

Name of the Chair	Candidate	Host Institution	Research interest	Science domain	Tier level
Chair In Work-Integrated Learning	Winberg C Prof	Cape Peninsula University of Technology	Research Chair in Work-integrated Learning, seeks to build knowledge in professional, vocational and technical education. This includes traditional professional programmes, as well as new and emerging professions that have the purpose of preparing candidates to engage meaningfully with the world beyond the university. Understanding the relationship between academic study and the world of work or professional practice is key to building knowledge in the field of work-integrated learning.	Social Sciences	2
Identities And Social Cohesion In Africa	Becker HA Prof	Nelson Mandela Metropolitan University	The Chair's research will advance values of Ubuntu, excellence and responsibility, articulating a humanizing pedagogy in the investigation of African epistemologies and their interrelation with contemporary identities and social realities. The proposed research also speaks to Constitutional rights, recognizing and seeking to integrate, through research, the diversity of knowledges and accounts of social experience to better understand the broader African continent. The Chair will advance research that investigates both autochthonous and immigrant forms of knowledge and social experience, their production, national integration, relevance to social justice and influences on social cohesion.	Social Sciences	2
Marine Spatial Planning	Lombard AT Dr	Nelson Mandela Metropolitan University	The Chair will provide a hub where researchers in ecosystem-based ocean governance ecological economics, and	Natural Sciences	2

			social sciences will be able to pool research expertise, assistance. The Chair will further “promote, recognise and reward research excellence” by offering avenues for emerging South African researchers to excel and compete with foreign researchers in the fast-growing field of Marine Spatial Planning .		
Molecular And Cellular Biology of The Eukaryotic Stress Response	Edkins AL Dr	Rhodes University	The chair will conduct multidisciplinary research that in future may be applied to identify, understand and treat the causes of both communicable and non-communicable disease. This will be through the study of an essential cellular process, such as the stress response, where fundamental observations can have broad applications. The relevance and importance of the fundamental aspects of this research is based in the fact that protein homeostasis a cornerstone of the central dogma of molecular biology and an essential cellular process.	Health and Medical Sciences	2
Global Change Social Learning Systems Development: Transformative Learning And Green Skills Learning Pathways	Lotz-Sisitka HB Prof	Rhodes University	The Chair will advance knowledge of Global Change Social Learning Systems from a social learning systems development perspective, focusing on how Global Change Social Learning Systems can be oriented towards systemic impact at multiple levels of society (micro, meso and macro) within a wider multi-levelled sustainability transitioning perspective. The research is concerned with investigating how SA can realise its development goals by <i>inter-alia</i>	Social Sciences	1

			drawing on the energies of its people, building capabilities, and promoting new forms of social learning throughout society. The chair will use multi-levelled transitioning systems research as a wider contextual framework, and critical realist concepts of emergence in multi-levelled, open social learning systems.		
Geopolitics And The Arts of Africa: Agency, Diversity And Democratisation	Simbao RH Prof	Rhodes University	The research activities of this Chair, will result in greater knowledge about South African and African identity that will build pride in and understanding of cultural diversity and heritage as a largely untapped socio-economic resource, without reverting to reductionistic approaches to capital growth. Further, they will result in new, creative ways of coping with and anticipating social change such as development, modernisation, migration and globalisation that affects the ways humans identify themselves and each other, and at times stereotype others.	Humanities	2
Social-Ecological Systems And Resilience	Biggs R Dr	Stellenbosch University	The area of social-ecological systems and resilience, which forms the focus of the Chair, is a rapidly growing research area globally. Research under the Chair not only focuses on advancing environmental sustainability and resilience in support of eradicating poverty and reducing inequality in the country. It further seeks to generate research of direct relevance to several international agreements and initiatives to which South Africa is signatory, in particular to research	Inter-Domain	2

			priorities under the new Future Earth global change research initiative as well as to the Intergovernmental science policy Platform on Biodiversity and Ecosystem Services.		
Gender Politics	Gouws A Prof	Stellenbosch University	The research focus of the Chair focuses on how issues highlighted in national strategies such as the National Development Plan are deeply gendered and in need of gendered solutions. Without gender research training in a multidisciplinary way gender blind solutions to these problems will continue to run into problems and ultimate failure. The Chair also proposes to use her rare combination as a gender scholar of quantitative and qualitative to analyse national policy interventions.	Social Sciences	2
Paediatric Tuberculosis	Hesseling AC Prof	Stellenbosch University	South Africa is one of the countries with the highest TB burden globally. Given the dual HIV/TB pandemics and the young population pyramid in SA, TB is a serious emerging phenomenon amongst young people of reproductive age. The Chair focuses on key under-researched areas such as novel shortened yet safe chemotherapeutic regimens and improved vaccines, linked to effective health and communication systems.	Health and Medical Sciences	2
Integrative Skeletal Muscle Physiology	Myburgh KH Prof	Stellenbosch University	This Chair will contribute soundly to the creation of new knowledge and the application thereof to support “science-for-a-better-world”. Skeletal muscle is responsible for all movement in human beings. Although skeletal muscle might be considered a robust tissue with no overt	Natural Sciences	1

