-based Study Projects

There has been a noteworthy increase in project-related activities during the past year. This has been possible through the contribution of ASSAf Members and other national and international experts who serve on the many panels and committees and who give freely of their time to assist ASSAf in the achievement of its goal to provide scholarly evidence-based policy advice. The ASSAf project staff has also played a valuable supportive role in project-related activities rendering a professional service to panel members.

Evidence-based study project activities form the core of the Academy's function and are a key area of future development. As the number of projects expands and addresses an intentionally broader spectrum of national issues and priorities, the number of staff required to service this area of activity has increased. Projects also play a key role in mobilising the ASSAf membership in service on committees and panels.

Plans to expand project activities into the important areas of energy and climate change were successfully achieved. Evidence-based projects fall into three broad areas, each staffed by a Project Officer who works under the guidance of the Project Manager. The three broad areas are health, humanities and education, and environment, including energy.

Seven new projects were introduced in the fields of climate change, energy, water, genetically modified organisms (GMOs), multi drug-resistant tuberculosis (MDR TB) and HIV/AIDS.



The Academy's full suite of evidence-based projects is summarised below.

### 2.3.1 Clinical Research and Related Training in South Africa

This consensus study was designed to contribute to building a national culture in which clinical research is seen as essential, and clinical trials are widely accepted and promoted. It has investigated how best to equip and encourage clinicians-in-training to embrace clinical research and evidence-based practice as indispensable elements in delivering



effective health care; how to ensure that clinical research flourishes in South Africa under conditions that protect the rights and safety of individuals; and how to ensure that government, parastatal institutions, academia and industry interact more constructively to create a favorable and enabling environment for clinical research to be conducted.

After completion of the draft report, peer reviewers were appointed by the ASSAf Council and the peer review process took place between mid-July to mid-August 2009. The final report was approved by Council in October 2009 and was printed in February 2010.

### 2.3.2 Improved Nutritional Assessment in South Africa

This consensus study was conceived as a follow-up to the *Consensus Report on HIV/AIDS, TB and Nutrition (2007)*. One of the key findings of the 2007 report was the (surprising) national deficit in modern nutritional assessment methods, particularly tests of micronutrient status that were grounded in the most up-to-date understandings of relevant physiology and pathological chemistry, and that were reliable, affordable and practically helpful. The aim of this study is to address this finding, seeking to identify the best assessment methods for these micronutrients to contribute to the prevention and treatment of these pandemic infectious conditions in the country. The six micronutrients identified as being most significant were vitamins A and D, folate, and the trace elements zinc, iron and selenium.

Most draft chapters of the report were completed in mid-2009. There is still one chapter outstanding. It is anticipated that this report will be published before the end of 2010.

### 2.3.3 State of Humanities in South Africa

This consensus study will examine the present status and role of the humanities in South Africa and suggest ways to strengthen and advance the contribution of the Humanities to national life and development in South Africa.

Funding was secured from two major funders, viz. the Ford Foundation and the Oppenheimer Memorial Trust.

A number of panel meetings were held and a series of public lectures was held at the Grahamstown Festival under the Think-Fest programme and attended by approximately 1000 people. Plans are underway to hold a major symposium in 2010.

### 2.3.4 PhD Study: Enhancing the Production of Postgraduates in South Africa

This study was commissioned by the National Research Foundation (NRF), the DST, the DoE, the Council on Higher Education (CHE), and other stakeholders. There is a broad consensus in the science community in South Africa that not enough high-quality PhDs are being produced in relation to the developmental needs of the country. It is anticipated that a ten-fold increase in the number of PhDs is required. This ambition to escalate the number of well-trained PhDs in South Africa raises fundamental questions about national capacity, critical partners, innovative programmes, strategic investments and cross-sectoral co-operation, that will be addressed by this panel.



## *Programme Activities*

During the financial year one workshop was held followed by an international symposium in October 2009.

The draft report has been finalised, peer reviewers approved and appointed, and the final report has been submitted for peer review. The final report will be released in mid-2010.

### 2.3.5 Science for Poverty Alleviation

ASSAf originally constituted its Committee on Science for Poverty Alleviation (CSfPA) to contribute to one of the five new national missions outlined in South Africa's R&D Strategy. The Committee was augmented in 2007 to generate forum-type studies of selected topics in three broad areas to assist government policy-makers and others, in the fight to alleviate poverty in South Africa. The three broad multidisciplinary areas are: small-scale agriculture; health of poor communities; and general environmental and other sustainability aspects of smaller (secondary) cities.

In 2009/2010 three projects were implemented under this umbrella committee: "Improving Maternal, Newborn and Child Health in Africa"; "GMOs in Africa: Challenges and Opportunities" and "Improving Access to Energy in sub-Saharan Africa."

ASSAf hosted a second workshop on "Improving Maternal, Newborn and Child Health in Africa" and a policy-makers' booklet was completed and launched at the ASADI conference in Ghana in November 2009. A comprehensive dissemination plan and stakeholder engagement plan have been compiled and will be fully implemented in 2010/2011. Media releases were issued when the report was published.

The GMOs project secured funding from the InterAcademy Panel (IAP) and the subcommittee held a planning meeting and a 2-day scientific workshop during the reporting period. A proceedings report is in the process of being compiled. A progress report was submitted to the IAP in December 2009, together with a request for further funding.

A planning meeting and a 2-day scientific workshop were held on the topic "Improving Access to Energy in sub-Saharan Africa" in preparation for the ASADI VI meeting. The workshop was attended by participants from the seven ASADI countries.

### 2.3.6 Science, Technology, Engineering and Mathematics (STEM) Education

This committee aims to serve as the interface between academic institutions and education authorities in matters related to school curricula. It will, *inter alia*, review examinations and assessment at school level and investigate curriculum concerns.

Two committee meetings were held and a 2 ½-day symposium on "Critical Issues in School Mathematics and Science: Pathways to Progress" was held in September/October 2009.

The committee is planning to undertake a meta-analysis of STEM education interventions through a consensus study aimed at formulating recommendations for government's consideration.





### 2.3.7 Standing Committee on Biosafety

The brief of the Committee is to establish whether or not there is an oversight mechanism in South Africa to regulate the conduct of safe science; to raise awareness of scientists about risks involved; and to address the extent of the implementation of biosafety measures in laboratories and what needs to be improved. Allied to this initiative, an ASSAf representative attended a workshop on "Good Laboratory Practice (GLP)" hosted by the Uganda National Academy of Sciences.

During the reporting year, the proposal to focus on GLP was broadened in scope to that of biosafety to oversee all components of biosafety, including bioethics, bio-risks and GLP, and was approved by Council. Committee members were identified and appointed. The committee met in February 2010 and is in the process of drafting a workplan and study proposals.

### 2.3.8 Low Carbon Cities

During 2009, a consensus study on "Low Carbon Cities" was approved by the ASSAf Council. The study is funded by the Danish International Development Agency (DANIDA) through the EThekweni (Durban) Municipality and is aimed at making recommendations on the transition to a low carbon city based on opportunities for reduction in energy usage, energy efficiency measures, renewable energy applications, carbon storage options, etc.

The first panel meeting took place in February 2010 and a review chapter on "International Perspectives on Low Carbon Cities" has been completed. The workplan and strategy for compilation of the final report have been finalised.





### 2.3.9 State of Water in South Africa

During 2009, ASSAf was approached by the Water Research Commission (WRC) to conduct a study on the "State of Water in South Africa". The study is aimed at conducting a rigorous scientific assessment of the state of water and assessing the current and future challenges. The project proposal was accepted by the ASSAf Council and funding secured from the WRC for a scoping exercise. Committee members were identified and approved by Council. The study will be conducted in two phases: the scoping phase will take the form of a roundtable discussion to identify the key questions and the second phase will consist of one or more consensus studies, for which proposal/s are still to be drafted.

An internal planning meeting with an appointed facilitator from the United States National Academies of Sciences took place in January 2010 and the first planning meeting of the Committee was held in March 2010.

### 2.3.10 The Emerging Threat of Multi Drug-resistant Tuberculosis: Global and Local Challenges and Solutions

During 2009, ASSAf was asked to convene, in collaboration with the Institute of Medicine (IOM), a workshop on multi drug-resistant tuberculosis (MDR TB) in order to examine the state of MDR TB in South Africa, to learn from the experiences of the South African public health community, and to draw lessons regarding best practices and novel approaches that could be applied both within and beyond the region. Funding was provided by the IOM.

A seven-member South African Liaison Planning Committee was assembled in June 2009 and the structure and topics for the workshop were finalised. A 2-day workshop, attended by key invited experts, was jointly hosted by ASSAf and the IOM in March 2010.

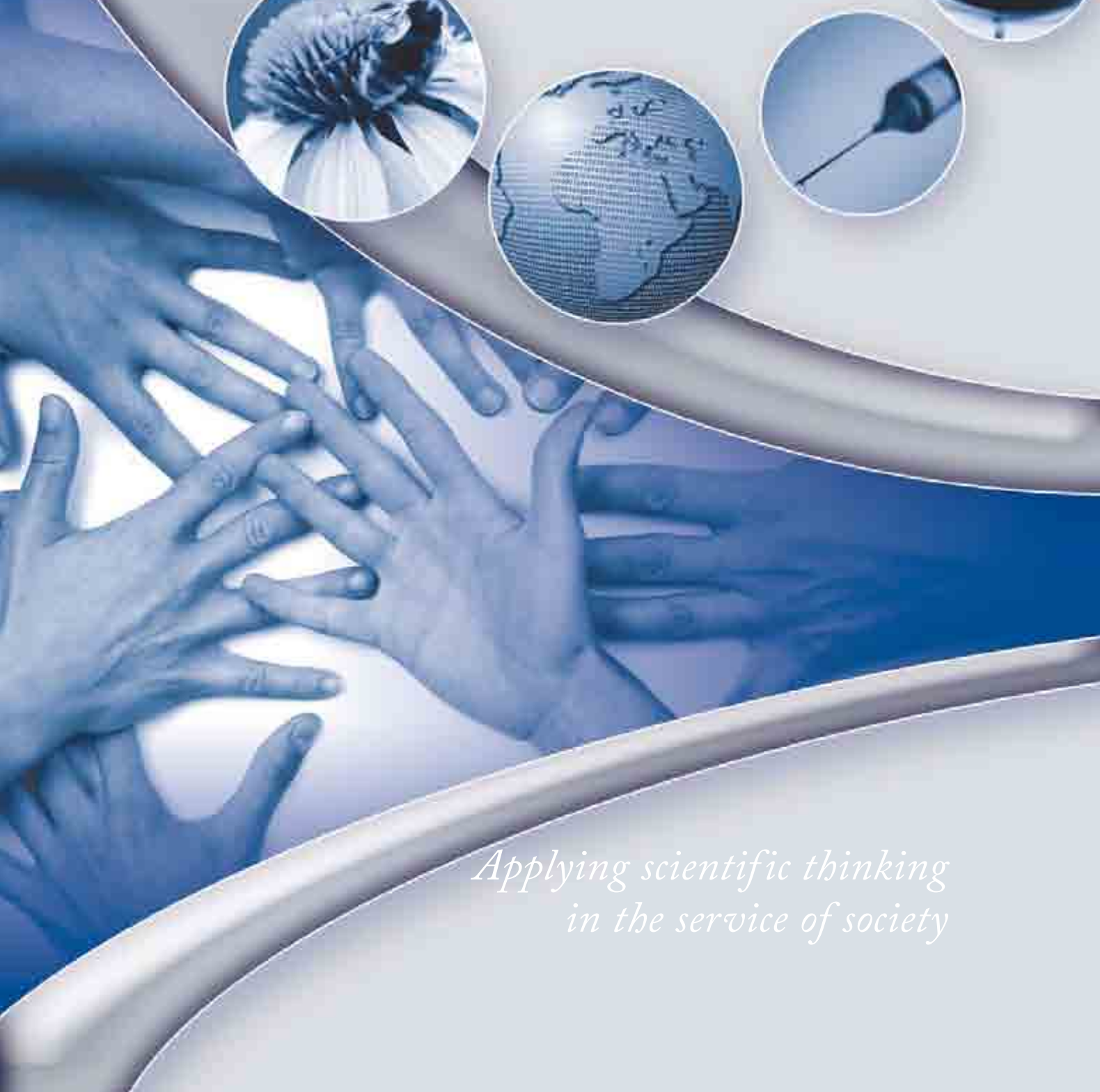
### 2.3.11 Envisioning a Strategy to Prepare for the Long-term Burden of HIV/AIDS

A long-standing IOM initiative to conduct a workshop on the long-term burden of HIV/AIDS in collaboration with ASSAf was realised in 2009, with planning and preparations for the workshop commencing. The study is aimed at examining the current human resource situation for the prevention, care and treatment of HIV/AIDS; illuminating the current state of long-term strategic planning by ministries of health and education and universities in South Africa and elsewhere in sub-Saharan Africa; and identifying projected capacities needed to deliver HIV/AIDS prevention and care services for the 2018-2023 timeframe. The study is funded by the IOM.

Potential committee member names were submitted to the IOM in September 2009 and logistical arrangements for a workshop in April 2010 have commenced.



## 2.4 Liaison Activities



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## 2.4.1 International Liaison Activities

Considerable momentum has been imparted to this important component of the Academy's activities. All activities are carefully meshed with those of the DST's own international programme and with the relevant programmes of the NRF.

Activities undertaken during the reporting year were as follows:

### **African Science Academies Development Initiative (ASADI)**

The African Science Academies Development Initiative (ASADI) programme funded by the US National Academies (USNAS) has provided an effective vehicle for improving cooperation between African science academies and their members/fellows. The fifth annual ASADI meeting, with a focus on "Improving Maternal, Newborn and Child Health in Africa", was held in Ghana in November 2009. ASSAf took responsibility for the production of a policy-makers' booklet on the topic which was launched at the Ghana meeting.

ASSAf will host the 2010 ASADI annual meeting and embarked on planning for this activity during the past financial year. The focus of the meeting will be on "Improving Access to Energy in sub-Saharan Africa".

The ASSAf partnership with the USNAS through the ASADI programme continues to make a major contribution to the development and recognition of the Academy.

Four staff members of ASSAf received training in Washington in September 2009.

### **Network of African Science Academies (NASAC)**

The Academy is a founder Member of the Network of African Science Academies (NASAC), and is currently a Vice-President. The Secretariat of NASAC is housed at the African Academy of Science (AAS) in Nairobi. During the past financial year, ASSAf partnered with NASAC on a variety of activities, for example, the IAP water project and the science academy development initiative.

ASSAf played and is continuing to play a leading role in the implementation of the NASAC Strategic Action Agenda relating to the establishment of new academies and strengthening existing ones within Africa. In May 2009, ASSAf hosted a workshop on "Strengthening and Initiating Academies in the SADC Region". Progress has been made on some of the recommendations of the workshop, including presentations at a Southern African Regional Universities Association (SARUA) meeting and a SADC meeting of senior officials meeting. Meetings were held with presidents of selected academies in the SADC region to discuss future actions.

