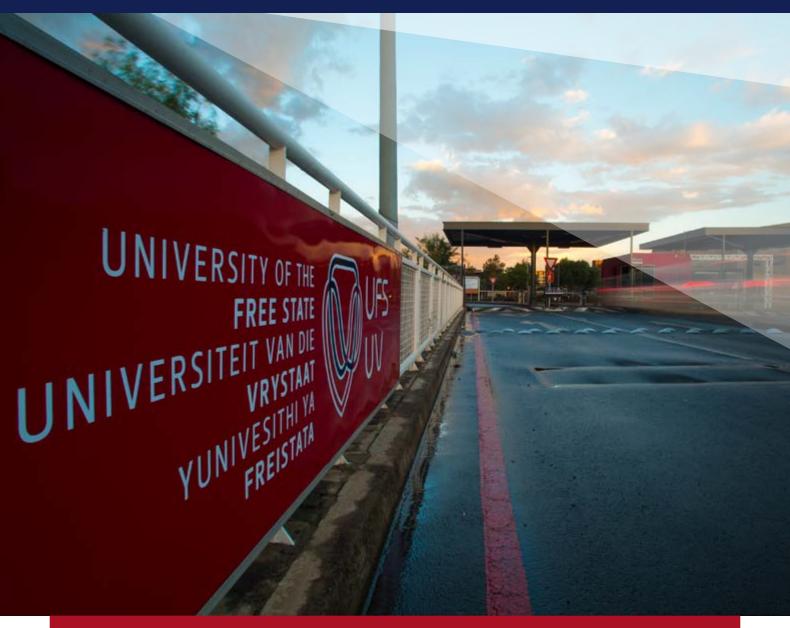
INTERNATIONALISATION REPORT

2017 Academic Year

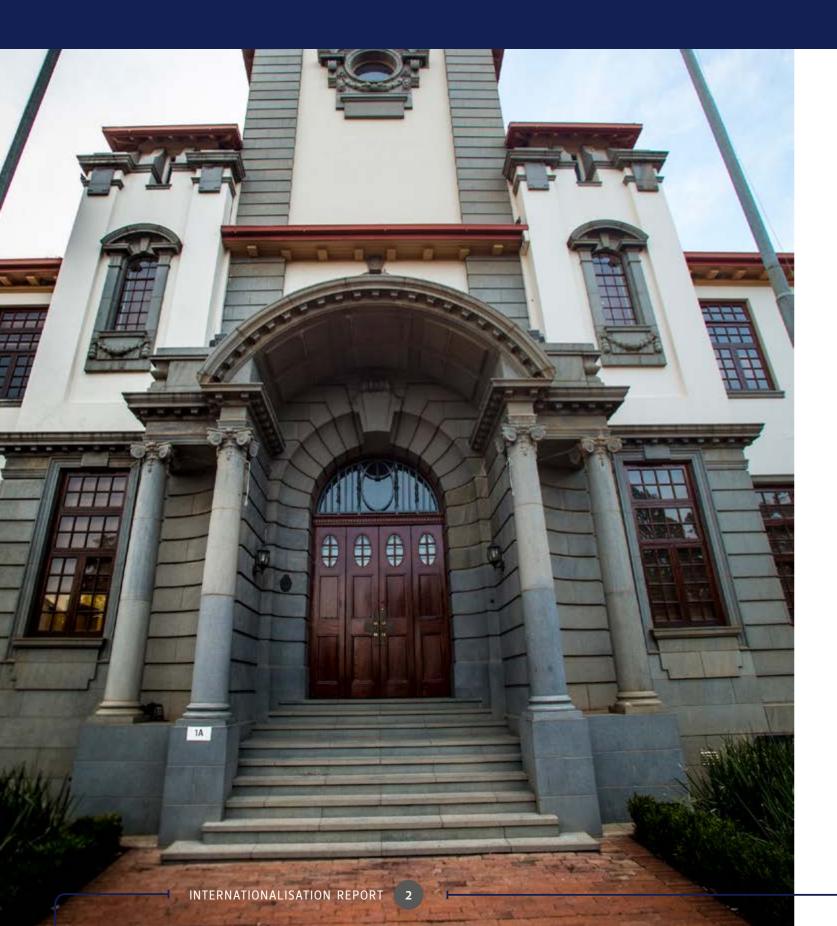


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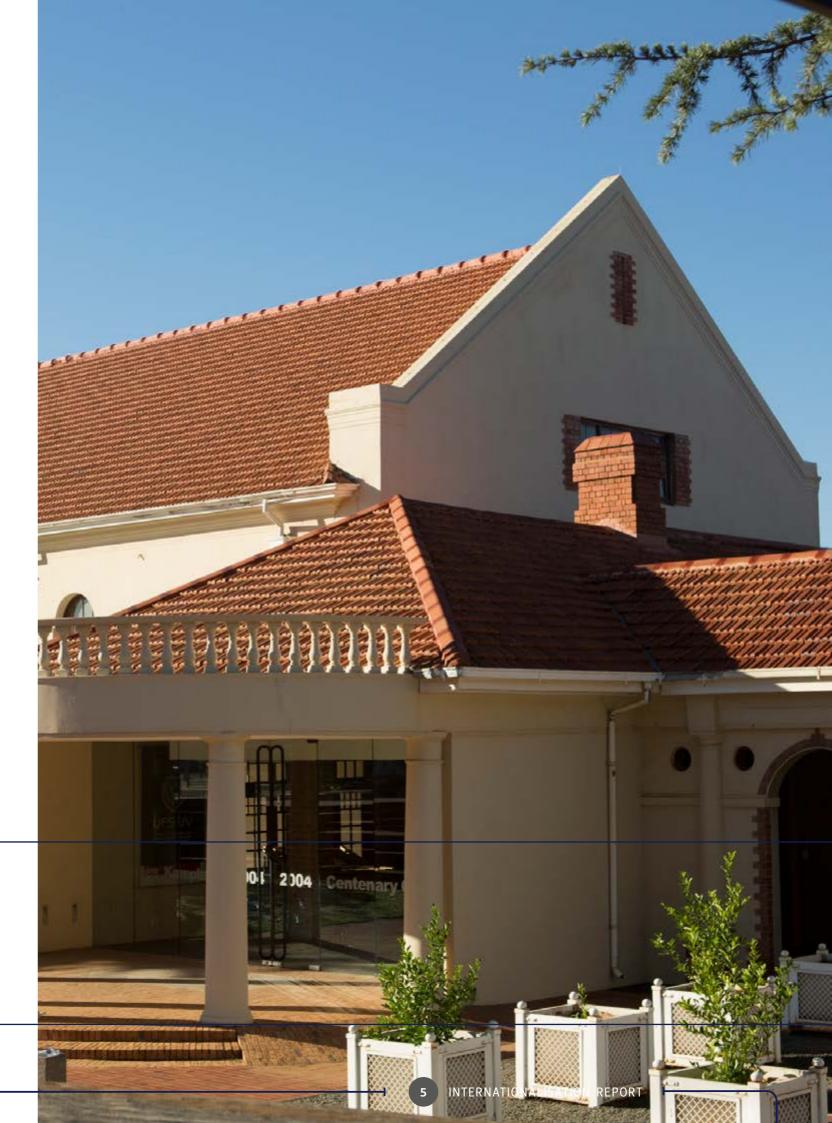
EDITORIAL