			disease increasing mortality, impairment of the ability to contract muscle and to move has severe consequences to human dignity and quality of life.		
The Sociology of Land, Environment And Sustainable Development	Walker CJ Prof	Stellenbosch University	This Research Chair proposes to explore the socio-ecological dynamics within which commitments to sustainability, development and social justice in the Karoo region must operate and thereby to contribute to knowledge production and national policy development directed towards sustainable development as a broad societal goal. The research work aligns well with the national research strategy spelled out in the 2002 National Development and Research Strategy (NDRS) of the Department of Science and Technology (DST), further refined in its Ten-Year Plan for Innovation.	Social Sciences	1
Phytochemical Food Network To Improve Nutritional Quality For Consumers	Sivakumar D Prof	Tshwane University of Technology	The proposed research programme will include areas of food nutrition and security, climate change, sustainable agriculture and bio-economy with an objective of providing healthy nutritional good quality fresh produce to all South Africans. The proposed research chair will initiate links and collaborations with a National Centre of Excellence for Food security that was established under the NRF-DST as a national initiative in 2014 with the objective to make food available to rural South Africans.	Natural Sciences	2
Dermatology and Toxicology	Khumalo NP Assoc Prof	University of Cape Town	The research focus will advance the field of dermatological sciences to contribute to	Health and Medical	2

			the National Research and Development priorities and health strategy. This Chair will establish a comprehensive research programme addressing various causes of hair loss and skin inflammation as well as pilot studies exploring the potential use of hair as a testing substrate in Medicine.	Sciences	
Biomedical Engineering & Innovation	Douglas TS Prof	University of Cape Town	Prof Douglas will contribute to socio-economic development in South Africa through: development of contextually appropriate technological solutions for a healthier population, collaboration with industry for commercialization of the health care technologies developed; and development of interdisciplinary skills and capacity in biomedical engineering and health innovation.	Inter-Domain	1
Systems Biology Studies On Plant Desiccation Tolerance For Food Security	Farrant JM Prof	University of Cape Town	This Chair aims, through understanding gained by multidisciplinary research on novel organisms, to produce through biotechnology, crops with considerable drought tolerance that will enable food security even under extreme drought conditions. It aims not only to achieve this for cereal crops (which currently provide the bulk of the world's food supply) but for food crops that are uniquely African. In this regard, her proposed work on production of drought tolerant <i>Eragrostis tef</i> , which would serve as a gluten free cereal and subsequently as fodder for animal husbandry or for manufacture of bioethanol.	Natural Sciences	1
Research Chair For Mineral Law In Africa	Mostert H Prof	University of Cape Town	Prof Mostert seeks to foster intellectual debate and free inquiry by facilitating access to accurate and reliable information, creating and strengthening collaborative ventures across the	Humanities	1

			continent, encouraging research that challenges the boundaries of traditional legal approaches and moves into new frontiers of academic thinking, developing research areas that focus on comparative research into Mineral Law regimes in Africa.		
Physical Cosmology	Weltman A Dr	University of Cape Town	The research focus of the Chair in Physical Cosmology will be on the fundamental physics that underlies all of cosmology and astronomy research into the nature of the Universe. This research aligns perfectly with national research priorities. Cosmology research directly answers the call of the "Space Science Grand Challenge" in the Ten-year Innovation Plan for Science and Technology.	Natural Sciences	2
Laser Applications In Health	Abrahamse H Prof	University of Johannesburg	South Africa is faced with a quadruple burden of disease, with the non-communicable diseases coming to the fore as greatest challenge to morbidity and mortality. In this grouping, South Africans are especially vulnerable to diabetes and cancers. Professor Abrahamse will not only align with the areas of importance identified by government, but will also contribute by introducing both preventative modalities and treatment modalities associated with two of the main non-communicable diseases.	Health and Medical Sciences	2
Integrated Studies Of Learning Language,	Henning E Prof	University of Johannesburg	This Chairs aims to shed light on how	Social Sciences	1