The Academy also participated in two NASAC executive meetings in Khartoum in June 2009 and Accra in November 2009.



## **InterAcademy Panel (IAP)**

ASSAf is one of over 100 member Academies of the IAP, headquartered in Trieste, Italy. ASSAf can thus enhance its national science academy role within our country by drawing on the experience and capacity of the world's science academies for South Africa's benefit. Significant short-term funding of projects was obtained from IAP, and undertaking similar projects and corresponding funding is anticipated for 2010/11.

ASSAf participates fully in all IAP activities and representatives of the Academy attended the IAP General Assembly held in London in January 2010.

The Academy submitted its national report on the IAP-funded project, "Best Practices of Science Education within sub-Saharan Africa" to the Uganda National Academy of Sciences. ASSAf also hosted an IAP-funded workshop on "Digital Knowledge Resource" in May 2009 and another on "GMOs for African Agriculture" in September 2009.

## **InterAcademy Council (IAC)**

The President of ASSAf has been elected to serve on the Board of the InterAcademy Council (IAC) for the period 2009 to 2013. The IAC produces reports on scientific, technological, and health issues related to the great global challenges of our time, providing knowledge and advice to national governments and international organisations. ASSAf intends, during its period of membership of this council, to participate fully in its activities and to become a true representative of the African continent for the benefit of all academies within the region.

## **InterAcademy Medical Panel (IAMP)**

ASSAf's membership of the IAMP provides valuable contact with the main medical academies world-wide and a focus on health problems of the developing world. Professor Anthony Mbewu, former President of the Medical Research Council (MRC) and a Member of ASSAf, served as a Vice-Chair during the reporting period.

## **The Academy of Sciences for the Developing World (TWAS)**

ASSAf is an active collaborator of TWAS, which has programmes to stimulate scientific development in developing countries and co-sponsors ASSAf's Young Scientist Award.

The highlight of the year was the hosting of the TWAS General Conference in Durban in October 2009. The hosting of the conference significantly increased ASSAf's profile and role in TWAS. The conference was attended by 347 participants from 63 countries in the developing world. The conference was also attended by the Ministers of S&T of South Africa, Brazil, and India, other high-ranking technical advisors of various governments in the developing and developed world, and representatives of Indian, Chinese, and Brazilian diplomatic missions in South Africa.



## *Programme Activities*

The conference programme was divided into six themed symposia, namely: science and technology development in South Africa; impact of the global financial crisis on research and education in developing countries; astronomy in developing countries; human pre-history in Africa; infectious diseases; and, science and technology education for development.

A concerted drive to increase the nomination of South African scientists was undertaken to coincide with the hosting of the TWAS conference. Nine South Africans were elected as TWAS Fellows bringing the total in the country to 19. Two South African young scientists were elected as TWAS young affiliates.

The book on *The State of Science in South Africa* was also launched during the conference.

TWAS and Third World Organisation of Women in Science (TWOWS) national chapters in South Africa were also launched at the conference. The TWOWS national chapter has established an executive committee and is consolidating the database on TWOWS members in South Africa and preparing a strategic plan. The TWAS national chapter will focus on activities for young scientists and aims to host a national conference in 2010.

The TWAS conference also provided an important opportunity to strengthen relationships with academies from Brazil, India, China, Mozambique and Zimbabwe. Presidents of the science academies of Brazil, India and South Africa met during the TWAS conference and reaffirmed their intention to establish cooperation among the three science academies.

TWAS hosts the secretariat of the Consortium on Science, Technology and Innovation for the South (COSTIS), which was launched in Budapest on 4 November 2009. The ASSAf President, as a member of the COSTIS, will play a convening role for the discussion on how South Africa could play a meaningful role in the advancement of COSTIS ideals.

## **G8 + 5 Academies**

A significant outflow of ASSAf's membership of the IAP has been its continuing inclusion in the annual meetings of the G8+5 academies, where the national science academies of the 13 countries discuss key issues of common interest and provide evidence-based advice to the heads of state at the G8+5 summit meetings. In addition, they issue Consensus Statements to international bodies and the world media/public. In March 2009, the meeting took place in Rome and a joint statement on energy was compiled. NASAC, together with individual member academies, also issued a statement on the brain drain problem in Africa.

### **2.4.2 National Liaison Activities**

The past year also saw increased networking with key stakeholders such as government, and organisations involved in policy advice and in the NSI. Formal meetings were held with two sections within DST, representatives from the New Partnership for Africa's Development (NEPAD), and the National Science and Technology Forum (NSTF). The Minister of S&T, Ms Naledi Pandor, made a formal visit to ASSAf in July 2009 soon after assuming office.





## COHORT

As Secretariat for the Committee of Heads of Organisations for Research and Technology (COHORT), increased participation of research and technology organisations in COHORT activities was pursued. Two meetings were held during the reporting period, one in November 2009, which was addressed by the Minister of S&T, Ms Naledi Pandor.

## ASSAf Science-for-Society Gold Medals

ASSAf annually awards up to two ASSAf Science-for-Society Gold Medals for outstanding achievement in scientific thinking for the benefit of society. In 2009, Gold Medals were presented to Professors Anna Coutsooudis and Paul van Helden of the Universities of KwaZulu-Natal and Stellenbosch, respectively.

## ASSAf-TWAS-DST Young Scientist Awards

ASSAf annually awards a Young Scientist prize. In 2009, the award was made to Dr Esta van Heerden of the Free State University.

## Annual Symposium

At least one national open symposium is held annually. The 2009 symposium, held in October 2009, addressed the topic of "PhD Production in South Africa". The forum was used in a consultative way to solicit input on the preliminary findings of the ASSAf consensus study on this topic.



## **Sydney Brenner Fellowship**

Dr Sydney Brenner donated a portion of his 2002 Nobel Prize to ASSAf to permit ASSAf (in partnership with the USNAS) to offer a prestigious postdoctoral Fellowship for research to be undertaken in South Africa over two years by an outstanding young scientist. Dr Brenner personally mentors the Fellows during and after tenure of the Fellowship. The Oppenheimer Memorial Trust has donated funds for a second Fellowship. ASSAf bears the administrative costs and supplements the stipends to ensure the success of the scheme.

Two Sydney Brenner Fellowships were awarded in the financial year. These went to Dr Penny Moore, from the National Institute of Communicable Diseases and Dr Samantha Barichievy from the CSIR, both researchers in the field of HIV/AIDS.

## **Young Scientist Activities**

ASSAf has been actively promoting young scientists' awards and activities. During the reporting year, support was granted to two young outstanding scientists, Dr Bernard Slippers and Professor Thokozani Majozi to attend the World Economic Forum in Tianjin, China in September 2009. ASSAf nominated Professor Tshilidzi Marwala, who was successfully awarded the prestigious AAS/TWAS Microsoft Award. Dr Bernard Slippers was nominated to attend the launch of the Global Young Academy (GYA) in Berlin, Germany from 13 to 14 February 2010 and was subsequently elected to serve on the Executive Committee of the newly established GYA.

## **Regional Public Lectures**

ASSAf partners with other organisations with local chapters to offer public lectures on a range of topics in the principal South African cities. The lectures are widely advertised and generally well attended. Regional lectures took place in Cape Town, Gauteng, Mpumalanga, Eastern Cape and KwaZulu-Natal.



## 2.5 Communication and Publications



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## 2.5 Communication and Publications

The vision of the Communication Programme of ASSAf is, through effective and targeted communication, to support the vision of the Academy to be the apex organisation for science and scholarship in South Africa. The mission is to communicate effectively with external stakeholders, including Members, the public, policy-makers and sponsors; to entrench ASSAf's value in the minds of its target audiences; and to improve internal communication in the ASSAf secretariat.

The Communication Programme is staffed by a Communication Manager and Communication Officer, as well as a Publications Coordinator and Assistant Editor for the *South African Journal of Science*.

### 2.5.1 Communication and Marketing

The branding of ASSAf was revitalised in 2009 to reflect the vision and growth of the Academy. All visual aspects of the Academy's communication were redesigned and are rigorously maintained through brand management.

Fourteen media releases on Academy activities were compiled, approved and disseminated. Contact visits to two additional universities were made (bringing the total to 11 institutions) to raise the profile of the Academy.

A comprehensive database of popular and science media was developed and 86 science media members currently receive all media releases and announcements. When relevant, media releases are sent to all university communications teams, and an additional 250 academic journal editors.

In March 2010, a Rapid Reponse Panel was established comprising Academy Members. ASSAf aims to become increasingly active in public discourse and members of the panel will voice opinions on key topical science issues while emphasising their affiliation to ASSAf. In this way, the Academy seeks to establish itself as a voice of authority.

A Rapid Response Policy and a Media Release Policy for the Academy were approved by Council in March 2010.

To ensure greater publicity for ASSAf awards and fellowships, media releases were distributed to science media, as well as universities and science institutions, and publicised on the new ASSAf website.

Each issue of *Quest* magazine features ASSAf news supplied by the communication team. The *SAJS* will start featuring appropriate articles in 2010.

ASSAf was represented at eight science events/Olympiads of which SciFest 2009 was the largest, with more than 60 000 learners visiting the festival.





## 2.5.2 Production of Evidence-based Research Reports

ASSAf, as the collective resource making possible the professionally managed generation of evidence-based solutions to national problems, has produced and published a total of nine evidence-based research reports.

Eight of the ASSAf reports produced in the reporting period reflected the new ASSAf brand.

Most of the evidence-based reports were produced in two versions; a full version and a concise version for use by policy-makers.

## 2.5.3 Website

The redevelopment of the ASSAf website, in line with the brand and with full Web 3.0 functionality, was finalised in 2009. Statistics on ASSAf website hits reveal a considerable increase in activity in the first three months since the website went live. In-house ability to maintain the ASSAf website was achieved.

An ASSAf blog was instituted and provides a forum for information dissemination and feedback on all aspects of the Academy's work and topical science subjects. The blog is accessible through the ASSAf website and ASSAf Members are encouraged to contribute their expertise in the science disciplines through guest-blogging.

## 3.5.4 Production of Periodical and Non-periodical Publications

The Communication section supported and produced all printed material for the Academy, ranging from its flagship journal, *South African Journal of Science (SAJS)* and science magazine, *Quest – Science for South Africa* to periodicals and non-periodical publications for ASSAf's various workshops, symposia and conferences.

### *South African Journal of Science*

The *SAJS*, now in its 106th year of publication, aspires to be the leading multidisciplinary journal in Africa, publishing original research with a multidisciplinary or regional focus, as well as serving as a forum for debate about recent developments in research and higher education.

The new editorial model comprising an Editor-in-Chief and 10 Associate Editors in specific disciplinary fields has been operational for just over one year and six issues were published on time in 2009. One Editorial Board meeting was held.

*SAJS* was the first of four pilot journals on the SciELO Open Access platform. The platform was launched in August 2009.

During the reporting year, the *SAJS* successfully transferred to an online manuscript tracking system.



## *Programme Activities*

The *SAJS* was actively marketed through media releases to all science journals, science editors, and stakeholders such as research institutes, universities, and relevant government institutions. Six media releases generated by ASSAf on content of the journal resulted in 41 hits.

Expansion of the front-of-house section of the journal has been successfully achieved, commencing with the first issue of Volume 105 (Jan/Feb 2009 issue). Soliciting articles/views addressing topical issues in the science arena for the front-end section of the journal has resulted in increased debate.

The broader scope of the *SAJS* was widely publicised through media releases to science journalists and universities/institutions and in the Academy's own publications. A marketing leaflet was also distributed widely. The number of manuscripts submitted in these new fields has increased, but there is still a need to improve the submission rate. Published papers should reflect the full spectrum of scholarly activity in South Africa. To date, only two papers have been published in the social, human and economic sciences due to the standard review lag time. Soliciting and publishing papers in these fields will be an ongoing endeavour.

The *SAJS* database was audited and updated. This will be an ongoing annual activity. Back copies of the journal were distributed at all youth science events.

## **Quest: Science for South Africa**

*Quest: Science for South Africa* is a full-colour, quarterly, popular science magazine directed at a target audience comprising learners, educators and the general public. It aims to present the country's foremost scientific work in an accessible form. *Quest* is widely distributed to public high schools with science departments and at national science events such as SciFest Africa, Science Olympiads, National Science, Engineering and Technology Week; and the National Science and Technology Forum (NSTF) Awards functions. The magazine is also available to the general public through retail sales in bookstores and by subscription.

With a print run of 25 000 per issue, *Quest* was distributed widely to Dinaledi schools (10 copies per school) and public schools with science departments (3 copies per school). A marketing drive was also undertaken in August 2009 to private schools. Some 3 000 private schools each received a complimentary *Quest* along with an introductory letter and subscription form. Response has been positive. A total of 81 new subscribers have been obtained. Four issues were published during the reporting period.

Each *Quest* magazine was compiled on a specific theme of topical interest, informed by school *curricula* and general global scientific issues. The first issue of 2010 was devoted to the "Science of Soccer".

*Quest* was marketed at eight science events/Olympiads. SciFest 2009 was the largest with more than 60 000 learners visiting the festival. Other events included the NSTF Top Scholars Programme, ESKOM Young Scientist Awards, AFRICA Day, DST National Science Week and the Mintek Quiz. At the NSTF, Eskom and Mintek competitions, *Quest* sponsored free one-year subscriptions for all the winners.



In collaboration with the Department of Education a readership survey was prepared and was distributed with the magazine in June 2009. More than 70 percent of respondents indicated that *Quest* should be published more frequently than quarterly.

A plan to introduce an interactive website for *Quest* was approved by the ASSAf Council in September 2009. The website was developed and was launched in March 2010 at SciFest 2010 through marketing leaflets and a play-station where learners could obtain hands-on experience of the interactive website.



## Science for Society

During the reporting year, the Academy continued the publication of the *Science for Society (SfS)* newsletter. Four issues of *SfS* were published. New features introduced include, *inter alia*, a regular Member profile section highlighting achievements of Members, regular project updates, and a section on ASSAf national and international involvement in the science arena.



## **The State of Science in South Africa**

A highlight for the Academy was the successful production and publishing of *The State of Science in South Africa* book. The book was launched at the TWAS Conference in October 2009 and has been widely acclaimed. A total of 1 000 copies has been distributed and plans are underway to produce a second print run.

## **Dissemination of Reports and Periodical and Non-periodical Publications**

ASSAf's distribution database was redeveloped and audited. Distribution plans for all reports were prepared prior to printing.

## **Digitisation of Evidence-based Research Reports**

The Academy has embarked on a long-term strategy to phase out large print runs of evidence-based and other publications to save on increasing print costs. The book *The State of Science in South Africa* has been converted into digital format and is available free of charge on the Academy's website. Other evidence-based reports are available on the website in PDF format.