Internationalisation has globally and in South Africa become accepted as one of the critical processes advancing the core business of universities. The South African Department of Higher Education and Training (DHET) are in the final stages of preparing a 'Policy Framework for the Internationalisation of Higher Education in South Africa' (DHET, 2017). Once promulgated, reporting on internationalisation will become mandatory. To conscientise our university about the rich internationalisation process at University of the Free State (UFS), and to prepare ourselves for the anticipated mandatory reporting, the Office for International Affairs (OIA) has compiled an institutional internationalisation report for the year 2017. This report considers the indicators for internationalisation which are set out in the draft 'Policy Framework for Internationalisation of Higher Education in South Africa' (GG 40815 of 28 April 2017).

The UFS is a highly internationalised university, and has a proud history of international engagements. For example, in the period 2014–2017, UFS researchers co-authored 1751 publications with 1253 collaborating institutions. The university has more than 50 high-quality and productive institutional collaborations with universities and institutions around the world. Under their umbrella, research collaboration, staff and student mobility, as well as other projects, are implemented. About 1900 international students were registered at UFS for the 2017 academic year, constituting 4.8% of the student population.

UFS adopted its Strategic Plan 2018-2022 immediately after it had formulated its Integrated Transformation Plan (ITP) in 2017. Internationalisation is seminal to the UFS strategy, and is considered one of the critical drivers for institutional transformation. The university is committed to developing locally relevant and globally competitive curricula, which connect to multiple knowledge paradigms. It emphasises research internationalisation and endeavours to widen researchers' international networks, with a special focus on the African continent.

An important aspect of the strategic thinking of the UFS on internationalisation is that it is important to ensure that all international activities are part of one intentional process of internationalisation. In the past, many international activities happened in isolation, without their contribution to enhancing the quality of the core business being noted. This first narrative annual report on internationalisation at the UFS is not only meant to prepare us for the anticipated new internationalisation reporting environment, but is also an attempt to rectify the lack of institutional awareness of the university's rich international engagements. It is based on information collated from other institutional reports. The reporting format is still being refined, and constructive feedback on this report will be highly appreciated.





SECTION 1: INSTITUTIONAL NARRATION

This section of the report highlights select international engagements and innovative international research activities of the UFS. The information was extrapolated from the UFS website and other institutional publications. Each of these engagements reflects the importance of Internationalisation for enhancing the quality and societal relevance of research and education.

UFS BLOEMFONTEIN CAMPUS

UFS CO-HOSTS CONFERENCE TITLED "A VIEW FROM THE PRECIPICE: CRITICAL REFLECTIONS ON SOUTH AFRICA AND AFRICA IN THE 21ST CENTURY".



From the left are: Prof JM Moosa (Centre for African Studies, Jawaharlal Nehru University, India); Prof Hussein Solomon (Senior Professor: Political Studies and Governance at UFS); Prof Virgil Hawkins (Osaka School of International Public Policy Studies, Osaka University in Japan); and Prof Ajay Dubey (Centre for African Studies, Jawaharlal Nehru University, India).

The UFS Department of Political Studies and Governance co-hosted a conference with Jawaharlal Nehru University (India), the Centre

for the Engagement on African Peace and Security, Southern African Centre for Collaboration on Peace and Security and Osaka University in Japan which took place from 13–14 February 2017. Attendees hailed from India, Japan, Zambia, Lesotho and South Africa. The conference focused on the economic and political challenges that South Africa is currently facing and issues facing the African continent, including India–Africa relations, the role of ethnicity, and issues of security and peace.

UFS DEPARTMENT OF CHEMISTRY HOSTS DR CRISTIAN CAPELLI FROM OXFORD UNIVERSITY WHOSE LECTURE UNLOCKED THE SECRET TO DNA



From left are: Dr Cristian Capelli, Associate Professor of Human Evolution at Oxford University; Dr Karen Ehlers, Senior Lecturer; and Prof Paul Grobler; both from the Department of Genetics at the UFS.

The UFS Department of Genetics hosted a lecture with Dr Cristian Capelli, an Associate Professor of Human Evolution at Oxford

University in the UK, on the history of our species. Dr Capelli's research, titled: "People on the move: population structure and gene flow in Southern Africa", focuses on reconstructing the history of human population. It demonstrates how different human populations are related and how they exchange genes. Dr Capelli purported that the research contributes to the medical field in that it informs health-related policies. Understanding the genetic make-up of individuals can provide medical professionals insight into the levels of susceptibility to diseases, and assists in the prescription of medication.

UFS GEOLOGY DEPARTMENT HOSTS ACADEMIC DUO FROM THE UNIVERSITY OF LEOBEN IN **AUSTRIA**



From the left: Prof Marian Tredoux, Associate Professor at the UFS Department of Geology; Prof Giorgio Garuti. from the University of Leoben; Dr Federica Zaccarini, also from Leoben; and Dr Freddie Roelofse, Head of the Department of Geology at the UFS.

The UFS Department of Geology hosted Prof Giorgio Garuti and Dr Federica Zaccarini from the University of Leoben on 5 and 6 April

2017. Both academics are experts in platinum-group element mineralogy and chrome-rich rocks. The visit strengthened the existing research co-operation between the two institutions. Prof Tredoux has had longstanding collaboration with the experts and they have co-authored various research publications together.