Mathematics And Science In The Primary School			children begin their learning trajectory and how they develop in language learning and reading, in mathematics and in science specifically, as these areas have been shown to be of national concern. In terms of language and reading literacy as partner in learning, the research community needs to know much more about how the English language is learned and used as medium of study in school and how it features as partner in conceptual development in maths and science, building on young children's use of their home language.		
Welfare And Social Development	Patel L Prof	University of Johannesburg	The Chair will be dedicated to knowledge development, transfer and capacity building in the field of social welfare and social development. Although her disciplinary home was originally in social work as a practice-based discipline, knowledge production and practice in social welfare requires an interdisciplinary response. The focus areas of the chair will thus build on the research strengths of the Centre for Social Development in Africa which inter alia: poverty and vulnerability with a focus on women, children, youth, and people with disabilities and mental	Social Sciences	1
South African Art And Visual Culture	Schmahmann B Prof	University of Johannesburg	The proposed work of the Research Chair will provide a forum for producing research and enabling capacities which have enormous importance to the heritage and museum sectors, to arts management, to the gallery sector, to the education sector, and which complement and provide invaluable support to the	Humanities	1

			work of art and design practitioners.		
Industrial Development	Tregenna FM Prof	University of Johannesburg	Industrial development is central to sustainable growth and employment creation in South Africa. The Chair will make a valuable contribution to the importance of different sectors and about the role of industrial policy. Industrial development is also viewed by government as a central plank of growth and development. As such, the proposed Chair is directly relevant to national priorities and national strategies.	Social Sciences	1
Proteolysis In Homeostasis, Health And Disease	Coetzer THT Prof	University of Kwazulu-Natal	The health of animals and the farmer are essential for any economy. Protease research is making significant contributions to the training of experts, the identification and treatment of African diseases affecting cattle, horses, chickens and people in Africa. There is no point of care diagnostic test for Trypanosomiasis and thus the development of a commercial diagnostic test will make a significant impact on cattle farming income generation and the livelihoods of many small-scale farmers. The research will continue to contribute to innovation competitiveness for South Africa	Natural Sciences	1
Ecosystem Health And Biodiversity In KZN And The E. Cape	Downs CT Prof	University of Kwazulu-Natal	The activities of the Chair are directly aligned with the Department of Science and Technology's (DST) Global Grand Challenge in reducing the human footprint. Global climate change and its impact on land cover/use has become one of the most critical environmental concerns both to the scientific community and to society at large. Climate change due to greenhouse gas emissions is expected to increase temperature, alter precipitation patterns and soil moisture budgets, increase the frequency and intensity of hurricanes, and induce changes in regional and local sea levels.	Inter-Domain	2

Antibiotic Resistance And "One Health"	Essack SY Prof	University of Kwazulu-Natal	The research area of the Chair in "Antibiotic Resistance and One Health" resonates with the National Development Plan (NDP) 2030 as articulated in the National Department of Health Strategic Plan 2014/15-2018/19. It addresses the prevention and reduction of the disease burden and the promotion of health, strengthening the health system, and, improving quality by using evidence, as prioritized in the NDP. It further speaks to preventing disease, reducing its burden and promoting health, improving the quality of care by setting and monitoring norms and standards, improving safety in healthcare and improving clinical governance as specified in the Strategic Plan	Health and Medical Sciences	2
Gender And Childhood Sexuality: Violence, Inequalities And Schooling	Bhana D Prof	University of Kwazulu-Natal	Gender inequality is one of the most pressing concerns in South African schools. It impacts on the quality of education with negative effects on children, especially for school-girls. In the context of gender and sexual violence, girls' disproportionate vulnerability to HIV and teenage pregnancy, there is critical need to address concerns and challenges, beyond gender parity. There is an urgent need to strengthen our responses by generating evidence-based research to improve educational programmes, to enhance gender equality and the health and well-being of children and to make schools safe for girls. This challenge underlies the work of the Chair to enhance the commitment to children's quality education which is gender just	Social Sciences	1
Chemistry Of Indigenous Medicinal Plants	Van Heerden FR Prof	University of Kwazulu-Natal	The use of plants for medicinal purposes is an important component of Indigenous African Knowledge System (IAKS). It is also a part of IAKS which lends itself toward value adding and commercialisation, which can be to the benefit of all the role players, including the holders of IAKS. Many of the important mainstream pharmaceuticals such as aspirin, morphine, quinine, digoxin and taxol, are plant-derived compounds. For the investigation and development of IAKS-based medicinal	Natural Sciences	2