It is envisaged that all reports and publications will increasingly be available electronically on the ASSAf website. Interested parties who require a printed version will have the option to order a print-on-demand copy at a cost.

## **Statements**

ASSAf published a statement on academic freedom in March 2010 and was a signatory to a statement on energy and climate change by the G8+5 group of academies, as well as a statement on brain drain published by NASAC.





# ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2010

COUNCIL'S RESPONSIBILITIES AND APPROVAL  
REPORT OF THE INDEPENDENT AUDITORS

STATEMENT OF FINANCIAL POSITION

STATEMENT OF COMPREHENSIVE INCOME

STATEMENT OF CHANGES IN RESERVES

STATEMENT OF CASH FLOWS

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

*Applying scientific thinking  
in the service of society*

# COUNCIL'S RESPONSIBILITIES AND APPROVAL

## Annual Financial Statements for the Year Ended 31 March 2010

The Council is required by the Constitution, to maintain adequate accounting records and is responsible for the content and integrity of the annual financial statements and related financial information included in this report.

It is its responsibility to ensure that the annual financial statements fairly present the state of affairs of the organisation as at the end of the financial year and the results of its operations and cash flows for the year then ended, are in conformity with its accounting policies. The external auditors are engaged to express an independent opinion on the annual financial statements.

The annual financial statements are prepared in accordance with our accounting policies and are based upon appropriate accounting policies consistently applied and supported by reasonable and prudent judgements and estimates.

The Council acknowledges that they are ultimately responsible for the system of internal financial controls established by the organisation and places considerable importance on maintaining a strong control environment. To enable the council to meet these responsibilities, the management committee sets out standards for internal control aimed at reducing the risk of error or loss in a cost-effective manner. The standards include the proper delegation of responsibilities within a clearly defined framework, effective accounting procedures and adequate segregation of duties to ensure an acceptable level of risk. These controls are monitored throughout the organisation and employees are required to maintain the highest ethical standards in ensuring the organisation's business is conducted in a manner that in all reasonable circumstances is above reproach. The focus of risk management in the organisation is on identifying, assessing, managing and monitoring all known forms of risk across the organisation. While operating risk cannot be fully eliminated, the organisation endeavours to minimise it by ensuring that appropriate infrastructure, controls, systems and ethical behaviour are applied and managed within predetermined procedures and constraints.

The Council is of the opinion, based on the information and explanations given by management, that the system of internal controls provides reasonable assurance that the financial records may be relied on for the presentation of the annual financial statements. However, any system of internal financial control can provide only reasonable, and not absolute, assurance against material misstatement or loss.

The Council has reviewed the organisation's cash flow forecast for the year to 31 March 2011 and, in the light of this review and the current financial position, it is satisfied that the organisation has or has access to adequate resources to continue in operational existence for the foreseeable future.

Although the Council is primarily responsible for the financial affairs of the organisation, it is supported by the organisation's external auditors.



## *Annual Financial Statements for the year ended 31 March 2010*

The external auditors are responsible for independently reviewing and reporting on the organisation's annual financial statements. The annual financial statements have been examined by the organisation's external auditors and their report is presented on pages 2 and 3.

The annual financial statements set out on pages 4 to 13, were approved by the council on the 16 July 2010 and were signed on its behalf by:



**Prof Robin Crewe**  
Chairperson, ASSAf Council  
President, ASSAf



**Prof Roseanne Diab**  
Executive Officer  
ASSAf

## **REPORT OF THE INDEPENDENT AUDITORS TO THE COUNCIL**

### **Academy of Science of South Africa**

#### **Report on the financial statements**

We have audited the accompanying financial statements of the Academy of Science of South Africa, which comprise the statement of financial position as at 31 March 2010, and the statement of comprehensive income, statement of changes in equity and statement of cash flows for the year then ended, and a summary of significant accounting policies and other explanatory notes set out on pages 4 to 13.

#### **Members' Council responsibility for the financial statements**

The Members' Council is responsible for the preparation and the fair presentation of these financial statements in accordance with their accounting policies. This responsibility includes: designing, implementing and maintaining internal controls relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error; selecting and applying appropriate accounting policies; and making accounting estimates that are reasonable in the circumstances.





### Auditor's responsibility

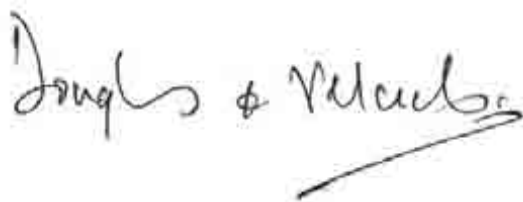
Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with International Standards on Auditing. These standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgement, including the assessment of the risk of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal controls relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal controls. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

### Unqualified Opinion

In our opinion, these financial statements fairly present, in all material respects, the financial position of the Academy of Science of South Africa as at 31 March 2010, and of its financial performance and its cash flows for the year then ended in accordance with its accounting policies.



**Douglas & Velcich**

**Chartered Accountants (S.A.)**

**Registered Accountants and Auditors**

**Johannesburg**

**16 July 2010**





## STATEMENT OF FINANCIAL POSITION AT 31 MARCH 2010

	Note	2010 R	2009 R	2008 R
<b>ASSETS</b>		<b>12,865,670</b>	<b>11,593,391</b>	<b>5,413,318</b>
<b>Non - Current assets</b>		<b>1,468,017</b>	<b>240,428</b>	<b>138,487</b>
Equipment	2	1,468,017	240,428	138,487
<b>Current assets</b>		<b>11,397,653</b>	<b>11,352,963</b>	<b>5,274,831</b>
Account receivables	3	198,140	78,206	-
Cash and cash equivalents	4	11,199,513	11,274,757	5,274,831
<b>Total assets</b>		<b>12,865,670</b>	<b>11,593,391</b>	<b>5,413,318</b>
<b>RESERVES AND LIABILITIES</b>		<b>12,865,670</b>	<b>11,593,391</b>	<b>5,413,318</b>
<b>Reserves</b>		<b>10,152,280</b>	<b>8,864,975</b>	<b>4,969,591</b>
Operating fund		5,981,011	5,912,151	4,969,591
Sustainability fund		4,171,269	2,952,824	-
<b>Current liabilities</b>		<b>2,713,390</b>	<b>2,728,416</b>	<b>443,727</b>
Accounts payable	5	1,438,876	1,728,416	443,727
Deferred grant income	7	793,505	1,000,000	-
Provision for leave pay	6	481,009	-	-
<b>Total reserves and liabilities</b>		<b>12,865,670</b>	<b>11,593,391</b>	<b>5,413,318</b>



## STATEMENT OF COMPREHENSIVE INCOME YEAR ENDED 31 MARCH 2010

	Note	2010 R	2009 R	2008 R
<b>INCOME</b>		<b>26,132,910</b>	<b>16,588,252</b>	<b>9,437,284</b>
Grants and donations	7	24,801,965	15,429,924	8,602,988
Membership fees received		42,400	29,300	20,500
Interest received		778,096	783,051	457,194
Other income		112,500	-	-
Income from publications		397,949	345,977	356,602
<b>EXPENDITURE</b>		<b>24,845,605</b>	<b>12,692,868</b>	<b>8,167,700</b>
Advertising and marketing		775	18,068	29,596
Annual report production		54,796	51,872	39,727
Assets expensed directly		37,694	3,591	-
Auditors' remuneration	8	53,000	14,064	23,185
Bank charges		17,545	9,859	2,892
Catering		34,190	34,922	12,079
Computer expenses		211,669	6,351	15,935
Conferences and seminars		21,983	9,419	54,024
Depreciation	2	268,978	37,528	30,244
Equipment rental		40,218	23,299	6,969
Insurance		26,839	5,081	1,404
NRF Service levy		19,595	57,660	86,351
Office expenses		54,077	-	-
Printing and stationery		118,803	62,090	43,082
Projects expenditure		21,314,672	10,449,883	6,518,913
Provision for leave pay		481,009	-	-
Recruitment and staff development		73,109	33,726	12,405
Rent, electricity and maintenance		747,993	-	-
Salaries and contributions		581,411	1,202,596	748,624
Subscription fees		5,591	382	370
Technical services		-	15,766	186,697
Telephone, faxes and postage		113,521	49,930	41,603
Travel and accommodation		568,137	601,952	309,138
Website maintenance		-	4,829	4,462
<b>SURPLUS FOR THE YEAR</b>		<b>1,287,305</b>	<b>3,895,384</b>	<b>1,269,584</b>



## STATEMENT OF CHANGES IN RESERVES FOR THE YEAR ENDED 31 MARCH 2010

	Operating fund R	Sustainability fund R	Total R
<b>Balance at 31 March 2007</b>	<b>3,700,007</b>	-	<b>3,700,007</b>
Surplus for the year	1,269,584	-	1,269,584
<b>Balance at 31 March 2008</b>	<b>4,969,591</b>	-	<b>4,969,591</b>
Surplus for the year	3,895,384	-	3,895,384
Transfer from operating fund	(2,952,824)	2,952,824	-
<b>Balance at 31 March 2009</b>	<b>5,912,151</b>	<b>2,952,824</b>	<b>8,864,975</b>
Surplus for the year	1,287,305	-	1,287,305
Transfer from operating fund	(1,218,445)	1,218,445	-
<b>Balance at 31 March 2010</b>	<b>5,981,011</b>	<b>4,171,269</b>	<b>10,152,280</b>



## STATEMENT OF CASH FLOWS FOR THE YEAR ENDED 31 MARCH 2010

	Note	2010 R	2009 R	2008 R
<b>Cashflows from operating activities</b>				
Cash receipts from donors and customers		25,234,880	15,726,995	8,980,090
Cash paid to suppliers and employees		(24,591,653)	(10,370,651)	(8,499,305)
<b>Cash generated from operations</b>	<b>9</b>	<b>643,227</b>	<b>5,356,344</b>	<b>480,785</b>
Interest received		778,096	783,051	457,194
<b>Net inflow from operating activities</b>		<b>1,421,323</b>	<b>6,139,395</b>	<b>937,979</b>
<b>Cash flows (utilised in) investing activities</b>				
Acquisition of equipment, at cost	<b>2</b>	(1,496,567)	(139,469)	-
<b>Net (decrease)/increase in cash and cash equivalents</b>		<b>(75,244)</b>	<b>5,999,926</b>	<b>937,979</b>
Cash and cash equivalents at beginning of year		11,274,757	5,274,831	4,336,852
<b>Cash and cash equivalents at end of year</b>	<b>4</b>	<b>11,199,513</b>	<b>11,274,757</b>	<b>5,274,831</b>





## NOTES TO THE ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2010

### 1 Accounting Policies

The annual financial statements are prepared on the historical cost basis, except for financial instruments as indicated below. The financial statements incorporate the following principal accounting policies which are consistent, in all material respects, with those applied in the previous year:

#### 1.1 Significant Judgements

In preparing the annual financial statements, management is required to make estimates and assumptions that affect the amounts represented in the annual financial statements and related disclosures. Use of available information and the application of judgement is inherent in the formation of estimates. Actual results in the future could differ from these estimates which may be material to the annual financial statements.

#### 1.2 Equipment and depreciation

Equipment is stated at cost less provision for depreciation. Depreciation is calculated to write off the cost of the assets on the straight line method over their expected useful lives at the following rates:

Computer equipment	- 33.33 % per annum
Office equipment	- 15 % per annum
Furniture and fittings	- 15 % per annum

#### 1.3 Financial instruments

##### Measurement

Financial instruments are initially measured at cost, which includes transaction costs. Subsequent to initial recognition, these instruments are measured as set out below:

##### Cash and cash equivalents

Cash and cash equivalents are measured at fair value.

##### Trade and other receivables

Trade and other receivables originated by the Academy are treated as loans and receivables, and are carried at amortised cost.

##### Trade and other payables

Trade and other payables are measured at amortised cost using the effective interest method.



## **NOTES TO THE ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2010 (Continued)**

### **1.4 Investment income**

Interest is recognised on a time proportion basis, taking account of the principal outstanding and the effective rate over the period to maturity, when it is probable that such income will accrue to the Academy.

### **1.5 Income**

Income from grants is brought to account in the period to which it relates. All other income is brought to account as and when received.

### **1.6 Project expense allocation**

In terms of its contractual obligations to donors, the Academy's policy is to allocate project expenses that are clearly identifiable as such, directly against project funds. Indirect and shared costs are either apportioned on the basis of management estimates.

Accrued and deferred grant income is based on the balance of the project fund after taking into account the direct, indirect and shared costs as described above. The unexpended surplus of the project fund is deferred to the following year or the deficit is accrued in the year under review.

### **1.7 Expenditure**

Expenditure is accounted for on the accrual basis.



## NOTES TO THE ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2010 (Continued)

### 2 Equipment

	Office equipment	Computer equipment	Furniture & fittings	Computer software	Total
	R	R	R	R	R
<b>31 March 2010</b>					
<b>Balance at 1 April 2009</b>	<b>240,428</b>	-	-	-	<b>240,428</b>
At cost	341,092	-	-	-	341,092
Accumulated depreciation	(100,664)	-	-	-	(100,664)
Additions during the year	21,785	206,177	1,105,829	162,776	1,496,567
Depreciation for the year	(39,338)	(50,602)	(124,779)	(54,259)	(268,978)
<b>Net book value 31 March 2010</b>	<b>222,875</b>	<b>155,575</b>	<b>981,050</b>	<b>108,517</b>	<b>1,468,017</b>
At cost	362,877	206,177	1,105,829	162,776	1,837,659
Accumulated depreciation	(140,002)	(50,602)	(124,779)	(54,259)	(369,642)
<b>31 March 2009</b>					
<b>Balance at 1 April 2008</b>	<b>138,487</b>	-	-	-	<b>138,487</b>
At cost	201,623	-	-	-	201,623
Accumulated depreciation	(63,136)	-	-	-	(63,136)
Additions during the year	139,469	-	-	-	139,469
Depreciation for the year	(37,528)	-	-	-	(37,528)
<b>Net book value 31 March 2009</b>	<b>240,428</b>	-	-	-	<b>240,428</b>
At cost	341,092	-	-	-	341,092
Accumulated depreciation	(100,664)	-	-	-	(100,664)
<b>31 March 2008</b>					
<b>Balance at 1 April 2007</b>	<b>168,731</b>	-	-	-	<b>168,731</b>
At cost	201,623	-	-	-	201,623
Accumulated depreciation	(32,892)	-	-	-	(32,892)
Depreciation for the year	(30,244)	-	-	-	(30,244)
<b>Net book value 31 March 2008</b>	<b>138,487</b>	-	-	-	<b>138,487</b>
At cost	201,623	-	-	-	201,623
Accumulated depreciation	(63,136)	-	-	-	(63,136)



## NOTES TO THE ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2010 (Continued)

### 3 Account Receivables

	2010	2009	2008
	R	R	R
Rental deposit	145,489	-	-
Interest accrued	52,651	78,206	-
	<u>198,140</u>	<u>78,206</u>	<u>-</u>