ANDREW MELLON FOUNDATION RENEWS ONGOING SUPPORT FOR UFS PROJECTS



Dr Saleem Badat and Annemia van der Heever.

On 23 March 2017, the UFS hosted Dr Saleem Badat, programme director, International Higher Education and Strategic Projects programme, at the Mellon Foundation, as part of his annual first-quarter feedback sessions with universities around the country that are beneficiaries of the Mellon Foundation. The Foundation assists select colleges, universities, and research institutes in

training scholars by making scholarships available for studies in the humanities that contribute to culture and society. The university guest indicated that for the year 2017, between \$10.8million and \$12 million would be available for grants by the programme. During the visit, projects funded by the foundation that relate to the institutional priorities of the UFS were discussed with the respective principal investigators. The possibility of codeveloping intra-institutional projects with other higher education institutions in South Africa was highlighted.

DR ALICE BRINK FROM THE UFS CHEMISTRY DEPARTMENT HOSTS PROF ELSPETH GARMAN FROM THE UNIVERSITY OF OXFORD IN THE UK



UFS Department of Chemistry senior lecturer, Dr Alice Brink (left), and Prof Elspeth Garman.

Prof Elspeth Garman presented a lecture at the Department of Chemistry, titled "104 years of crystallography: What has it taught us and where will it lead?" Crystallography is the scientific technique that allows for the position of atoms to be determined in any matter which is crystalline. In her lecture,

Prof Garman focused on how to refine and mount protein structures in cold cryo conditions at about -173°C. Her research is significant in that it led to the discovery of the first crystal structure of a TB protein. This engagement reflects endeavours by UFS to attract excellent international researchers and research students to its university community to promote research collaboration and innovation.

UFS FACULTY OF HEALTH SCIENCES HOSTS HANNES MEYER SYMPOSIUM IN CARDIOTHORACIC **SURGERY**



Dr Johan Brink demonstrates a MAZE procedure with a pig's heart.

The UFS Faculty of Health Sciences hosted the annual Hannes Meyer Symposium in Cardiothoracic Surgery. The symposium was organised by Prof Francis Smit, head of the Department of Cardiothoracic Surgery at UFS, with the support from the Society of Cardiothoracic Surgeons of South Africa and the European

Association of Cardiothoracic Surgery (EACTS). Over the past 16 years this symposium has steadily been growing in stature and prestige leading to the resounding success of this year's event. The aim of the symposium was to provide an overview of the latest advances in cardiothoracic surgery and perfusion as well as providing hands-on training via simulation to trainees from South Africa and the rest of the African continent.

DR.TSHOKOLO MAKUTOANE PRESENTED A PAPER AT THE 2017 ANNUAL MEETING OF THE SOCIETY OF BIBLICAL LITERATURE IN BOSTON IN THE US



Dr. Tshokolo Makutoane, a senior lecturer at the Department of Hebrew at UFS, was a speaker at the annual meeting of the Society for Biblical Literature (SBL), which was held from 19-21 November 2017 in Boston, in the US. Dr. Makutoane received a travel grant from the SBL to present his paper, titled "The Contribution of Linguistic Typology for the Study of Biblical Hebrew in Africa: The Case of Sesotho Pronouns". Dr Makutoane's paper was part of a

thematic session on Theoretical Approaches to Anaphora and Pronouns in Biblical Hebrew in which scholars from Canada, the US, Australia, Europe and Israel will participate. His research highlights the teaching of Biblical Hebrew in Africa, more specifically, pronouns, to Sesotho-speaking students.

PROFESSOR GARETH AUSTIN, IN RED JERSEY, FROM CAMBRIDGE UNIVERSITY ADDRESSES YOUNG SCHOLARS AT UFS



From 8–9 June 2017, in the first conference of its kind on the African continent, the International Studies Group at UFS hosted the Young Scholars Initiative conference with Prof Gareth Austin as the keynote speaker. Prof Austin's keynote address focused on the "Economic History in Africa's Decolonisation and Development". Prof Austin, a professor in economic history at the University of Cambridge, discussed how Africa's economic history had always

been about its development, and provided a brief periodisation of the economic historiography of Africa. Sixty-five young and senior scholars from five continents attended the conference titled, Decolonising Africa, which provided a platform to reflect on the African experience from an historical perspective, and to assess the current position of the continent in the global economy.

UFS CARDIAC TEAM DOES PIONEERING WORK

The UFS Cardiac team had various achievements at national and international levels this year. The Robert WM Frater Cardiovascular Research Centre attached to the Faculty of Health Sciences has commenced with a pioneering research project concerning idiopathic dilating cardiomyopathy. With an Afrocentric research focus, the Department of Cardiothoracic Surgery hopes to treat viruses unique to Southern Africa, and other underlying causes of dilated cardiomyopathy with endomyocardial biopsies. The study is a project that flows from Prof. Makoali Makotoko's PhD, and is in collaboration with Prof Heinz-Peter Schultheiss from Charité – Universitätsmedizin Berlin's Institute for Cardiac Diagnostics and Therapy. The faculty is in the process of formalising its collaboration relationship with the Charité – Universitätsmedizin Berlin.

IRSJ RESEARCH FELLOW PROMOTES HUMAN RIGHTS TRANSFORMATION

INTERNATIONALISATION REPORT



Dr Joanne Coysh at the launch of her book, Human Rights Education and the Politics of Knowledge.

Dr Joanne Coysh, a postdoctoral research fellow from the University of Warwick, in the UK, and an Institute for Reconciliation and Social Justice (IRSJ) research fellow at the UFS, launched her book, Human Rights Education and the Politics of Knowledge, at the Centenary

Complex on the Bloemfontein Campus on 15 August 2017. The purpose of the book is to connect theory to practice in order to design processes through which people begin to take positive and transformative decisions and actions. Her international experience in education and working in communities has allowed her to integrate global best practices into local application, thereby mastering the art of balancing theory with practice, research with reality, and facilitation with integration. The book illustrates how this dance can turn human rights education into human rights transformation.

UFS PROFESSOR RECEIVES AFRICAN AWARD FOR APPLIED SCIENCES



Above: Prof Abdon Atangana from the UFS Institute for Groundwater Studies.

Prof Abdon Atangana from the Institute for Groundwater Studies at UFS received the African Award of Applied Mathematics at an International conference titled, The African Days of Applied Mathematics held in Errachidia, Morocco. Additionally, Clarivate

Analytics recently named "The new fractional derivative and application to nonlinear Fisher's reaction-diffusion equation", an article on applied mathematics by Prof Atangana as the New Hot Paper because it was the highest-cited maths paper in the world for 2017.