			plants, expert natural product chemists are needed and therefore the Chair in Chemistry of Indigenous Medicinal Plants is relevant and will contribute greatly to the IAKS.		
Ecosystem Health: Monitoring And Managing The Health Resilience Of The Limpopo River Basin	Luus-Powell WJ Prof	University of Limpopo	The research Chair will focus on the environment including abiotic and biotic aspects, as well as communities affected by the environment (ecosystem services). With this multi-disciplinary research the Chair will develop and increase the understanding of the interactions between people and the environment in order to maximise the long-term beneficial use of resources and minimise hazards now and in the future.	Natural Sciences	2
International Constitutional Law	De Wet E Prof	University of Pretoria	The research Chair is aligned to focus on fundamental disciplines, scarce and critical knowledge fields. Although knowledge of international constitutional law is of critical importance for South Africa in light of its leading role within SADC, the AU, BRICS and the UN, this knowledge is extremely limited in the country and in the region as a whole. The Chair in international constitutional law, directed specifically at stimulating advanced capacity in resolving conflicting obligations stemming from different international organizations, will make a significant contribution to countering these impediments.	Natural Sciences	1
Fungal Genomics	Wingfield BD Prof	University of Pretoria	Interrogating the genomes of fungi has a very broad range of applications. It has direct and valuable applications to several research fields such as biodiversity, health, microbial ecology, bioremediation, plant microbe interactions, industrial biotechnology (including biofuels), climate change and environmental processes and bioprospecting. These research fields encompass the full scope of research objectives, from fundamental (e.g., the microbial ecology of South African terrestrial habitats) through to strongly applied studies (e.g., Bioprospecting for industrial enzymes or	Natural Sciences	1

			biopharmaceuticals). The Chair will contribute immensely to this areas of research and associated industry.		
Plant Health Products From Indigenous Knowledge Systems (PHP_IKS)	Lall N Prof	University of Pretoria	Indigenous Knowledge Systems (IKS) and using natural products for the benefit of the people in South Africa in many different fields are significant components of the activity in the proposed Research Chair. Although there is a great prevalence in disease, there are only a few herbal products based on traditional knowledge for combating major ailments. Further, due to the lack in pharmacological investigation, our plant diversity is underutilised and limited to ethno-traditional medicinal uses. The interdisciplinary programme of the Research Chair will bring together experts from several distinct areas to investigate the medicinal potential of the plant diversity of South Africa. The Chair is closely aligned with the South African government's Bio-economy Strategy.	Health and Medical Sciences	2
Animal Infectious Diseases (Zoonosis)	Markotter W Prof	University of Pretoria	The relevance of zoonosis and the societal, health and economic impact has been demonstrated far too well by the current Ebola epidemic. It did not only have an economic impact on the countries where the outbreak occurred but had a global impact and with an estimated cost of more than \$32 billion. South Africa has also contributed substantially to the current Ebola outbreak that included financial contributions, as well as contributions in terms of infrastructure and human resources. The research Chair will make a difference locally and contribute internationally by addressing zoonotic diseases nationally, regionally and to have a global impact due to the importance of zoonotic diseases globally. The Chair will also focus on developing multidisciplinary training programmes focusing on the human-animal-ecosystem interface.	Inter-Domain	2

Religion/Sacred Texts, Gender (African Women) And HIV And AIDS Waste To Energy Systems Engineering Law, Society And Technology Information And Communication Technology For Development Collaborative Governance And Partnership	Pistorius T Prof	University of South Africa	The Chair's research focus is aligned with knowledge generation and human capital development in response to the needs of the African continent (e-commerce legal frameworks for Africa). It will also contribute to economic sustainability, innovation and capacity building in science and technology (the role of IP in the knowledge economy) and open distance learning (the management of IP for open learning). The Chair for Law, Society and Technology will promote responsible virtual citizenship (legal aspects of cybersecurity; IP and cybercrime) and focus on intellectual property law and innovation, especially the role that design law can play in the innovation chain.	Humanities	2
Information and Computer science	Van Biljon JA Prof	University of South Africa	Information and Communication Technologies for Development (ICT4D) refers to the use of Information and Communication Technologies (ICTs) for improving the human condition that is consistent with the values of social justice and fairness. The ICT4D Chair research will impact Learning Systems and Global Change Social Learning Systems. Aside from its reliance on technology, ICT4D also requires a nuanced understanding of the context which can be community development, poverty alleviation, agriculture, healthcare, or education, which the Chair will also contribute critical knowledge towards.	Information & Computer science	2
Vector-Borne And Zoonotic Pathogens	Burt FJ Prof	University of the Free State	The activities of the Chair will strengthen regional and national imperatives, specifically at a national level the Chair will contribute significantly to the objectives of the Provincial Department of Agriculture in the central region of South Africa to professionalize their diagnostic and laboratory services and to develop key laboratories to take on the role of reference laboratories for the central region of South Africa. Significant aspects of the service they aim to provide are associated with those related to vector-borne and zoonotic diseases.	Health and Medical Sciences	1