### 4 Cash and Cash Equivalents

Cash at bank - current accounts	104,029	232,925	297,843
Cash at bank - call account	11,095,484	11,041,832	4,976,988
	<u>11,199,513</u>	<u>11,274,757</u>	<u>5,274,831</u>

### 5 Accounts Payable

National Research Foundation	217,844	921,169	443,727
Accruals	1,221,032	807,247	-
	<u>1,438,876</u>	<u>1,728,416</u>	<u>443,727</u>

### 6 Provision for Leave Pay

Balance at beginning of year	-	-	-
Raised during the year	481,009	-	-
	<u>481,009</u>	<u>-</u>	<u>-</u>





## NOTES TO THE ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2010 (Continued)

### 7 Grants and Donations

	2010	2009	2008
	R	R	R
<b>Grants</b>	<b>23,368,059</b>	<b>11,956,264</b>	<b>8,373,225</b>
Department of Science and Technology			
DST/CON 0005/2009	3,500,000	3,000,000	-
Received	3,500,000	3,000,000	-
Initial start up and relocation costs	1,000,000	-	-
Received	-	1,000,000	-
Deferred to 2010	1,000,000	(1,000,000)	-
Baseline and other	9,893,000	5,820,000	5,980,000
Received	9,893,000	5,820,000	5,980,000
DST/CON0005/2009	3,900,000	-	-
TWAS Conference			
Received	3,900,000	-	-
The African Academy of Sciences	468,147	-	-
Received	468,147	-	-
The Ford Foundation	230,424	-	-
Received	1,023,929	-	-
Deferred to 2011	(793,505)	-	-
The Institute of Medicine	1,224,041	-	-
Received	1,224,041	-	-
The Oppenheimer Memorial Trust	418,500	159,000	150,000
Received	418,500	159,000	150,000
Shuttleworth Foundation	(64,366)	213,510	-
Received	-	213,510	-
Refunded	(64,366)	-	-
United States National Academies	1,798,313	2,763,754	2,243,225
Received	1,798,313	2,763,754	2,243,225
Germany Federal Ministry of Education and Research	1,000,000	-	-
Received	1,000,000	-	-
<b>Balance carried forward</b>	<b>23,368,059</b>	<b>11,956,264</b>	<b>8,373,225</b>



## NOTES TO THE ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2010 (Continued)

### 7 Grants and Donations (continued)

	2010	2009	2008
	R	R	R
<b>Balance brought forward</b>	<b>23,368,059</b>	<b>11,956,264</b>	<b>8,373,225</b>
<b>Donations</b>	<b>1,433,906</b>	<b>3,473,660</b>	<b>229,763</b>
Academia Brasil	-	133,928	-
Academia de Senegal	-	-	64,963
InterAcademy Panel	293,323	-	-
Sydney Brenner Fellowship	142,450	204,120	151,080
The Oppenheimer Memorial Trust	-	1,000,000	-
Third World Academy of Sciences	248,925	660,440	13,720
National Research Foundation	559,208	1,385,000	-
Nelson Mandela Metropolitan University	25,000	-	-
North-West University	25,000	-	-
Ugandan National Academy	-	90,172	-
University of Pretoria	25,000	-	-
Water Research Commission	115,000	-	-
	<b>24,801,965</b>	<b>15,429,924</b>	<b>8,602,988</b>

### 8 Auditors' Remuneration

Audit fee - 2009	53,000	-	-
Audit fee - 2008	-	45,368	-
Audit fee - 2007	-	-	46,583
	<b>53,000</b>	<b>45,368</b>	<b>46,583</b>

Prior years audit fees have been apportioned to project expenditure.



## NOTES TO THE ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2010 (Continued)

### 9 Cash Generated from Operations

	2010	2009	2008
	R	R	R
Surplus for the year	1,287,305	3,895,384	1,269,584
<b>Adjustments for :</b>			
Depreciation	268,978	37,528	30,244
Interest received	(752,541)	(861,257)	(457,194)
(Decrease)/increase in deferred income	(206,495)	1,000,000	-
Provision for leave pay	481,009	-	-
<b>Changes in working capital</b>			
Trade and other receivables	(145,489)	-	-
Trade and other payables	(289,540)	1,284,689	(361,849)
	<b>643,227</b>	<b>5,356,344</b>	<b>480,785</b>

### 10 Taxation

The Academy is exempt from income tax under Section 10(1)(cN) as read with Section 30 of the Income Tax Act.

### 11 Commitments

The Academy has commitments in respect of operating lease charges for premises as follows:

Payable within one year	837,216	-	-
Payable thereafter	1,066,781	-	-
	<b>1,903,997</b>	<b>-</b>	<b>-</b>



## ACADEMY OF SCIENCE OF SOUTH AFRICA NOTES TO THE ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2010 (Continued)

### 12 Going Concern

The existence of the Academy is dependent on the continued support of its donors, by way of grants. Should the grants be withdrawn it is highly unlikely that the Academy will be able to continue as a going concern. Donors have agreed to continue supporting the Academy in 2010/2011 financial year.

### 13 Financial Risk

#### 13.1 Currency risk

The Academy is exposed to currency risk to the extent that grants are received by the Academy in foreign currency.

#### 13.2 Interest rate risk

The Academy is exposed to interest rate risk, as it places funds at both fixed and floating interest rates. The risk is managed by maintaining an appropriate mix between fixed and floating rates and placings within market expectations.

#### 13.3 Credit risk

The Academy's credit risk is attributable to liquid funds. The credit risk on liquid funds is limited because the counter party is a bank with credit rating assigned by international credit-rating agencies. The Academy has no significant concentration of credit risk.

#### 13.4 Liquidity risk

The Academy manages liquidity risk by monitoring forecast cash flows and ensuring that adequate cash reserves are maintained.





Annexure A: Abbreviated  
Biographies of ASSAf Members



*Applying scientific thinking  
in the service of society*

## Annexure A: Abbreviated Biographies of ASSAf Members

**Quarraisha Abdool Karim** is Associate Professor in Clinical Epidemiology at Columbia University and Adjunct Associate Professor in the School of Public Health at the University of KwaZulu-Natal. She is currently Director of the CU-SA Fogarty AITRP, Associate Scientific Director of CAPRISA and Co-chair of the HIV Prevention Trials Network (HPTN).

**Salim S Abdool Karim** is a clinical infectious disease epidemiologist whose main current research interests are in microbicides and vaccines to prevent HIV infection, and implementing antiretroviral therapy in resource constrained settings. He is Pro-Vice-Chancellor (Research) at the University of KwaZulu-Natal.

**Robert M Adam** is Chief Executive Officer of the Nuclear Energy Corporation of South Africa (NECSA). He was Director-General of the Department of Science and Technology.

**Ralph D Adendorff** is Professor in the Department of English Language and Linguistics at Rhodes University.

**Jimi Olalekan Tosin Adesina** is Professor of Sociology at Rhodes University. He was President of the South African Sociological Association (2004-2006), is Interim Secretary-General of the African Sociological Association, and is a member of the Executive Committee of the Council for the Development of Social Science Research in Africa (CODESRIA).

**Miriam Adhikari** is a Professor and Head, Paediatrics at the Nelson Mandela School of Medicine at the University of KwaZulu-Natal. She is a subspecialist in neonatology with a special interest in paediatric nephrology.

**Jill Adler** holds the First Rand Foundation Chair of Mathematics Education at the University of the Witwatersrand and Chair of Mathematics Education at King's College, London. She directs the QUANTUM research project on mathematical knowledge for teaching and is the Chairperson of the ASSAf STEM committee.

**Anthony Jide Afolayan** is the leader of the Center for Phytomedicine Research and the Director of the Central Analytical Laboratory at the University of Fort Hare. He is also the Research Niche Area Leader (Unlocking the potential of indigenous plants for sustainable livelihoods in the Eastern Cape).

**Erna Alant** founded the Centre for Augmentative and Alternative Communication (CAAC). The Centre received the Education Africa Presidential Award for Special Needs in 1995. She currently holds the position of professor and Otting Endowed Chair in Special Education at Indiana University, Bloomington in the USA.

**Mark Alexander** is Professor of Civil Engineering in the University of Cape Town (UCT). He is part of the leadership of the CSIRG (Concrete Materials and Structural Integrity Research Group) at UCT, where work is being done on problems of marine concrete durability.

**Marco Andreoli** is Specialist Scientist at the South African Nuclear Energy Corporation (NECSA).

**Christopher Charles Appleton** is a Professor of Parasitology in the School of Biological and Conservation Sciences at the University of KwaZulu-Natal (UKZN). He is a Fellow of UKZN.



## *Annexure A: Abbreviated Biographies of ASSAf Members*

**Reinhard Richard Arndt** was one of the founders of the Rand Afrikaans University, and Head of the Chemistry Department for 12 years. He was the President of the Foundation for Research Development.

**Lewis David Ashwal** is Professor of Petrology and Director of the African Lithosphere Research Group at the University of the Witwatersrand, School of Geosciences.

**Ahmed A Azad** was Director of Research in the Health Sciences Faculty, University of Cape Town. He was Senior Scientist at the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO) in Melbourne, Australia.

**Lucinda Backwell** is a Research Fellow in the Bernard Price Institute for Palaeontological Research.

**Saleem Badat** is Vice-Chancellor of Rhodes University. He was Director of the Education Policy Unit at the University of Western Cape, and the first Chief Executive Officer of the Council on Higher Education.

**Himansu Baijnath** is an Honorary Research Professor in the School of Biological and Conservation Sciences at the University of KwaZulu-Natal.

**Narend Baijnath** is Vice-Principal: Strategy, Planning and Partnerships at the University of South Africa. He is currently involved in coordinating and steering the implementation of UNISA's ten-year strategic plan.

**Yunus Ballim** currently holds a personal Professorship at Wits and was the Head of the School of Civil and Environmental Engineering from 2001 to 2005. He is deputy Vice-Chancellor at Wits.

**Jacek Banasiak** is a Senior Professor in the School of Mathematical Sciences at the University of KwaZulu-Natal. He was the Vice-President of the South African Mathematical Society from 2001-2005.

**Eric Bateman** is Professor of Respiratory Medicine, the Managing Director and the Founder of the University of Cape Town Lung Institute and Clinical Director of the Department of Critical Care at Groote Schuur Hospital.

**Ahmed Cassim Bawa** was until recently the Deputy Vice-Chancellor for Research at the University of KwaZulu-Natal and before that he worked for the Ford Foundation after a career in theoretical physics. He is Professor and Distinguished Lecturer at Hunter College, City University of New York. He has served on the Boards of the NRF and NACI.

**Solomon Benatar** is Professor Emeritus of Medicine and Founding Director of the University of Cape Town's Bioethics Centre. He was Chairman of the University of Cape Town's Department of Medicine and Chief Physician at Groote Schuur Hospital from 1980-1999.

**Michael Berger** was Associate Professor and Head of Chemical Pathology at the Red Cross Children's Hospital from 1980 to 1989 and Professor and Head of Chemical Pathology at the University of Natal Medical School from 1990 to 1996.



## *Annexure A: Abbreviated Biographies of ASSAf Members*

**Patricia Berjak** is a Professor Emeritus and Research Associate at the University of KwaZulu-Natal (UKZN). She is a Fellow of UKZN and the Academy of Sciences for the Developing World (TWAS).

**Ann Bernstein** is the founding Director of the Centre for Development and Enterprise (CDE).

**Arvin Bhana** is a Director of Research in the Child, Youth, Family and Social Development Research Unit in the Human Sciences Research Council and an Adjunct Associate Professor in the School of Psychology at the University of KwaZulu-Natal.

**Krish Bharuth-Ram** is Professor Emeritus at the University of KwaZulu-Natal. He was Professor and Head of Physics, Dean of Science at the University of Durban-Westville, Director of iThemba Laboratory for Accelerator-Based Science and Executive Director/Interim Vice-President of the National Research Foundation.

**Ramesh Bharuthram** was previously Dean of Science at the University of the Witwatersrand. He has served as Professor of Physics, Dean of the Faculty of Science, Deputy Vice-Chancellor at the University of Durban-Westville; and as Director: Research at the ML Sultan Technikon and the University of KwaZulu-Natal. Presently, he is Deputy Vice-Chancellor (Academic) at the University of the Western Cape.

**Kanti Bhoola** is Honorary Professor in the Faculty of Health, University of Witwatersrand, and Head of the Inflammation/Immunology Unit, Centre for Asthma, Allergy and Respiratory Research, Lung Institute of Western Australia, University of Western Australia, Perth.

**Nicholas Biekpe** is the President of the Africagrowth Institute. He was Professor of Development Finance and Econometrics at the University of Stellenbosch Business School.

**Judith Bishop** is Director of Computer Science in External Research at Microsoft Research, based in Redmond, USA. She leads a team of Principal Research Managers in her role to create strong links between Microsoft's research groups and universities globally. She was Professor at the University of Pretoria, South Africa.

**Nigel Tempest Bishop** is Professor of Applied Mathematics at the University of South Africa (UNISA). He was Deputy Dean of the Faculty of Science at UNISA.

**Gregory L Blatch** is Professor of Biochemistry and Director of the Biomedical Biotechnology Research Unit at Rhodes University. His research interests fall within the broad field of biomedical biotechnology, with a focus on the role of molecular chaperones and co-chaperones in disease and infection.

**Liesbeth Botha** is Executive Director: CSIR Materials Science and Manufacturing.

**Rudie Botha** is Professor of General Linguistics at the University of Stellenbosch. He is a Research Fellow at the Netherlands Institute for Advanced Studies.

**Thomas Hamilton Bothwell** is Professor Emeritus of Medicine and an Honorary Professorial Research Fellow at the University of the Witwatersrand.



## *Annexure A: Abbreviated Biographies of ASSAf Members*

**Paul Bowen** is Professor and former Head of the Department of Construction Economics and Management at the University of Cape Town. He is Deputy Dean in the Faculty of Engineering and the Built Environment.

**Charles Kimberlin Brain** was Director of the Transvaal Museum in Pretoria from 1968 to 1991 and is currently Curator Emeritus of the museum. He is also Honorary Professor of Zoology at the University of the Witwatersrand and Research Associate at the Bernard Price Institute for Palaeontological Research.

**George Branch** is Professor of Zoology and the Marine Biology Research Institute, University of Cape Town.

**Chris Brink** is Vice-Chancellor of Newcastle University, UK, and was previously Principal of the University of Stellenbosch.

**Paul Andries Brink** is Professor and Chairman of the Research Committee, Department of Internal Medicine, University of Stellenbosch.

**James Bull** is Professor Emeritus and Honorary Research Associate in Organic Chemistry at the University of Cape Town.

**Renier Andrian Burger** is Professor and Director of Unit for Space Physics at the University of the North-West.

**Sandra Burman** is Professor of Socio-Legal Studies at the University of Cape Town and (founder) Director of the Interfaculty Centre for Socio-Legal Research.