NOBEL PRIZE-WINNER PRESENTS FIRST LECTURE AT VICE-CHANCELLOR'S PRESTIGE LECTURE SERIES



From the left: Prof Jeanette Conradie, UFS Department of Chemistry; Prof Michael Levitt, Nobel Prize-winner in Chemistry and biophysicist and professor in structural biology at Stanford University; Prof Francis Petersen, UFS Vice-Chancellor and Rector; and Prof Corli Witthuhn, UFS Vice-Rector: Research.

Prof Michael Levitt, the South Africa-born biophysicist and Nobel Prize-winner in Chemistry, paid a visit to the UFS as part of the Academy of Science of South Africa's Distinguished Visiting Scholars' Programme. Prof Levitt, a professor in structural biology at Stanford University in the US, presented a captivating lecture at the Bloemfontein Campus on his lifetime's work that earned him the Nobel Prize in 2013. His lecture launched the Vice-Chancellor's Prestige Lecture series, aimed at knowledge-sharing within and beyond our university boundaries.



INTERNATIONALISATION REPORT

UFS SOUTH CAMPUS

The UFS South Campus is home to international students and is in the process of strengthening its international collaborations. In the future, the campus may become a hub for virtual mobility.

UFS QWAQWA CAMPUS

The Afromontane Research Unit (ARU), which is based at the Qwaqwa campus, is strengthening its position as an international mountain research hub.

AFROMONTANE UNIT HOSTS INTERNATIONAL TRANSDISCIPLINARY SEMINAR



Prof Courtney Flint, from Utah State University in the US, is flanked by PhD candidates Mavis Mbiriri and Sarudzai Moana from the UFS Department of Geography.

The Afromontane Research Unit, located on the Qwaqwa Campus of the UFS, hosted an international seminar in July 2017, themed "Enhancing interdisciplinary research: opening up new

perspectives, questions and solutions at the interface between traditional academic disciplines, and between scientists and non-scientists". The seminar was attended by researchers from various institutions including the Free State Development Corporation, Free State Gambling, the Liquor and Tourism Authority, Ezemvelo KZN Wildlife, BloemWater, Utah State University, the University of KwaZulu-Natal, the University of the Witwatersrand and the National University of Lesotho. "Research is a transformative exercise and researchers ask questions in the process of conducting their studies. Most of these cannot be answered by just one discipline," elucidated Prof Francis Petersen, UFS Vice-Chancellor and Rector, in emphasising the value of interdisciplinary research.

QWAQWA CAMPUS HOSTS ACADEMICS FROM JAPAN



From the left: Dr Jared McDonald (Department of History) and Dr Melissa Hansen (Department of Geography), with Kanako Matsuya from the United Nations University's Institute for the Advanced Study of Sustainability, and Prof Shogo Kudo from the University of Tokyo.

The Qwaqwa Campus hosted a delegation from the University of Tokyo and the United Nations University in Japan with a view to fortify research collaborations in sustainability studies. "Like us in Qwaqwa and broadly in South Africa, Japan is faced with serious youth migration challenges and the findings from the proposed research project are expected to help with the solutions. What is also not good about this is that when our youth and graduates leave, they leave Qwaqwa even poorer with more unemployment," said Dr Elsa Crause, Campus Vice-Principal: Academic and Research. UFS Vice-Chancellor and Rector, Prof Francis Petersen, initiated the Akita-Qwaqwa project when he visited Japan in July 2017.





SECTION 2: REPORT OF THE OFFICE FOR INTERNATIONAL AFFAIRS (OIA)

This section of the report outlines activities in which the OIA was directly involved in the year under review. The OIA is a strategic office which supports internationalisation, "an intentional process to integrate or infuse intercultural, international and global dimensions in higher education; to advance the goals, functions and delivery of higher education and thus to enhance the quality of education and research" (DHET, 2017). The OIA is a strategic office, which enables comprehensive internationalisation at the UFS and supports the process operationally.

2.1 STRATEGIC

The UFS is in the process of developing a new internationalisation strategy, which is anchored in the 2018-2023 Strategic Plan and the Integrated Transformation Plan.

LUNCHTIME CONVERSATION IN INTERNATIONALISATION

On 21 October 2017, a strategic conversation on internationalisation with deans and other senior internal stakeholders took place. The anticipated Draft Policy Framework for the Internationalisation of Higher Education in South Africa was unpacked and the participants considered fundamental principles which will be embedded in the new UFS internationalisation strategy. Attendees included the Vice-Chancellor and Rector, Prof Francis Petersen, the Vice-Rector: Research Prof Corli Witthuhn, as well as various deans and directors, as well as select academics.



2.2 PARTNERSHIPS AND COLLABORATIONS

One of the principal purposes of the OIA is to facilitate the UFS international partnerships and to support other stakeholders with specialised support relating to their international activities.

DELEGATION FROM BELARUSIAN STATE UNIVERSITY VISITS THE UFS

In trying to increase the UFS' footprint in Eastern Europe, the OIA, together with the Department of Informatics, hosted a delegation from the Belarusian State University of Informatics and Radio-Electronics from Belarus, which took place on 10 July 2017. The meeting centred on establishing cooperation between the two institutions. Synergies for collaboration were identified and will be formalised in due course. The academic champion will be Prof Pieter Blignaut: Head of Department: Computer Science and Informatics, supported by Mr Zenzele Mdletshe: Senior Officer responsible for partnerships in the OIA.

HOSTING OF WERNER BEYLEFELD FROM UNIVERSITY OF REGINA, CANADA

UFS hosted Mr Werner Beylefeld, Coordinator of International Study Abroad at the University of Regina, Canada, on 5 September 2017. The purpose of the visit was to explore the deepening of the cooperation, which UFS and the University of Regina have been forging since 2013 under the umbrella of an institutional Cooperation Agreement. The collaboration between the two universities commenced at the time with a research project titled "Considering the roles of Mathematics specialist teachers in Grade 6-8 classrooms", which was championed by Dr Karen Junqueira from the UFS Faculty of Education and collaborated with Dr Kathy Nolan from the University of Regina.