Historical Trauma And Memory	Gobodo-Madikizela P Prof	University of the Free State	The transition process from apartheid to democracy brought South Africa to an awe-inspiring threshold of a bright and hopeful future for its citizens. Yet it seems clear that South Africa has not lived up to this dazzling image of change and transformation. The Chair will thus provide a unique platform that is rooted in the complex social realities of South Africa – with frameworks associated with Euro-American canonical knowledge on the one hand, and with African ethics and moral philosophy on the other. This interplay provides a productive intellectual project which, combined with the inter- and trans-disciplinary approach to trauma studies will be crucial in positioning the Chair nationally and in Africa as a leading knowledge centre in the field of trauma studies.	Humanities	1
Visual History & Theory	Hayes PM Prof	University of the Western Cape	National research and development programmes emphasise that we are in an age of fast-developing new technologies. In many senses these technologies and their public interface are highly visual. Visual theory, together with photography and digital training and support for research projects has resulted in exhibitions, museum development, curatorial projects and entry into art galleries, besides a raised general participation and competence in new technologies. The Chair would expand this modest success, enabling a series of initiatives and connections to unfold.	Humanities	1
Health Systems Governance	Schneider H Prof	University of the Western Cape	The research Chair will focus squarely on the strategic focus of engaging in high-quality, socially responsive research in the niche area of public health – functioning health systems, and within this governance processes which are a prerequisite for affording adequate, appropriate, affordable and good-quality health care to all communities in South Africa.	Health and Medical Sciences	2

Virus-Host Dynamics For Public Health.	Moore PL Prof	University of the Witwatersrand	The research focus of the Chair is firmly ensconced in this Trust of bioscience. More specifically it will continue with the HIV focus. Specifically to define the precise viral variants that engage rare B cells that go on to become anti-HIV broadly neutralizing antibodies. Furthermore, viral deep sequencing using longitudinal samples will enable a precise definition of the viral variants associated with the maturation of breadth. These will enable the design of immunogens to be tested in non-human primates.	Health and Medical Sciences	1
Hydrometallurgy And Sustainable Development	Ndlovu S Prof	University of the Witwatersrand	The research focus of the Chair will be on the extraction and recovery of mainstream metals such as base metals and the critical metals such as cobalt vanadium and tungsten which are essential for manufacturing and fabrication of different components that are a necessity in a world with ever increasing demands for advanced technology and renewable and sustainable energy generation for economic development and growth. Hydrometallurgy in Africa remains largely geared to the recovery of metals from natural raw ores.	Engineering	2
Research on the Health Workforce 4 Equity And Quality	Rispel LC Prof	University of the Witwatersrand	The Chair will generate new knowledge and expand scientific capacity on health workforce planning, production, performance and dynamics in South Africa, contribute to capacity strengthening in health workforce research, and provide evidence to strengthen the development and implementation of national health workforce policies. The Chair will also make an important contribution to international knowledge, by leading cross-country studies (particularly the BRICS countries) that draw lessons beyond the specifics of national contexts and are useful for other countries embarking on similar health sector reforms. The Chair focusing on the health workforce will provide for theoretical and methodological innovation in this area, thus enhancing international debates in the academic disciplines that it spans – public health, health	Health and Medical Sciences	2

			economics, sociology, public health policy and management.		
Global Change and Systems Analysis	Scholes MC Prof	University of the Witwatersrand	The research focus of the Chair will firmly be aligned with the focus of the research Plan and the GCSRI as it will investigate "Systems thinking, involving equal partners, in order to improve human and social wellbeing and to protect the environment". Research methodologies are being developed to explore these areas and South Africa has data, but only limited expertise, in conducting the analyses. The Chairs close association with IIASA, who are at the cutting edge of developing these technologies, will allow her to bring this to South Africa.	Natural Sciences	1