**Jennifer Case** is Director of undergraduate studies in the Department of Chemical Engineering at the University of Cape Town where her research is focused on student learning in tertiary science and engineering.

**Phillip Allen Charles** is Director of the South African Astronomical Observatory (SAAO), and on leave from his post as Professor and Head of Astronomy at the University of Southampton.

**Arthur Chaskalson** became the first President of South Africa's new Constitutional Court in June 1994 and in November 2001 he became the Chief Justice of South Africa.

**Nithaya Chetty** is an Associate Professor of Physics at the University of Pretoria and President of the South African Institute of Physics from 2007 to 2009.

**Rachel Chikwamba** is the Research Group Leader of the Plant Biotechnology Group at the CSIR. She is also an Adjunct Senior Lecturer in the Department of Botany at the University of Pretoria and a member of the Forestry and Agricultural Biotechnology Institute (FABI).

**Anusuya Chinsamy-Turan** is a palaeobiologist at the Zoology Department at the University of Cape Town.

**Renfrew Christie** is Dean of Research at the University of the Western Cape.





## *Annexure A: Abbreviated Biographies of ASSAf Members*

**Paul Cilliers** is Professor of Philosophy at the University of Stellenbosch.

**Walter T Claassen** was Professor and Vice-Rector for Research at the University of Stellenbosch.

**Peter Eiddon Cleaton-Jones** was Head of the Dental Research Institute, University of the Witwatersrand (1969 to 2004). He has extensive experience on research ethics committees - MRC 1990 to 2002 (Chair 1998 to 2002), Wits 1974 to present (Chair 1985 to present) Human Sciences Research Council 2002 to present (Chair 2002 to 2005).

**Thomas Eugene Cloete** is Dean of the Faculty of Science at the University of Stellenbosch. He is the former Head of Microbiology and Plant Pathology, Faculty of Natural and Agricultural Sciences at the University of Pretoria (UP), and former Chair of the School of Biological Sciences at UP.

**Maureen Coetzee** holds a DST/NRF Research Chair (SARChI) in Medical Entomology and Vector Control and is Director of the Malaria Entomology Research Unit in the Faculty of Health Sciences at the University of the Witwatersrand. She is an Honorary Consultant in the National Institute for Communicable Diseases of the National Health Laboratory Service, Johannesburg.

**John Darrell Comins** is Emeritus Research Professor and Director of the Raman and Luminescence Laboratory at the University of the Witwatersrand. He was previously Director of the DST/NRF Centre of Excellence in Strong Materials, ad hominem Professor of Optical Spectroscopy of Solids from 1990 to 2002, Professor of Solid State Physics and Chairman of the Materials Physics Research Institute.

**Neville Raymond Comins** is the National Innovation Advisor for COFISA (Cooperation Framework on Systems of Innovation between Finland and South Africa), and now consults on Innovation and Science Park development. He was previously Chief Executive Officer of The Innovation Hub Management Company (Pty) Ltd.

**Simon H Connell** is an Extraordinary Associate Professor at the University of North-West.

**Hoosen Coovadia** is Emeritus Professor of Paediatrics and Child Health, Emeritus Victor Daitz Professor of HIV/AIDS Research, University of KwaZulu-Natal. He is also a Director: HIV Management, Maternal Adolescent and Child Health Unit [MatCH], University of the Witwatersrand and Commissioner, National Planning Commission, Presidency, South Africa.

**Anna Coutsoudis** is a public health scientist and is a Professor in the Department of Paediatrics and Child Health at the University of KwaZulu-Natal. She is a Fellow of UKZN and the Academy of Sciences for the Developing World.

**Don Cowan** is Director of the Institute for Microbial Biotechnology and Metagenomics and Senior Professor of Microbiology in the Department of Biotechnology at the University of the Western Cape.

**Richard Mark Cowling** is Professor of Botany at the Nelson Mandela Metropolitan University and Honorary Professor of Botany at the University of Cape Town.



## *Annexure A: Abbreviated Biographies of ASSAf Members*

**Robin Michael Crewe** is Vice-Principal of the University of Pretoria and currently President of the Academy of Science of South Africa.

**Felix Dapare Dakora** is Professor and Research Chair in Agrochemurgy and Plant Symbioses at Tshwane University of Technology. He was Dean of Research at the Cape Peninsula University of Technology.

**Peter Dankelmann** is Professor in the School of Mathematical Sciences at the University of KwaZulu-Natal.

**Dennis Martin Davis** sits as Judge of the Cape High Court, and is also a Competition Appeal Court Judge.

**Santi Daya** is Professor of Pharmaceutical Sciences at Rhodes University.

**Christian Rudolph de Beer** is Vice-Principal of the University of Pretoria. He was Professor and Head of the Department of Commercial Law and Dean of the Faculty of Law at the former Potchefstroom University.

**John Wesley de Gruchy** is Professor Emeritus of Christian Studies at the University of Cape Town (UCT). He was Director of the Graduate School in Humanities at UCT. He is a Life Fellow and a Senior Research Scholar at UCT, an Extraordinary Professor at the University of Stellenbosch, and an Adjunct Professor at the University of Fort Hare.

**Okkert C de Jager** is at the Unit for Space Physics, North-West University. He holds the Research Chair in Astrophysics and Space Science. He is also the South African Group Leader of the High Energy Stereoscopic System (HESS) collaboration.

**Vivian Anne de Klerk** is Professor and Dean of Students at Rhodes University and was Head of the Department of English Language and Linguistics. She served as President of the Linguistics Society of Southern Africa and is the ministerial appointee on the South African Geographical Names Council.

**Cheryl de la Rey** is Professor in Psychology and Vice-Chancellor and Principal of the University of Pretoria.

**Wessel Van Zyl de Villiers** is Group Executive: Strategy and Performance at the South African Nuclear Energy Corporation (NECSA). He is the Chairman of the *Suid-Afrikaanse Akademie vir Wetenskap en Kuns* and serves on the executive committee of the National Science and Technology Forum.

**David Dewar** is Professor of Architecture, Planning and Geomatics at the University of Cape Town.

**Maarten de Wit** is the Phillipson-Stow Professor at the University of Cape Town, and founding Director of the Centre for Interactive Graphical Computing of Earth Systems (CIGCES) and Africa Earth Observatory Network (AEON).



## *Annexure A: Abbreviated Biographies of ASSAf Members*

**Roseanne Denise Diab** is the Executive Officer of the Academy of Science of South Africa (ASSAf) and Professor Emeritus and Senior Research Associate in the School of Environmental Sciences, University of KwaZulu-Natal (UKZN). She is a Fellow of UKZN and the South African Geographical Society.

**Thulani H Dlamini** was part of the team that developed the National Nano-technology Strategy. He initiated the development of a photonics strategy for South Africa. He serves on a number of boards, including those of the Laser Research Institute, and the African Laser Centre.

**Kathleen Ann Driver** is Professor of Mathematics and Dean of the Faculty of Science, University of Cape Town.

**John Duncan** is a consultant/researcher in Higher Education. He was Dean of Research at Rhodes University.

**Norman TF Duncan** is Professor in Psychology and the Head of the School of Human and Community Development at the University of the Witwatersrand. He is the Past-President of the Psychological Society of South Africa (PsySSA).

**Lourens Marthinus du Plessis** is Professor of Public Law at the University of Stellenbosch.

**Wilhelmina du Plessis** is Professor in the Faculty of Law, North-West University. She is Co-chair of the research committee of the IUCN Academy of Environmental law.

**Anton Eberhard** is Professor in the Graduate School of Business at the University of Cape Town in the field of energy infrastructure reform and regulation. He is a member of the National Planning Commission.

**George Andrian Ekama** is Professor at the University of Cape Town and a specialist in biological wastewater treatment systems.

**George Francis Rayner Ellis** is Professor Emeritus of Mathematics at the University of Cape Town. He was President of the Royal Society of South Africa from 1994 to 1997 and a former Council Member of the Academy of Science of South Africa. He is a Fellow of the Academy of Sciences for the Developing World (TWAS) and a Fellow of the Royal Society, London.

**Petra Engelbrecht** is Executive Dean, Faculty of Education Sciences on the Potchefstroom Campus of North-West University. She was Professor of Educational Psychology at the University of Stellenbosch.

**Irma Eloff**, is the Dean: Faculty of Education, University of Pretoria. Her research focuses on education and educational psychology.

**Theunis Erasmus** was Vice-Rector at the University of Pretoria, and Chairman of the *Suid Afrikaanse Akademie vir Wetenskap en Kuns*.

**Patrick George Eriksson** is Head of the Department of Geology at the University of Pretoria. His research focuses on Precambrian sedimentology.



## *Annexure A: Abbreviated Biographies of ASSAf Members*

**Arthur George Every** is Professor Emeritus of Physics at the University of the Witwatersrand.

**Bernard Fanaroff** is Managing Director of Fanaroff Associates and Project Manager of the South African Square Kilometre Array project. He was Deputy Director-General in the Office of the President, Deputy Director-General in the Department of Safety and Security, Chairman of the Integrated Justice System Board and National Secretary of the National Union of Metalworkers of SA.

**Jill Margaret Farrant** is a Professor and holds a Research Chair (Molecular Physiology of Plant Desiccation Tolerance) in the Department of Molecular and Cell Biology, University of Cape Town.

**Michael William Feast** is Professor Emeritus of Astronomy at the University of Cape Town. He was Director of the South African Astronomical Observatory (SAAO) and Vice-President of the International Astronomy Union.

**Johannes Wolfgang Fedderke** is Director of Economics Research South Africa and Professor at Pennsylvania State University and the Helen Suzman Chair in Political Economy at the University of the Witwatersrand.

**John Field** is Professor of Zoology and Director of the Marine Research Institute at the University of Cape Town, Chair of the Global Ocean Observing System (GOOS) of and was President of the Scientific Committee on Oceanic Research (SCOR).

**Brian Figayi** is a retired Professor, and was Vice-Chancellor of the former Peninsula Technikon.

**Rosalie Finlayson** is Professor at the University of South Africa (UNISA). She was previously Academic Planner at UNISA.

**Alan Flisher** is the Sue Streungmann Professor of Child & Adolescent Psychiatry & Mental Health at the University of Cape Town. His work in child psychiatry straddles the clinical and social sciences.

**Peter Peter Folb** is Chief Specialist Scientist at the South African Medical Research Council and Professor Emeritus of Pharmacology at the University of Cape Town (UCT). Since 1999 he has been Chair of the WHO global scientific advisory committee in vaccine safety.

**Sharon Fonn** is Professor and Head of the School of Public Health, University of the Witwatersrand. She is a member of the CANSA Research Committee and represents the organisation in their joint cancer research initiative with the Medical Research Council.

**Pierre William Froneman** is Professor in the Department of Zoology and Entomology at Rhodes University.

**Richard Francis Fuggle** is Professor Emeritus in Environmental Studies at the University of Cape Town. He founded the University's Environmental Evaluation Unit in 1985 and directed it until his retirement.



## *Annexure A: Abbreviated Biographies of ASSAf Members*

**Christoph Friedrich Garbers** is Professor of Organic Chemistry at the University of Stellenbosch. He was previously the President of the CSIR, and Chair of the National Research Foundation Board.

**Geoff Graham Garrett** was President and Chief Executive Officer of the CSIR from 1995 to 2000 and Chief Executive of Australia's Commonwealth Scientific and Industrial Research Organisation (CSIRO) from 2001 to 2008.

**Jan Collins Geertsema** is Quality Manager of the Faculty of Natural Sciences at North-West University after his retirement as Director of Research Support at North-West University. He was Dean of the Faculty of Natural Sciences and Professor of Statistics.

**Gert Johannes (Jakes) Gerwel** is Chancellor of Rhodes University, Distinguished Professor in the Humanities at the University of the Western Cape, and Honorary Professor in the Humanities at the University of Pretoria. He was Vice-Chancellor and Rector of the University of the Western Cape from 1987 to 1994.

**Wieland Gevers** is Emeritus Professor of Medical Biochemistry and Life Fellow at the University of Cape Town. He is General Secretary of the Academy of Science of South Africa and former President of the Academy of Science of South Africa (1998-2004). He is a Fellow of the Academy of Sciences for the Developing World.

**Hendrik Geyer** was appointed to his present position as Professor of Theoretical Physics at Stellenbosch University (SU) in 1990. Before that he had been a member of the Pelindaba Theoretical Physics Group (Nuclear Development Corporation) for seven years, finally serving as Principal Scientist.

**David Glasser** is Professor of Chemical Engineering and Director of the Centre of Material and Process Synthesis (COMPS) at the University of the Witwatersrand.

**Irvy Marian (Igle) Gledhill** is a Fellow of the Defence, Peace, Safety and Security Unit of the CSIR, South Africa, where her principal research interests are in computational fluid dynamics (acceleration) and in molecular modeling (electronic structure methods).

**Richard Joseph Goldstone** was Justice of the Constitutional Court of South Africa. He served as the Chief Prosecutor of the United Nations International Criminal Tribunals for the former Yugoslavia and Rwanda and is currently the Chairman Emeritus of the Human Rights Institute of the International Bar Association.

**Robert Mervyn Gous** was a Senior Professor in Animal and Poultry Science at the University of KwaZulu-Natal (UKZN) before retiring at the end of 2007. He is a Fellow of UKZN.

**Glenda Elisabeth Gray** is the Executive Director of the Perinatal HIV Research Unit (PHRU), and Associate Professor of Paediatrics at the University of the Witwatersrand.

**Diane Jeanette Grayson** is a physicist and science educator and is Academic Development Manager in the Faculty of Engineering, Built Environment and Information Technology at the University of Pretoria.





## *Annexure A: Abbreviated Biographies of ASSAf Members*

**Gideon Petrus Greyvenstein** is General Manager at the Pebble Bed Modular Reactor (PBMR) and was Professor of Thermal Fluids and Thermodynamics of the University of the North-West.

**Nicolaas Johannes Grové** is Registrar at the University of Pretoria (UP). He was Professor in the Department of Private Law at UP.

**Ariff Ahmed Haffajee** is Professor of Surgery, Chief Specialist Surgeon, Head of the Renal Transplant Unit – Addington Hospital, Head of Gastrointestinal Unit – King Edward VIII Hospital, Head of Alimentation Unit - King Edward VIII Hospital, Chairman of the Optic and Imaging Unit at the Nelson R Mandela School of Medicine at the University of KwaZulu-Natal (UKZN) and a Fellow of UKZN.

**Fritz JW Hahne** is Director of the African Institute for Mathematical Science (AIMS) and was Professor of Theoretical Physics and Dean of Science at the University of Stellenbosch.

**Raymond Haines** is a retired Professor of Inorganic Chemistry from the University of KwaZulu-Natal (UKZN) and a Fellow of UKZN. He was the Head of the Department of Chemistry (PMB campus, 1978-1992) and the Dean of Science (subsequently Science and Agriculture) (1992-2001). He is now an Honorary Research Associate at the University of Cape Town.