WEICONE VECONE VECONE Faculty Manager Ms Lizette Pretorius and Ms Marine Venter represented the Faculty of Economic and Management Sciences, whereas Faculty Manager Ms Marlene Viljoen, Ms Ielse Seale and Ms Maria Philips participated on behalf of the Faculty of Health Sciences. The OIA coordinated the engagement. The deliberations focused on research collaboration as well as student and staff mobility. The visit provided the university guest an opportunity to engage with the newly appointed Director of OIA, Mr Cornelius Hagenmeier.

HOSTING OF DELEGATION FROM XI'AN JIAOTONG MEDICAL UNIVERSITY IN CHINA

On 2 August 2017, UFS hosted a delegation from Xi'an Jiaotong Medical University in China. The main purpose of the visit was to explore possible collaboration between Xi'an Jiaotong University and UFS and the Free State Department of Health, in terms of students obtaining practical training and Internship in South Africa. The meeting resolved that firstly, Xi'an Jiaotong University would need to send its curriculum electronically to UFS colleagues in order to establish synergies in the curriculum, and secondly, to convene a high-level strategic meeting between the province, UFS and the Health Professions Council of South Africa. in order to set the tone going forward for this collaboration. The academic champion is Prof Nathaniel Mofolo: Head of Department: Family Medicine, supported by Mr Mdletshe, Senior Officer responsible for partnerships in the OIA.

UFS HOSTS A DELEGATION FROM RADBOUD UNIVERSITY IN THE NETHERLANDS

On 27 October 2017, Prof Joris Knoben and Ms Charissa van Moulik from Radboud University in the Netherlands visited UFS. The delegates engaged with representatives from the Economic and Management Sciences, the Business School and the Office for International Affairs, on the deepening of the existing partnership between UFS and Radboud University. The collaboration agreement between the two institutions was recently renewed as an institutional agreement.



The focus of the deliberations was on the deepening of the collaboration and on exploring opportunities to have exchange mobility from UFS to Radboud. It was agreed that the champions would look at opening the cooperation by examining funding models such as the EU Erasmus+ programme to overcome the financial challenges that hinder mobility of UFS students. Furthermore, the possible development of a postgraduate exchange programme, research collaborations and the future exploration of joint master's degree programmes were discussed. The participants agreed that the universities would explore external funding opportunities, specifically with a view of developing a reciprocal PhD mobility.

UFS STARTS COLLABORATION WITH UNIVERSITY OF APPLIED SCIENCES OSTWESTPHALEN-LIPPE

UFS hosted Prof Klaus Maasmeyer and Prof Klaus Mass from University of Applied Sciences Ostwestphalen-Lippe (OWL), Germany, from 30 October-1 November 2017. Prof Corli Witthuhn, the Vice-Rector: Research, welcomed the delegates. The Office of the Director coordinated the visit for Agricultural Development, Dr Antonie Geyer, and the OIA.





The delegation visited the Faculty of Natural and Agricultural Sciences and engaged with academic leaders in the field of agriculture. During the visit it was agreed that academic collaboration between the two universities would commence immediately, and would start in the interdisciplinary Agri-Pedia IT-Agriculture joint venture at UFS. A final-year student from OWL would participate in an approximately 10-week internship programme and it is envisaged the student would be involved as a co-author in an academic publication.

During their visit, the delegates benchmarked with UFS Agricultural departments for a new bachelor degree programme in precision farming, which OWL plans to introduce in 2018. During the meeting, additional areas of interest were profiled and flagged for future exploration.

ROUND-TABLE DISCUSSION HOSTED BY THE FOOD AND AGRICULTURAL ORGANISATION (FAO)

Mr Mdletshe and Dr Antonie Geyer represented the UFS at this forum on 17 November 2017. The objective was to engage stakeholders on the opportunities offered by FAO to South African students. In sub-Saharan Africa, it was found that only South Africa was not adequately represented in these programmes. FAO then decided to invite various stakeholders for a robust dialogue on how to ensure that the South African youth take up these internship opportunities. The Department of Agriculture, Forestry and Fisheries, private businesses, the National Youth Development Agency and universities were among the stakeholders present. The way forward tabled was that a standing committee including all stakeholders would need to be established to:

- Coordinate the awarding of internship and distribution of the opportunities;
- Participate in the development of the new curriculum;
- Develop and manage synergies among the stakeholders.

It was recommended that a follow-up meeting be scheduled to provide clarity on the proposed actions. The FAO was tasked to facilitate this process. Additional universities and business societies should be invited to the next meeting.

BENCHMARKING VISIT BY THE UNIVERSITY OF VENDA (UNIVEN)

On 16 November the UFS hosted a delegation from UniVen that included the partner institution's Director of Research and Innovation, Senior Prof Georges Ekosse, and Research Prof Pascal Bessong. The purpose of the visit was twofold. Firstly, to benchmark best practice modalities concerning the Research Development Grant and secondly, to broaden collaboration between UFS and UniVen.

The UniVen delegation met with Dr Freddie Roelofse, Prof Marian Tredoux, Dr Robert Hansen and Mr Raimund Rental from the Department of Geology. The meeting provided scope to foster collaboration between the Geology Department at UFS and the Department of Mining and Environmental Geology at UniVen. In the meeting, the following was resolved:

- 1. There is scope to foster a multidisciplinary collaboration that will include soil sciences, the Institute of Groundwater Studies and the Geology Department.
- 2. The collaboration should include the use of equipment for analytical infrastructure and data analysis purposes.
- 3. External examination to be included in the collaboration.





Meeting with the Directorate Research Development

Meeting with the Department of Geology

PRESENTATION ON THE NATIONAL POLICY FRAMEWORK AT THE CAPE PENINSULA UNIVERSITY OF TECHNOLOGY

On 17 November 2017, Mr Cornelius Hagenmeier facilitated a workshop on the Draft Policy Framework for Internationalisation of Higher Education in South Africa on the invitation of the Cape Peninsula University of Technology. The sector received a final draft on 16 November 2017. This will be the final consultation before the framework is promulgated.

THE UFS HOSTS PROF MARIA POMIANOWSKA, RECTOR OF KRAKOW ACADEMY IN POLAND

On 24 November 2017, Prof Maria Pomianowska visited the UFS on invitation by the Odeion School of Music. The purpose was to explore the possibilities of forging a collaborative relationship between the UFS and the Krakow Academy of Music, particularly concerning Odeion's participation in the Five Continents project, under the stewardship of Prof Pomianowska. Further areas of cooperation discussed were a joint research programme on indigenous music between the two countries, which will be facilitated by the Ethnic Music Department at Krakow. To ensure that this initiative finds relevance in South Africa, Odeion will engage with the Free State Arts Festival on the possibility becoming a part of the upcoming programme. Prof Pomianowska will take the lead in conceptualising and concretising this initiative with the assistance of the OIA.