**Ronald Harley** is Professor at the Georgia Institute of Technology, Atlanta, USA. He was Professor of Electrical Machines and Power Systems at the University of Natal in Durban from 1971 to 2000. He was the Vice-President of Operations of the IEEE Power Electronics Society from 2003 to 2004.

**Susan Theresa Largier Harrison** is Professor in the Department of Chemical Engineering, University of Cape Town and Director of the Centre for Bioprocess Engineering Research.

**Rashid Hassan** is Professor and Director of the Centre for Environmental Economics and Policy in Africa (CEEPA), University of Pretoria.

**Manfred Armin Hellberg** is Professor Emeritus of Physics and Senior Research Associate at the University of KwaZulu-Natal (UKZN). He was Dean of Science (1995–2000) and was twice Pro Vice-Chancellor (1993; 2002) at UKZN. He is a Fellow of UKZN.

**Fred Thomas Hendricks** is the Dean of the Faculty of Humanities at Rhodes University and previously Editor of the *African Sociological Review*.

**Jozeph Johannes Henning** is a Distinguished Professor and Dean of the Faculty of Law of the UFS and played an instrumental role in the development of jurisprudence at the Faculty of Law of the UFS. He has an extensive research record which has contributed to academic excellence and international recognition.

**Christopher Henshilwood** is a Professor at the Institute for Human Evolution, University of the Witwatersrand and holds a South African Research Chair in the Origins of Modern Human Behaviour funded by the National Research Foundation. He is also the Professor of African Archaeology at the Institute for Archaeology, History Culture and Religion at the University of Bergen, Norway.



## *Annexure A: Abbreviated Biographies of ASSAf Members*

**Winston Hide** is Professor and Director of the South African National Bioinformatics Institute at the University of Western Cape and a Visiting Professor of Bioinformatics and Computational Biology at Harvard School of Public Health.

**John Anthony Higgins** is currently an Andrew W Mellon Research Professor in the new Archives and Public Culture project at UCT, headed by NRF Research Chair Carolyn Hamilton. He is the author of the award-winning study, *Raymond Williams: Literature, Marxism and Cultural Materialism*.

**Diane Hildebrandt** is the SARChI Professor of Sustainable Process Engineering at the University of the Witwatersrand. She is also the Co-director for the Centre for Optimisation, Modeling and Process Synthesis (COMPS) at the University of the Witwatersrand.

**Michael Johan Richard Hoch** is an Honorary Professorial Research Fellow at the University of the Witwatersrand, Johannesburg and Visiting Research Scientist at the National High Magnetic Field Laboratory, Tallahassee, Florida, USA.

**Jan-Hendrik Servaas Hofmeyr** is Professor of Biocomplexity and Biochemistry at the University of Stellenbosch and Co-founder of the Centre for Studies in Complexity.

**Sarah Jane Howie** is a Professor in the Department of Curriculum Studies at the University of Pretoria. She is also the Director of the Centre for Evaluation and Assessment in Education and Training.

**Henk Huismans** is a Professor and Head of Genetics at University of Pretoria (UP). He was a Professor and Head of the Department of Virology at UP.

**Brian John Huntley** is Professor Emeritus in the Department of Botany at the University of Cape Town. He was Chief Executive Officer of the South African National Biodiversity Institute (SANBI) and he currently serves as a Special Advisor to SANBI.

**Gregory Dudley Hussey** is Professor and Director of the Institute of Infectious Diseases and Molecular Medicine at the University of Cape Town (UCT). He was Head of the Pediatric Infectious Diseases Unit in the School of Child and Adolescent Health at UCT.

**David Steve Jacobs** holds a Research Chair in Animal Evolution and Systematics at the University of Cape Town.

**David Harris Jacobson** is a UK Chartered Engineer. He was Professor, Department of Computational and Applied Mathematics, University of the Witwatersrand and Associate Professor at Harvard University.

**Wilmot James** is Executive Chairperson of the Africa Genome Education Institute, and a Board member of the Ford Foundation. He was Dean of the Faculty of Humanities and Professor of Sociology at the University of Cape Town and Director of the Institute for Democracy in Africa (IDASA).

**Estrelita Janse van Rensburg** is a Global Medical Director at Global Central Laboratories, Quintiles and an Extraordinary Professor at the Faculty of Health Sciences at the University of Pretoria.



## *Annexure A: Abbreviated Biographies of ASSAf Members*

**Jonathan David Jansen** is Rector and Vice-Chancellor at the University of Free State and is also an Extraordinary Professor of Education at the University of the Witwatersrand.

**Mohamed S Jeenah** is Deputy Vice-Chancellor, Research at the Nelson Mandela Metropolitan University.

**Trefor Jenkins** is Professor Emeritus and Honorary Professorial Research Fellow, Division of Human Genetics, School of Pathology, National Health Laboratory Service at the University of the Witwatersrand.

**Colin Thomas Johnson** was Vice-Principal and Pro Vice-Chancellor of Rhodes University. He was President and Chief Executive Officer of the Agricultural Research Council 1999-2000. He was Professor of Botany and Dean of the Faculty of Natural Science at the University of the Western Cape (1986–1998).

**Eugene Llewellyn Julies** is Executive Director of Warrodoms Consulting, and Chief Technical Advisor to the Ministry of Commerce in Afghanistan. He was Chief Executive Officer of the South African Bureau of Standards.

**Michael Jeffrey Kahn** is Visiting Fellow at the National Research Foundation and Director of Research and Innovation Associates. He was Executive Director at the Human Sciences Research Council (2002-2008) and Special Advisor to the Minister of Science and Technology (2002-2003).

**Loveness Kaunda** is the Director of the International Academic Programmes Office at the University of Cape Town.

**Michael Charles Kew** is Professor Emeritus of Medicine in the Faculty of Health Sciences and Honorary Professorial Research Fellow in the Department of Medicine of the University of the Witwatersrand, and an Honorary Professor in the Department of Medicine of the University of Cape Town and Groote Schuur Hospital.

**Rifka Kfir** is Chief Executive Officer of the Water Research Commission. She has also held senior management positions in the Council for Scientific and Industrial Research and the National Research Foundation. She serves on the Board of the International Water Management Institute (IWMI).

**Benito Makhala Khotseng** was Deputy Vice-Chancellor at the Free State University (1993 - 2002), Visiting Professor of Comparative Education at Seton Hall University, New Jersey, USA since 2000 and Board member of the Higher Education Quality Committee (HEQC) of the Council on Higher Education (2001-2004).

**Ralph Emmanuel Kirsch** was Professor in the Department of Medicine, Faculty of Health Sciences, University of Cape Town. He was President of the College of Medicine of South Africa.

**Johann Frederick Kirsten** is Professor and Head of the Department of Agricultural Economics, Extension and Rural Development at the University of Pretoria.



## *Annexure A: Abbreviated Biographies of ASSAf Members*

**Duard Godfried Kleyn** is Professor and Dean of the Faculty of Law at the University of Pretoria.

**Horst Helmut Klump** is Professor Emeritus of Biochemistry at the University of Cape Town (UCT) and Visiting Professor in the Department of Chemistry and Biological Chemistry, Rutgers University, New Jersey, USA. He is a Life Fellow of UCT.

**Carolina Koornhof** is Dean of the Faculty of Economic and Management Sciences at the University of Pretoria.

**Girish Jayant Kotwal** was Professor and Chair of Medical Virology, member of the Institute of Infectious Diseases and Molecular Medicine at the University of Cape Town, Director of WHO Influenza Center in South Africa and Senior International Wellcome Trust Fellow for Biomedical Sciences in South Africa.

**Bernard Christiaan Lategan** is Director of the Stellenbosch Institute for Advanced Study (STIAS). He was Dean of the Faculty of Arts and Social Sciences from 1991 to 1996 and served on the Council of the University of Stellenbosch.

**Attie Johannes Ligthelm** is Dean of the School of Dentistry at the University of Pretoria.

**Brenda Louw** is Professor and Head in the Department of Communication Pathology at the University of Pretoria. She is also the Director of the Centre for Early Intervention in Communication Pathology.

**Johan Lutjeharms** is Professor Emeritus of the University of Cape Town where he was Head of the Ocean Climatology Research Group of the Department of Oceanography.

**Christopher Cuthber Posela Madiba** is Chief Director of Systems Development and Coordination in the Department of Education.

**Nomathemba Virginia Magi** is Project Manager – Implementation of the new curriculum, the National Curriculum Statement Grades 10 – 12 at the national Department of Education. She was Dean of the Faculty of Education at the University of Zululand.

**Sunil Dutt Maharaj** is Professor of Applied Mathematics in the School of Mathematical Sciences at the University of KwaZulu-Natal in Durban and Director of the Astrophysics and Cosmology Research Unit.

**Thokozani Majazi** is Professor in the Department of Chemical Engineering at the University of Pretoria. He is a Fellow of the CSIR, a Fellow of the Water Institute of Southern Africa, a Fellow of the Academy of Engineers of South Africa and a Board member of the Nuclear Energy Corporation of South Africa.

**Malegapuru William Makgoba** is Vice-Chancellor of the University of KwaZulu-Natal. He is a Fellow of the Royal College of Physicians of London and was elected as Foreign Associate Member of the United States National Academy of Sciences' Institute of Medicine.

**Duma Enoch Malaza** is Chief Executive Officer of Higher Education South Africa (HESA) and the former Director of Quality Assurance at the University of Pretoria.



## *Annexure A: Abbreviated Biographies of ASSAf Members*

**Johannes Albertus Geldenhuys Malherbe** is retired Professor of Electronic and Computer Engineering at Pretoria University (UP). He was Dean of Engineering and Vice-Principal at UP.

**Mzamo P Mangaliso** is a Professor of Strategic Management at the University of Massachusetts, Amherst, MA in the USA. He was President and CEO of the National Research Foundation of South Africa from 2006-2008.

**Chabani Manganyi** is Chairman of the Council for Higher Education and was Vice-Principal of the University of Pretoria. He was Vice-Chancellor of the University of the North and Director-General in the Department of Education.

**Thabane Vincent Maphai** is an Executive Director of Corporate Affairs and Transformation at South African Breweries and was Chairman of BHP Billiton SA and formerly Corporate Affairs Director of South African Breweries and non-Executive Chair of Castle Brewing Namibia. He is also an Extraordinary Professor at the University of South Africa and Chairperson of the Council of the University of KwaZulu-Natal.

**Adrian David Marais** is the Head of the Division of Lipidology in the Department of Internal Medicine at Groote Schuur Hospital and has a joint appointment with the University of Cape Town Health Sciences Faculty.

**Jacobus Gideon Maree** is a Professor in the Faculty of Education, University of Pretoria, and Editor of the *SA Journal of Psychology*.

**Tshilidzi Marwala** is Executive Dean of the Faculty of Engineering and Built Environment at the University of Johannesburg. He also serves on the Boards of City Power Johannesburg and EOH (Pty) Ltd.

**Thoko V Mayekiso** is the Deputy Vice-Chancellor for Research, Technology and Planning at Nelson Mandela Metropolitan University (NMMU). He was the Executive Dean of the Faculty of Arts at NMMU.

**Bongani Mawethu Mayosi** is Professor and Head of the Department of Medicine at the University of Cape Town and Groote Schuur Hospital, Cape Town. He is the President of the College of Physicians of South Africa and Vice-President of the Pan African Society of Cardiology.

**Anthony David Mbewu** joined the Global Forum for Health Research as Executive Director in January 2010. Previously he was the President of the Medical Research Council of South Africa and a Visiting Professor in Cardiology and Internal Medicine at the University of Cape Town. He is former Vice-President of the Academy of Science of South Africa and Fellow of the Royal College of Physicians of the UK and Foreign Associate of the Institute of Medicine of the USA.

**Veronica McKay** is Professor and the Director of the Institute of Adult Basic Education and Training at the University of South Africa.





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**Lirieka Meintjes-van der Walt** is an Adjunct Professor of Law at the University of Fort Hare.

**Barry Vincent Mendelow** is Emeritus Professor in the Department of Molecular Medicine and Haematology at the University of the Witwatersrand, and a staff member of the National Health Laboratory Service.

**Rajend Mesthrie** is Professor of Linguistics at the University of Cape Town and holder of an NRF Research Chair. He is currently President of the Linguistics Society of Southern Africa, serving a second term. His work focuses mainly on Sociolinguistics in the Southern African context.

**Joseph Phillip Michael** is Professor of Organic Chemistry at the University of the Witwatersrand and is currently Head of the School of Chemistry.

**John Robert Midgley** is Deputy Vice-Chancellor: Academic Affairs and Research at the University of Fort Hare and a former Professor and Dean of Law at Rhodes University.

**Guy Franklin Midgley** leads the South African National Biodiversity Institute's Climate Change and BioAdaptation Programme.

**Duncan Mitchell** is Emeritus Professor of Physiology at the University of the Witwatersrand, and Honorary Research Professorial Fellow in its Brain Function Research Group.

**Valerie Mizrahi** is Research Professor, Director of the Molecular Mycobacteriology Research Unit, Co-director of the Centre of Excellence for Biomedical TB Research at the University of the Witwatersrand and National Health Laboratory Service, and is a two-time recipient of an International Research Scholar's grant from the Howard Hughes Medical Institute (USA).

**Philemon Mphathi Mjwara** is Director-General of the Department of Science and Technology. He was the Group Executive of Research and Development; Strategic Human Capital Development at the Council for Scientific and Industrial Research.

**Renosi Mokate** is Deputy Governor and Executive Director at the Reserve Bank. She previously served as Chairperson of the Financial and Fiscal Commission.

**Khotso Mokhele** is Vice-President of the ICSU Committee for Scientific Planning and Review and a member of the ICSU Executive Board. He is a founding member of the ICSU Regional Committee for Africa and a founder member of the Association of Black Scientists, Engineers and Technologists (ABSET). He was President and Chief Executive Officer of the National Research Foundation (NRF).

**Harm Moraal** is Professor of Physics at North-West University and Director of the Antarctic Research Programme, in which he studies various aspects of cosmic-ray physics in the heliosphere.

**Vincent Clifford Moran** is Professor Emeritus at the University of Cape Town (UCT) and holds a research position in the Zoology Department at UCT.



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**Lynn Morris** is a Chief Specialist Scientist and Head of the AIDS Unit at the National Institute for Communicable Diseases in Johannesburg and holds a joint appointment (Research Professor) at the University of the Witwatersrand.

**Johann Mouton** is Director of the Centre for Research on Science and Technology and Professor in the Department of Sociology and Social Anthropology at the University of Stellenbosch.

**Bangilizwe Mqeke** is a Professor of Law and former Dean of Law at Rhodes University. He is an Advocate of the High Court of South Africa.

**John Cantius Mubangizi** is a Professor of Law at the University of KwaZulu-Natal. He is also Deputy Vice-Chancellor and Head of the College of Law and Management Studies at that university.

**Sospeter Mwijarubi Muhongo** is Full Professor of Geology, University of Dar Es Salaam. He was the founding Regional Director of the International Council for Science Regional Office for Africa (ICSU ROA). He is Honorary Professor of Geology at the University of Pretoria. He is a Fellow of the Academy of Sciences for the Developing World (TWAS).

**Johan Pieter Muller** is Professor of Curriculum in the School of Education and Deputy Dean of Research and Postgraduate Affairs in the Faculty of Humanities at the University of Cape Town. He is also Director of the Graduate School of Humanities.

**Marie Muller** is Registrar: Academic at the University of Johannesburg. She was chosen to represent the Commonwealth Nurses at the International Council of Nurses Congress in Canada in 1997. She has previously been Dean of Humanities at UP, Dean of Education at UJ, and Nursing and Education at UJ.

**Sagadevan Govindasamy Mundree** is currently General Manager of Program Investment in the Innovation Business Group within the Department of Employment, Economic Development and Innovation where he leads a team responsible for the Queensland Primary Industries and Fisheries' Investments in Research, Development and Extension in all the primary industries of Queensland.

**David Mycock** is based at the University of the Witwatersrand. His research interests are directed at the development and scientific understanding of *in vitro* storage methods for plants that are presently difficult to store by conventional means.

**Christina Mynhardt** is Professor in the Department of Mathematics and Statistics at the University of Victoria, Canada.

**Jean B Nachegal** is Extraordinary Professor in the Department of Internal Medicine and Director of the Centre for Infectious Diseases at Stellenbosch University and Honorary Full Professor of Medicine in the Department of Medicine at University of Cape Town.

**Gonasageran Naidoo** is Professor Emeritus and Senior Research Associate in the School of Biological and Conservation Sciences, University of KwaZulu-Natal. He is a Fellow of UKZN.



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**Shamila Nair** is Director of Research at the French Institute for Health and Medical Research (INSERM) and currently Chief of the Unit for the Implementation of the African Union/Consolidated Plan of Action for Science and Technology (CPA) at the United Nations Education, Scientific and Cultural Organisation (UNESCO, Natural Sciences) in Paris.

**Luigi Renzo Nassimbeni** is Senior Research Scholar of the University of Cape Town (UCT). He held the Chairs of Chemical Crystallography and Physical Chemistry at UCT and directs the Supramolecular Chemistry Research Unit at the same institution.

**Nicoli Natrass** is Professor of Economics and Director of the AIDS and Society Research Unit at the University of Cape Town.

**Daniel James Ncayiyana** has been Editor of the *South African Medical Journal* since 1993, and currently serves as Advisor to the President of the Human Sciences Research Council. He was Deputy Vice-Chancellor at the University of Cape Town (1996-2001) and Vice-Chancellor, Durban Institute of Technology (2001-2005).

**Njabulo Simakhahle Ndebele** was Vice-Chancellor and Principal at the University of Cape Town, following tenure as a Scholar-in-Residence at the Ford Foundation in New York. He was a founding Chair of the Southern African Regional Universities Association, and is President of the Association of African Universities.

**Phuthi E Ngoepe** is Professor and Director of the Materials Modeling Centre of the University of Limpopo.

**Mokubung Nkomo** is Professor in the Department of Education Management at the University of Pretoria.

**Wiseman Nkuhlu** is Chancellor of the University of Pretoria, Chairperson of Pan African Capital Holdings and was the first Chairperson of the Council for Higher Education. He was the Chief Executive Officer of the Secretariat of NEPAD (New Partnership for Africa's Development).

**Jo MF Noero** is Professor and Director in the School of Architecture at the University of Cape Town. He was the Ruth and Norman Moore Chair of Architecture at Washington University and Director of Graduate Studies. He is an honorary Fellow of the Royal Institute of British Architects.

**Loyiso Gordon Nongxa** is Professor and Vice-Chancellor and Principal at the University of Witwatersrand. He was previously Deputy Vice-Chancellor: Research at the University of Witwatersrand, and Dean of Science at the University of the Western Cape.

**Tebello Nyokong** is Professor of Physical Chemistry at Rhodes University. She is a recipient of the Order of Mapungubwe: Bronze.

**Cyril Thomas O'Connor** is Acting Deputy Vice-Chancellor at the University of Cape Town (UCT). He is the former Dean of the Faculty of Engineering and the Built Environment at UCT. He is Founder Director of the Mineral Processing Research Unit at UCT and also founded and is still a member of the Catalysis Research Unit which is one of the national Centres of Excellence. He is a Fellow of the University of Cape Town.



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**Darragh O'Donoghue** is Co-director of the Whole Earth Telescope, and Head of the Instrumentation Division at the South African Astronomical Observatory (SAAO).

**Catherine A Odora Hoppers** is a Research Chair in Development Education at the University of South Africa (UNISA) and was a Professor at the University of Pretoria, specialising in indigenous knowledge.

**Douglas William Oliver** is the Director: School of Pharmacy at the North-West University. He is (founder) member of the Academy of Pharmaceutical Sciences and President of the SA Society for Basic and Clinical Pharmacology since 2001.

**Gilbert Oke Martin Onwu** is Professor of Chemical Education in the Faculty of Education, University of Pretoria.

**Phillip Onyebujoh** is the Manager for Proof of Principle and Implementation Research on Tuberculosis and Leprosy at the World Health Organisation.

**Frederick Mark Orkin** is the Director-General of the Public Administration Leadership and Management Academy (PALAMA). He was President and Chief Executive Officer of the Human Sciences Research Council (2000-2005); Head of Statistics South Africa (1995-2000); and Professor of Social Research Methodology in the Faculty of Management at the University of the Witwatersrand.

**Nicky Gopalan Padayachee** was Professor and Dean of the Faculty of Health Sciences, University of Cape Town. He is President of the Health Professions Council of South Africa.

**Norman Pammenter** is a Professor Emeritus and Senior Research Associate at the University of KwaZulu-Natal (UKZN). He is a Fellow of UKZN and in 2005 was awarded the Silver Medal of the South African Association of Botanists.

**Mohammed Iqbal Parker** is the Director of the International Centre for Genetic Engineering and Biotechnology (ICGEB), Cape Town. He was the Head of the Division of Medical Biochemistry and Director of Research in the Health Science Faculty at the University of Cape Town.

**John Parkington** is Professor in the Department of Archaeology at the University of Cape Town.

**Adrian (Adi) Walter Paterson** was a member of the National Advisory Council on Innovation (1998-2004) and is a member of the South African Academy of Engineering. Until recently he held the position of General Manager at PBMR.

**Robert Clive Pattinson** is Professor and Clinical Head of the Department of Obstetrics and Gynaecology at the University of Pretoria and Chief Specialist at Kalafong Hospital. Previously he was Director of the Maternal and Infant Health Care Strategies Research Unit at the Medical Research Council.

**Claire Penn** is the Simmonds Hampton Chair of Speech Pathology and Audiology at the University of Witwatersrand. She was awarded the Order of Mapungubwe (Silver) in 2007 and was category winner of Shoprite Checkers Woman of the year in 2008.



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**John Morley Pettifor** is a paediatrician and Professor at the University of the Witwatersrand Chris Hani/Baragwanath Hospital. His research interests focus on vitamin D and bone metabolism.

**Nancy Phaswana-Mafuya** is a research director in the Human Science Research Council's Social Aspects of HIV/AIDS and Health research programme. She is also an Extraordinary Visiting Professor at the University of the Western Cape.

**William Pick** is Professor Emeritus and former Head of the School of Public Health at the University of the Witwatersrand, Honorary Professor at the University of Cape Town, Honorary Professor at the University of the Western Cape and Chairperson of the Council for Medical Schemes.

**Pragasen Pillay** is Professor in the Department of Electrical & Computer Engineering and Hydro-Quebec Senior Chair and holds the Jean Newell Distinguished Professorship in Engineering at Concordia University. He is also a Part-time Professor at the University of Cape Town.

**Carl Wilhelm Irene Pistorius** was the Vice-Chancellor and Principal of the University of Pretoria. He is currently the Vice-Chancellor of the University of Hull in the UK. He is a former member and chairperson of the National Advisory Council on Innovation (NACI).

**Chris Pistorius** is Professor of Materials Science and Engineering at Carnegie Mellon University, Pittsburgh, Pennsylvania, USA. He was Head of the Department of Materials Science and Metallurgical Engineering at the University of Pretoria. He is a Fellow of the South African Academy of Engineering.

**Nyameko Barney Pityana** is Principal and Vice-Chancellor of the University of South Africa. He is Chairperson of Higher Education South Africa (HESA) and Chairman of the African Council for Distance Education. He serves as the Chairman of the African Union Commission's Steering Committee on African Intellectuals and the Diaspora, as well as the African Governance Institute.

**Deborah Posel**, former Director of WISER, completed a D Phil at Nuffield College, University of Oxford in 1987, where she was also a Gwilyn Gibbon Prize Research Fellow. She has written extensively on the history of apartheid. Her recent work focuses on the South African Truth and Reconciliation Commission.

**Hans Jurgens Potgieter** was Professor in the Department of Microbiology and Dean of the Faculty of Science at the University of the Free State.

**Anastassios Pouris** is Professor and Director of the Institute for Technological Innovation at the University of Pretoria.

**Bernard Alexander Prior** is Professor Extraordinary in the Department of Microbiology and the former Chairman of the School of Biological Sciences at the University of Stellenbosch. He is currently Honorary Professor at the Durban University of Technology and Senior Researcher in the Institute for Wine Biotechnology, Stellenbosch University.

**Hugh Wynford Pritchard** is Head of Research in the Seed Conservation Department of the





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Royal Botanic Gardens Kew, UK and a member of Kew's Senior Science Group. He is a Founding Trustee of the International Society for Seed Science, Chair of the Seed Storage Committee of the International Seed Testing Association, Governor of Writtle College, partner institute to the University of Essex, UK and Fellow of the Institute of Biology and Linen Society.

**Otto Walter Prozesky** was Vice-Principal of the Pretoria University (1986-1989) and President of the Medical Research Council (1993-1998).

**Mapule Ramashala** was the Chair of the Medical Research Council and former Vice-Chancellor of the Medical University of South Africa (MEDUNSA).

**Raj Ramesar** is Professor and Head of the Division of Human Genetics at the University of Cape Town. He also serves as Director of the Medical Research Council Human Genetics Research Unit, and CANSA's Colorectal Cancer Research Consortium.

**Mamphela Aletta Ramphela** is the Chairperson of the TIA Board. She was previously Managing Director at the World Bank and Vice-Chancellor of the University of Cape Town. She served as Director of the Institute for Democracy in South Africa and Equal Opportunities Research Project. She is also the Chair of Circle Capital Ventures and a former Co-chair of the Global Commission on International Migration.

**Michelle Ramsay** is the Head of the Molecular Genetics Laboratory in the Division of Human Genetics at the National Health Laboratory Service and is a Professor at the University of Witwatersrand. She is the interim Director of the Sydney Brenner Institute for Molecular Bioscience.

**Doug Eric Rawlings** is Head of the Department of Microbiology and Deputy Dean of the Faculty of Natural Sciences at the University of Stellenbosch. He is a Fellow of the University of Cape Town.

**Batmanathan Dayanand (Daya) Reddy** holds the South African Research Chair in Computational Mechanics at the University of Cape Town. He is a member of the Department of Mathematics and Applied Mathematics, and Director of the Centre for Research in Computational and Applied Mechanics.

**Priscilla Reddy** is Professor and Researcher at the Medical Research Council.

**Vera Helen Rees** is Professor and Executive Director in the Department of Obstetrics and Gynaecology at the University of the Witwatersrand. She has served as the Chairperson of Medicines Control Council.

**Thomas Rehle** is Director and Senior Programme Advisor in the Human Sciences Research Council (HSRC) programme on Social Aspects of HIV/AIDS and Health. He is a Visiting Professor of International Health at the University of Cape Town, School of Public Health and Family Medicine.

**Carolus Reinecke** was Professor of Biochemistry and Vice-Chancellor, of the former Potchefstroom University.

**David Mark Richardson**'s primary research interest is in the field of biological invasions,



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particularly the ecology of plant invasions. He is currently Professor in the Department of Botany and Zoology at Stellenbosch University and Deputy Director: Science Strategy at the DST-NRF Centre of Excellence for Invasion Biology.

**Linda Marlene Richter** is Executive Director of Child, Youth and Family Development at the Human Sciences Research Council and a Fellow of the University of KwaZulu-Natal. She is Honorary Professor in Psychology and Honorary Professor in Paediatrics and Child Health at the University of the Witwatersrand.

**Terence John Robinson** is Professor of Zoology and Executive Head of the Department of Botany and Zoology at the University of Stellenbosch.

**Justus Christiaan Roux** is Director of the Centre for Language and Speech Technology at Stellenbosch University. He was Chair of the Department of African Languages and Vice-Dean of the Faculty of Arts at the same institution.

**Heinz R  ther** is Professor of Geomatics at the University of Cape Town (UCT) and was Head of the Department of Surveying at UCT.

**Edward Peter Rybicki** is a Professor in Microbiology in the Department of Molecular and Cell Biology, and a member of the Institute of Infectious Disease and Molecular Medicine at the University of Cape Town.

**Michael John Samways** is Professor and Chair of the Department of Conservation Ecology and Entomology at Stellenbosch University.

**Roelf Feenstra Sandenbergh** is Professor and Dean of the Faculty of Engineering, Built Environment and Information Technology at the University of Pretoria.

**Christopher Charles Saunders** is Emeritus Professor at the University of Cape Town. His scholarly interests lie in the 20th century history of Southern Africa. He is an Associate Editor of the *South African Journal of Science*, where he is responsible for humanities manuscripts.

**Lawrence Schlemmer** is Executive Director of the research company MarkData (Pty) Ltd. He was formerly Vice-President of the Human Sciences Research Council, Professor and Director of the Centre for Policy Studies at the University of the Witwatersrand Graduate School of Business, Professor and Director of the Centre for Applied Social Sciences at the University of Natal.

**Mary Catherine Scholes** is Professor in the School of Animal, Plant and Environmental Sciences at the University of Witwatersrand. She serves as Vice-Chairperson for the Board of Trustees for the International Centre for Tropical Agriculture and is Chairperson of the International Geosphere Biosphere Programme.

**Robert Scholes** is a systems ecologist in the CSIR's Natural Resources and the Environment Division. He is a CSIR Fellow and serves on the Board of South African National Parks (2006 to present).

**Barry David Schoub** is Executive Director of the National Institute for Communicable Diseases.



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**Roland Schulze** is Professor Emeritus at the University of KwaZulu-Natal. He is best known for his work in hydrological modeling.

**Casper Schutte** was Professor of Chemistry at the University of South Africa, and Interim Manager of the South African Bioinformatics Initiative.