THE UFS HOSTS A DELEGATION FROM EAST CHINA UNIVERSITY OF TECHNOLOGY (ECUT)

Following an initiative of the Free State Office of the Premier, a delegation from ECUT visited the UFS on 4 December 2017. The purpose was to discuss the possibility of establishing collaboration between ECUT and the UFS within the field of Geology. Prof Freddie Roelofse, head of the Geology Department, and his team met with the delegation and had robust discussions. The parties considered possible staff and student exchanges, the establishment of joint degree programmes and the sharing of higher education best practice modalities.



2.3 INTERNATIONALISATION AT HOME AND **INTERNATIONAL STUDENT ACTIVITIES**

INTERNATIONALISATION AT HOME (I@H)

Unfortunately it is not possible to create opportunities for all UFS students to participate in outgoing student exchanges, so the UFS strives to offer its student community international experiences on its three campuses. The UFS internationalisation process includes a focus on I@H, which refers to the purposeful integration of international and intercultural dimensions into the formal and informal curriculum for all UFS students within the domestic learning environments. Activities aimed at I@H are therefore intentional and provide local students with international exposure without them having to leave their domestic environments. Consequently, the university strives to include South African students in the international student activities. It structures intersectional celebrations of cultural diversity, including celebrations of Africa Day and national independence days relevant to the university community, yet at the same time highlights activities that promote social integration of local and international students.



CITY TOUR (BLOEMFONTEIN CAMPUS)

On 25 February 2017, the OIA; SRC: International Student Council and the International Student Association, (ISA) in collaboration with the Department of Sport, Art, Culture and Recreation, hosted a city tour for new international students. The purpose of the tour was to introduce them to Bloemfontein and its surrounds; to assist them with their adjustment into the South African and Bloemfontein culture; and to familiarise them with South Africa and Bloemfontein's history,

natural resources, social customs, religions, art, as well as political dynamics. The tour ended off with a lunch at one of the local braai spots in the Bochabela township called "Secret Corner".

DIALOGUE SESSION

On 24 March 2017, the SRC International Student Council and the ISA hosted a dialogue session for all international students at the Bloemfontein and South campuses. The aim of the dialogue session was to stimulate discussions between all international students (undergraduate and postgraduate) to develop a strategy to integrate student activities on campus. The students agreed to have functions that would incorporate all international students while still keeping separate links to their associations.

CAFÉ TRÄUMEREI

On 31 March 2017, the International Student Association hosted a lunch for international students at Café Träumerei. The theme for the session was "Show love we are diverse." The aim of the session was to celebrate and embrace diversity. Participants showed interest in having more functions of this nature that focused on an inclusive student social life at the university. Future events will include both local and international students.

ZIMSA ANNUAL BRAAI

On 12 May 2017 the Zimbabwean Student Association (Zimsa) hosted its annual braai in celebration of Zimbabwe Independence Day. The theme was "Together as one" and aimed to unite the Zimbabwean community on campus, create awareness, and share the history of the national holiday with the rest of the UFS community.

AFRICA DAY

On 25 May 2017, the OIA attended the Africa Day commemorations hosted by the UFS Sasol Library and the Bloemfontein Department of Sports, Art, Culture and Recreation. Mr Kanego Mokgosi represented the office at the UFS Library celebrations and offered a 10-minute presentation on Africa and its history. After partaking in the events, it became apparent that the OIA would need to be more visible in celebrating this event, as there was a need to institutionalise the celebration of Africa Day.

ESTABLISHING AN INTERNATIONAL STUDENT ASSOCIATION ON QWAQWA CAMPUS

As part of increasing the OIA's visibility strategy and the mandate to reciprocate services offered to international students on all three campuses, the office assisted students on the Qwaqwa Campus to establish an International Student Association (ISA). They were advised on the procedures to follow in ensuring their association was registered. Further to this, a meeting was convened between the Bloemfontein and Qwaqwa campus associations to help them with establishing the association. The initiative received a positive response from the Vice-Principal: Academic and Research at the Qwaqwa Campus.

KOVSIES BIGGEST BRAAI

This is a new initiative from the OIA, the ISA and the SRC: International Student Council. The purpose of this event is to help raise funds as part of the SRC student fund to support financially needy students from being deregistered. The function took place on 12 August 2017 and received an overwhelmingly positive response from the institution. So much so, it was recommended that the event become an annual initiative.

2.4 REGISTRATION, ORIENTATION AND WELCOMING OF INTERNATIONAL STUDENTS

The provision of dedicated international student services is a critical function of the OIA. The UFS is in the process of strengthening international student services.

FIRST-SEMESTER REGISTRATIONS

From 23 January until 10 February 2017, the office assisted all international students with their registration process. This service included the removal of international blocks such as foreign and medical aid blocks, which are pre-loaded on all international students' profiles as a precautionary measure to ensure that students comply with the necessary legislation before completing their registration process. The Momentum Health medical aid service provider was onsite and assisted all the students with their medical aid confirmation certificates and issuance of cards. On 26 January 2017, the same level of service was extended to all international students on the South Campus. Additionally, all the first-semester incoming exchange students from the various UFS partner institutions were assisted with registration and integration into UFS student life.

SECOND-SEMESTER REGISTRATIONS

From 24-28 July 2017, the office took part in the second-semester registration for all international students across the three campuses. All the incoming second-semester exchange students were supported. Additionally, a medical aid information session was organised for them and they received their medical aid cards and were provided with updated information regarding their medical aid cover.

ORIENTATION SESSION

On 31 January 2017, the office presented an orientation session for all first-entering international students that was part of the Gateway programme hosted by the Student Affairs division. During the session, the OIA focused on the services offered by the office, introduced all staff members, and highlighted the importance of local and social integration into the UFS community. This presentation was followed by information sessions conducted by safety and security; immigration regulation update; campus life and accommodation services.



WELCOME FUNCTION (BLOEMFONTEIN AND SOUTH **CAMPUSES)** On 17 February 2017, the OIA organised a welcome function for first-entering international students in collaboration with the SRC: International Student Council and ISA, the main purpose of which was to ensure the students' successful academic and social integration into the UFS community and to celebrate cultural diversity.

WELCOME FUNCTION (QWAQWA CAMPUS)

This was a new initiative by the OIA aimed at creating visibility and developing internationalisation processes on the Qwagwa campus. The function was hosted on 3 March 2017, in collaboration with the Qwagwa Student Affairs office; both the Bloemfontein and Qwaqwa campus SRCs; and all prospective ISA committee members at the Qwaqwa campus. The students received welcoming addresses from the Registrar: Systems and Administration, Qwaqwa campus Vice-Principal: Academic and Research, and the Qwaqwa campus Acting Director of Student Affairs. These addresses were followed by an information session on immigration compliance and the induction of the new ISA committee members for Qwagwa. Students enjoyed performances by fellow international students, followed by lunch and a tour of Phuthaditjhaba.

2.5. IMMIGRATION AND MEDICAL AID COMPLIANCE

The UFS is obliged to ensure compliance of its international students with the relevant immigration legislation, and to report on the immigration status of its international students to the South African Department of Home Affairs. To support its international students, the OIA developed a strategy to disseminate information on immigration matters relevant to international students, including medical aid.



MEDICAL AID INFORMATION SESSION

In collaboration with brokers from Absa, UFS, and Momentum Health conducted an information session on medical aid for international students on 24 August 2017 at Qwaqwa campus and on 24 October 2017 at the Bloemfontein Campus. Brokers from Absa assists international students with medical aid queries as part of a Medical Aid Project, which is coordinated by the International

Education Association of South Africa (IEASA) of which the UFS is a member. At the session, Absa Brokers and Momentum Health provided international students with an update on medical aid developments relevant to them. All International students were informed about dates and times on which the brokers would assist them on campus with medical aid queries.

UFS ENGAGES DHA ON IMMIGRATION MATTERS RELATING TO ASYLUM/REFUGEE STUDENTS

Ms Jeanne Niemann from the OIA, met with Ms Babalwa Ntakana and Ms Mfundo Ngoswana from the Asylum Office of the Department of Home Affairs (DHA) on 2 October 2017 to discuss issues regarding asylum and refugee permits. The principal issue was the verification of the permit. Due to the number of renewals on one permit, and the inconsistency of the renewal process, it becomes difficult to register students at UFS without verifying the authenticity of such permits. At the meeting it was agreed that the DHA Asylum/Refugee Office would verify all asylum seekers' and refugee permits before the students were accepted by UFS.

UFS COLLABORATES WITH DHA ON PROVIDING IMMIGRATION INFORMATION TO INTERNATIONAL **STUDENTS**

Ms Niemann from the OIA met with Mr Ben Makhalemela from DHA on 3 October 2017 to discuss the possibility of conducting regular contact sessions on the UFS campuses as part of the Immigration Awareness campaign. These sessions will educate staff and students regarding visa and medical aid compliance as well as various other immigration-related facets. A Q&A session will be included to allow the UFS stakeholders an opportunity to engage with DHA officials and to seek clarity on certain issues. This new initiative will start in 2018.

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2.6 PROVISION OF INFORMATION ON INTERNATIONAL OPPORTUNITIES

STUDY IN EUROPE CONSORTIUM AND INFORMATION SESSION

The UFS joined a consortium, "Study in Europe", that is funded by stakeholders in European higher education. The collaboration, which is coordinated by the Academic Cooperation Association (ACA) in Belgium, aims to provide information about study opportunities in Europe. Under the umbrella of this partnership, the Central University of Technology (CUT) and UFS co-hosted an information session on 4 October 2017 at Callie Human Centre on the Bloemfontein Campus). About 200 students from the two universities used the opportunity to obtain information about scholarships for exchange and degree study opportunities in Europe. Representatives of Nuffic-Neso (the Netherlands), Campus France, the Swedish Institute and the Hungarian Embassy highlighted their flagship scholarship programmes.





The information session was a huge success. However, the exhibitors could have focused more on exchange opportunities instead of promoting full degree-seeking opportunities, as the university needs to retain its full degree-seeking students.



ERASMUS+ INFORMATION SESSION

The UFS hosted an Erasmus+ information session on the 16 October 2017. The objective of the session was to equip prospective applicants from the UFS with adequate tools to be able to complete successful Erasmus+ applications. The session was open to all academics and researchers, professors and project leaders of all faculties and departments. The OIA invited Ms Jozet Muller:

Programme Manager: Higher Education and Governance and a delegation of the European Union of South Africa to unpack the information to the UFS audience. It focused on opportunities for students, academics, and support staff and included presentations by International Credit Mobility (ICM), the Jean Monnet Scholarship Programme, and Key Action Capacity Development. The session was successful as it provided attendees with a platform to engage and ask questions. The prospective applicants were advised to take note of the varying closing dates for each opportunity/stream, with the first application closing as early as late January 2018 while the other calls closed in February.

2.7 STAKEHOLDER ENGAGEMENT

The UFS is a member of the International Education Association of South Africa (IEASA), a voluntary association of South African public universities that promotes internationalisation.

IEASA DIRECTOR'S FORUM (DF)

UFS was well represented for DF meetings for the academic year 2017. Ms Chevon Jacobs, the Acting Director: Internationalisation, attended the meeting on 30 March, which was held at the University of South Africa. The newly appointed Director: Internationalisation represented the university at a later meeting at the University of Cape Town on 20 November 2017. The DF forum provides UFS with an opportunity to participate in strategic discussions on internationalisation. One critical topic covered in 2017 included the developments around the national Draft Policy Framework for the Internationalisation of Higher Education in South Africa, which is due for promulgation in March 2018 of IEASA.



OIA ANNUAL PLANNING MEETING

The Director of OIA, Mr Cornelius Hagenmeier, participated in IEASA's annual planning meeting that was held at the University of Cape Town on 20–21 November 2017. He was re-elected as a member of the executive committee and treasurer, of IEASA.

2.8 SPECIAL PROJECTS

ERASMUS+ KA 107

The Erasmus+ KA107 project is in partnership with the University of Alicante in Spain. The project focuses on language, translation and interpretation, and will afford one student and one academic staff member a one-semester exchange abroad in Alicante. One staff member from Alicante will spend five days training at UFS.