**Soraya Seedat** is Professor and Co-director of the Medical Research Centre Unit on Anxiety and Stress Disorders at the University of Stellenbosch as well as the DST/NRF South African Research Chair in PTSD.

**Bob JR Seretio** is Professor Emeritus of Physics of the University of Fort Hare. He was Dean of the Faculty of Science at the University of Fort Hare.

**Mamokgethi Setati** is Professor and Executive Dean of The College of Science, Engineering and Technology at the University of South Africa; Honorary Professor of Mathematics Education at the University of Witwatersrand and Professor Extraordinaire at the Tshwane University of Technology.

**Vikash Sewram** is Director of the Oncology Research Unit of the Medical Research Council and Director of the Cancer Research Initiative of South Africa. He is also an Honorary Professor in the Department of Surgery, Nelson R Mandela School of Medicine, UKZN.

**Lawrence Vere Shannon** is a retired Honorary Professor of Oceanography. He was Director of the South African Sea Fisheries Research Institute (now Marine and Coastal Management).

**John Francis Sharpey-Schafer** is a retired Nuclear Physicist attached to the Universities of Western Cape and Zululand. He was Director of iThemba LABS.

**Olive Shisana** is the President and Chief Executive Officer of the South African Human Sciences Research Council (HSRC). She was Executive Director of the Social Aspects of HIV/AIDS and Health at the HSRC, Professor and Head of Department of Health Systems Management and Policy at MEDUNSA, Executive Director of the World Health Organisation's Family and Community Health and Director-General of the Department of Health.

**Sibusiso Sibisi** is Chief Executive Officer of the Council for Scientific and Industrial Research. He was Executive Director (R&D) at Plessey South Africa and Deputy Vice-Chancellor for Research and Innovation, University of Cape Town.

**Roy Siegfried** is Professor Emeritus at the University of Cape Town. He has served as Director of the Sir Percy Fitzpatrick Institute of African Ornithology.

**Silvester Ron Simango** is Associate Professor of Linguistics in the Department of English Language and Linguistics at Rhodes University. His work focuses on morphology and syntax, as well as language contact in Southern Africa. He is an Executive Board member of the Linguistic Society of Southern Africa and has previously taught at the University of Limpopo and the University of Malawi.

**Leickness Chisamu Simbayi** is the Acting Executive Director and the Deputy Executive Director of the Social Aspects of HIV/AIDS and Health (SAHA) research programme at the Human Sciences Research Council (HSRC). He is also an Extraordinary Professor of



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Psychology at the University of Stellenbosch.

**Ratnamala M Singh** is Visiting Research Professor at the Centre for Higher Education Research and Information of the Open University, United Kingdom. She was Executive Director of the Higher Education Quality Committee, Council on Higher Education and Executive Director in the Division for Social Sciences and Humanities at the National Research Foundation/Centre for Science Development and Human Sciences Research Council (1995 – 2000).

**Beric William Skews** is Director of the Flow Research Unit at the University of the Witwatersrand, where he has previously held Chairs in Mechanical and in Aeronautical Engineering, as well as having held academic posts in Canada and Japan. He was previously Manager of R&D at Eskom.

**Hendrik Christoffel (Hennie) Snyman** is Professor Emeritus of Physics at the Nelson Mandela Metropolitan University and former Rector and Vice-Chancellor of the Port Elizabeth Technikon.

**Himla Soodyall** is the Director of the MRC/NHLS/Wits Human Genomic Diversity and Disease Research Unit at the National Health Laboratory Service and the University of Witwatersrand. She is the recipient of the Order of Mapungubwe (Bronze).

**Theodor John Stewart** is Professor Emeritus in the Department of Statistical Sciences at the University of Cape Town. He was Director and Head of Operations Research and Statistics at the National Research Institute for Mathematical Sciences of the CSIR.

**Pieter Streicher Steyn** is Professor of Chemistry at the University of Stellenbosch. He was Director of Research at Stellenbosch University and was elected as an external CSIR Fellow in 2001.

**Pieter Helenius Stoker** is Professor Emeritus at the School of Physics, North-West University. He was Head of Department of Physics and Dean of the Faculty of Natural Sciences at the former Potchefstroom University.

**Anton Ströh** is Dean of the Faculty of Natural and Agricultural Sciences and a Council Member of the University of Pretoria.

**Rolf Heinrich Stumpf** was Vice-Chancellor at the Nelson Mandela Metropolitan University in Port Elizabeth, Deputy Vice-Chancellor at the University of Stellenbosch from 1998 to 2002 and President of the Human Sciences Research Council from 1993 to 1998. He is a member of the executive committee of Higher Education South Africa.

**Gerald Edwin Gerry Swan** is Dean of the Faculty of Veterinary Science at the University of Pretoria. He is President of the South African Veterinary Association.

**Chris F Swanepoel** is Professor Emeritus and Research Fellow in the Department of African Languages at the University of South Africa (UNISA). He was Vice-Principal: Academic and Research at UNISA (2001-2006).



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**Frans Swanepoel** is Director Research Development and Professor of Sustainable Agriculture at the University of the Free State. He is a recent (2008-2009) Fulbright Fellow of Cornell University, USA. He is a member of the Board of the ARC.

**Nthoana Tau-Mzamane** is Registrar at Walter Sisulu University. She was President and Chief Executive Officer of the Agricultural Research Council (2001 - 2006); Head of the Department of Agriculture, Land and Environment in Limpopo Province (1996-2001); and Professor of Agriculture at the University of Fort Hare.

**John Reginald Nuttall Taylor** is Professor of Food Science at the University of Pretoria.

**Petro Terblanche** is the Executive Director of the Technology and Innovation Directorate at the Medical Research Council (MRC). She was previously Head of the CSIR's Biochemtek Division.

**Jennifer Ann Thomson** is Emeritus Professor of Microbiology in the Department of Molecular and Cell Biology at the University of Cape Town. She is the Co-founder of "South African Women in Science and Engineering" (SAWISE).

**Phillip Vallentine Tobias** is Professor Emeritus and Honorary Professorial Research Fellow in the School of Anatomical Sciences, University of the Witwatersrand. He is a Fellow of the Royal Society of London, National Academy of Sciences of USA, American Philosophical Society, American Academy of Arts and Sciences and the Austrian Academy of Sciences. He has 17 Honorary Doctorates.

**Keyan Gray Tomaselli** is Director and Professor at the Centre for Cultural, Communication and Media Studies at the University of KwaZulu-Natal (UKZN). He is a Fellow of UKZN. His research interests are political economy, African cinema and visual anthropology.

**Peter Doughtrey Tyson** is Professor Emeritus, former Deputy Vice-Chancellor and Vice-Principal, Director of the Climatology Research Group, University of the Witwatersrand. He was Vice-President of the International Council of Science (ICSU) from 2003-2005.

**Leana Uys** was the Deputy Vice-Chancellor and Head of the College of Health Sciences at the University of KwaZulu-Natal (UKZN). Her career in nursing began in the 1970s. She was appointed Head of the School of Nursing at UKZN in 1986. Her research focuses on the rehabilitation of psychiatric patients.

**Peter Vale** is Nelson Mandela Professor of Politics in the Department of Political and International Studies, Rhodes University and Visiting Professor in the Humanities, University of Johannesburg.

**Annél van Aswegen** is Director: Human Resources and a Member of Council of the University of Pretoria. She is a Professor in the Department of Private Law. She was formerly Professor and Head of the Department of Private Law, Acting Registrar: Professional Services and a Member of Council of the University of South Africa.

**Jan Horn van Heerden** is Professor and Head of Department of Economics at the University of Pretoria.





## *Annexure A: Abbreviated Biographies of ASSAf Members*

**Willem Francois Petrus van Heerden** is Professor and Head of the Department of Oral Pathology and Oral Biology in the School of Dentistry at the University of Pretoria

**Paul David van Helden** is Professor and Head of Medical Biochemistry at the University of Stellenbosch (US). He is the Director of the Medical Research Council/US Centre for Molecular and Cellular Biology, and Co-director of the DST Centre of Excellence in molecular tuberculosis research.

**Albert van Jaarsveld** is the President and CEO of the National Research Foundation. His distinguished career in research, teaching and leadership include academic and management positions at the Universities of Stellenbosch and Pretoria, and the position of Adjunct Professor: Environmental Studies Programme at Dartmouth College, USA.

**Frederik van Niekerk** is Executive Director: Research and Innovation, at the North-West University.

**Anton Albert van Niekerk** is Professor of Philosophy and Director of the Centre for Applied Ethics at the University of Stellenbosch. He is Chair of the Philosophy Department. He is a member of the Board of Directors of the International Association of Bioethics and Chair of the Board of Directors of the Ethics Institute of South Africa (EthicSA).

**HCJ (Dingie) van Rensburg** is Director of the Centre for Health Systems Research and Development at the University of the Free State.

**Johan van Staden** is Professor Emeritus and Director of the Research Centre for Plant Growth and Development, School of Biological and Conservation Sciences, University of KwaZulu-Natal.

**Johan Daniel van Wyk** is Professor Emeritus of Electrical Engineering at the University of Johannesburg. He was Professor of Electrical and Computer Engineering at Virginia Polytechnic Institute and State University, Research Leader in the National Science Foundation Engineering Research Centre for Power Electronic Systems, Blacksburg, Virginia, USA and is at present Research Professor at this centre.

**Willem Heber (Emile) van Zyl** is a Professor in Microbiology at the University of Stellenbosch and is currently heading up a biofuels research programme towards the development of advanced second generation technologies for the conversion of total plant biomass to biofuels.

**Johan van Zyl** is the Group Chief Executive Officer of Sanlam Limited. He was Vice-Chancellor and Principal at the University of Pretoria (1997-2001) and Professor of Agricultural Economics.

**Andries Johannes van der Walt**, South African Research Chair in Property Law and Professor at Stellenbosch University, was instrumental in the development of the new field of constitutional property law. His book on this topic is the only one of its kind in South Africa. He is also active in property theory, especially on the transformation of South African property law.

**Daniel Verwoerd** is Research Coordinator of the Faculty of Veterinary Science at the University of Pretoria. He was the founder of the Molecular Biology Section and Director of the Onderstepoort Veterinary Institute of Agricultural Research Council.



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**Zeblon Zenzele Vilakazi** is Director of iThemba LABS and Extraordinary Professor at the University of Pretoria and Honorary Associate Professor at the University of the Witwatersrand. He is a member the Board of Nuclear Industries Association of SA and serves as the Chairman of the International Atomic Energy Agency standing advisory committee on Nuclear Applications.

**Sibusiso Vi-Nkomo** is Professor and Executive Director: Institutional Advancement at the University of Pretoria (UP). He was Dean of Commerce at UP.

**Louise Vincent** is Associate Professor and Acting Head of Department in the Department of Political and International Studies, Rhodes University. She was a Rhodes Scholar (1991, Wolfson College).

**Daniel Visser** is Acting Deputy Vice-Chancellor at the University of Cape Town. He is chair of the South African chapter of the International Academy of Comparative Law, and a former President of the Southern African Society of Legal Historians.

**Renuka Vithal** is a Deputy Vice-Chancellor at the University of KwaZulu-Natal. Her role is to provide strategic leadership on teaching and learning, developing university teaching and learning policies and monitoring their consistent university-wide implementation.

**Wilma Viviers** is Professor in International Trade and the Director of the School of Economics in the Faculty of Economic and Management Sciences at North-West University (Potchefstroom campus). Her research focus is on international trade and trade promotion.

**James Andrew (Jimmy) Volmink** is Deputy Dean (Research) and Professor of Community Health in the Faculty of Health Sciences of the University of Stellenbosch. He is also Director of the South African Cochrane Centre of the Medical Research Council.

**Gerhard von Gruenewaldt** is Research Advisor to the Wits Foundation and a private consultant. He was Professor of Geology at the University of Pretoria before his appointment as Vice-President of the Foundation for Research Development and later the National Research Foundation.

**Hester Vorster** is Professor and Research Director of the Africa Unit for Transdisciplinary Health Research, at the University of North-West.

**Yusuf Waghid** is a Dean of Faculty of Education at Stellenbosch University. He was Chair of the Department of Education Policy Studies.

**Anthony David Mortimer Walker** is a Professor Emeritus and Honorary Research Associate in Physics at the University of KwaZulu-Natal (UKZN). He is part-time Director of Special Projects in the Research Office and a Fellow of UKZN.

**Brian Warner** is Distinguished Professor Emeritus of Natural Philosophy at the University of Cape Town, Visiting Professor at the University of Southampton, and Adjunct Professor at James Cook University, Townsville.



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**Vanessa Jane Watson** is Professor in the School of Architecture, Planning and Geomatics at the University of Cape Town and on the executive of the African Centre for Cities at UCT.

**Mark Charles Wentzel** is Professor with the Water Research Group in the Department of Civil Engineering at the University of Cape Town.

**Patricia Ann Whitelock** has a joint appointment with the South African Astronomical Observatory (SAAO) and the University of Cape Town. She was Acting Director of SAAO from 2002 to 2003.

**Anna-Lise Williamson** is Professor in the Department of Clinical Laboratory Service at the University of Cape Town (UCT). She is a member of the executive committee of the Institute of Infectious Disease and Molecular Medicine (IIDMM) at UCT.

**Francis Wilson** is Professor Emeritus in Economics at the University of Cape Town. He is the Director of the Data First Resource Unit (for Information Research and Scientific Training) in the Centre for Social Science Research.

**Brenda Wingfield** is Deputy Dean in the Faculty of Natural and Agricultural Sciences and Professor of Genetics at the University of Pretoria. She is also the Chairperson of the National Science and Technology Forum [NSTF].

**Michael Wingfield** is Professor and Director of the Forestry and Agricultural Biotechnology Institute at the University of Pretoria. He is also Director of Centre of Excellence in Tree Health Biotechnology and Tree Protection Co-operative Programme.

**Marié Philliphina Wissing** is Professor in Psychology and Director of the School for Psycho-social Behavioral Sciences at the North-West University.

**David Randle Woods** was Vice-Chancellor of Rhodes University and Deputy Vice-Chancellor (Research) at the University of Cape Town. He is a Fellow of the American Academy of Microbiology and a Life Fellow of the University of Cape Town.

**Laurence Stuart Wright** is Director and Professor in the Institute for the Study of English in Africa (ISEA) at Rhodes University. He is Honorary Life President of the Shakespeare Society of Southern Africa and has recently been awarded the Gold Medal of the English Academy of Southern Africa.

**Hong-Kun Xu** is Professor at the National Sun Yat-sen University in Kaohsiung, Taiwan. He was Professor at the University of KwaZulu-Natal.

**Alphose Zingoni** is Professor of Structural Engineering and Mechanics in the Department of Civil Engineering of the University of Cape Town. He was Dean of the Faculty of Engineering at the University of Zimbabwe from 1997 to 1999.



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