UFS PARTICIPATION IN THE SOUTH AFRICA-SWEDEN UNIVERSITY FORUM (SASUF)

SASUF was launched with a planning meeting on 2-3 October 2017 to pave the way for the project in terms of strengthening ties between Sweden and South Africa in the fields of research, education and innovation. Mr Hagenmeier, Ms Wanda Verster and Ms Jacobs represented the UFS. The purpose of the

collaboration project was to bring together more than 300 researchers, PhDs and students from Sweden and South Africa in seminars, mobility exchanges and projects. Special focus was dedicated to identifying academic focus areas and challenges for the first research seminar in 2018; identifying surrounding activities for the first research seminar; setting up academic advisory boards that will be based on the research interests from each university, and discussing organisational issues such as the steering committee and timelines for the project.

STINT PROJECT IN URBAN PLANNING

The Department of Architecture submitted a grant proposal under the STINT Initiation grant for short-term projects, which was a success. The necessity of the partnership is based on the Urban Rural Space research node at Uppsala University, and the phenomenological, critical studies and post-structuralist focus of the UFS Department of Architecture. The physical context of both institutions provides the relevant research focus of urban/rural dichotomies and lived experiences. Uppsala and the Mangaung Metro (including Bloemfontein) are both situated in a changing context related to urbanisation, rural areas and the changing relationships between these two elements. The need for this project stems from initiatives by both institutions to increase internationalisation, and a broader understanding of urban and rural spaces, especially in terms of residential buildings. The academic champion for this initiative is Ms Verster, who is also the AAC for the thematic field on urbanisation in the 21st century for the Sweden-South Africa Research and Innovation project (SASUF).

IMPALA PROJECT

The Director of OIA, Mr Hagenmeier, facilitated a workshop, "Decolonisation of the Curriculum", at the University of Venda on 25-26 September 2017, on invitation from the EU-funded IMPALA project, which focuses on developing capacity for internationalisation. On the side of the engagement, Mr Hagenmeier discussed the involvement of the UFS in future Erasmus+ applications.

UFS PARTICIPATION IN THE US-SA NETWORK DHET

On 3-4 September 2017, Mr Hagenmeier attended a meeting convened by DHET on the United States-South Africa Higher Education Network (US-SA). At the meeting a Staff Doctoral Programme was conceptualised. The participation assisted UFS researchers in preparing themselves for applications under the call, which was issued in October 2017.

2.9 2017 INTERNATIONALISATION CONFERENCE ATTENDANCE BY OIA MEMBERS

The OIA networked on behalf of the UFS, strengthening its existing partnership and linkages, established new partnerships and linkages through participating in conferences focusing on internationalisation and partnership development.



2017 INTERNATIONAL EDUCATION ASSOCIATION OF **SOUTH AFRICA (IEASA) CONFERENCE.**

The 2017 IEASA conference took place from 23-25 August 2017 in Durban. The conference theme was "Advancing Internationalisation of Higher Education: Overcoming Hostility and Building Communities". The purpose of the conference was to provide a common platform for higher education educators, international

education practitioners, professionals and representatives from various educational agencies with an opportunity to deliberate and explore the current and future challenges facing the internationalisation of higher education globally.

This year's conference once again affirmed the importance for higher education institutions to internationalise, which is:

- To create global awareness at all levels;
- To fulfil a co-shaping role through exposure and contribution to international best practice, opportunities and trends:
- To build and maintain international standing and reputation, in terms of relevance, recognition and excellence;
- To promote and celebrate diversity;
- To prepare well-rounded internationally competent and mobile staff and students; and
- To generate income through joint research collaborations, special short-term programmes, co-publications,

2017 EUROPEAN ASSOCIATION FOR INTERNATIONAL EDUCATION (EAIE) CONFERENCE, HOSTED IN SEVILLE, SPAIN



The theme of this year's conference was a "mosaic of cultures" which is a metaphor for the work done by international educators and practitioners in the field of higher education internationalisation. Mr Mdletshe and Ms Jacobs represented the UFS.

The conference provided ample networking opportunities and afforded the UFS with a platform to meet and engage with current partners to either finalise the renewal of agreements or have

discussions on how to elevate exiting co-operation. The engagements with partner universities included:

- A handover of two newly signed MoUs between UFS and KU Leuven in Belgium, and Huelva University in
- **Jonkoping University:** The discussion centred on the renewal of the Swedish government's Linnaeus-Palme Programme. This meant the renewal of the JU-UFS collaboration in the field of social work, which will provide two UFS students with an exchange opportunity at JU and vice versa.
- Fulda University in Germany: The discussion centred on the commemoration of the signing of the new cooperation agreement. In celebrating this milestone, Fulda University offered the UFS one fully-funded winter school opportunity for one student to attend in January 2018. The nomination and selection process will be drafted in consultation with all key stakeholders and the Department of Economics, which is academic champion for this co-operation.
- Amsterdam University of Applied Sciences, the Netherlands: The focus of this meeting was to explore opportunities to expand the existing collaboration between the two institutions. One such way was to explore the development of a COIL programme (Collaborative Online International Learning).
- **Artevelde Hogeschool, Belgium:** The discussion centred on workplace learning opportunities. The university has an excellent link with between 400 and 500 companies for internship placement. This would be a wonderful opportunity for the UFS to explore and grow workplace learning programmes within the EMS and business sector. We resolved to look at curriculum harmonisation first in order to assess compatibility before we evaluate interest and link academics with their counterparts at each institution.

SOUTHERN AFRICAN-NORDIC CENTRE (SANORD) CONFERENCE

Mr Hagenmeier represented the UFS at the annual conference and 10-year anniversary celebrations of SANORD, of which the UFS is a member. Under the theme, "The role of universities in Research and Technology transfer to improve the livelihoods in Southern Africa", Delegates debated current trends in research internationalisation and related topics. The conference provided an excellent opportunity to strengthen the collaboration with universities in Scandinavian countries.

According to the bibliometrica for SANORD, for the period 2008–2017, listed below are the number of co-authored publications that emanated from collaborative work with universities in this partnership.

INSTITUTION	UNIVERSITY OF FREE STATE, ZA
Aarhus University, DK	10
University of Southern Denmark, DK	2
University of Eastern Finland, FI	
University of Jyväskylä, Fl	4
University of Tampere, FI	
University of Turku, FI	26
University of Iceland, IS	2
Inland Norway University of Applied Sciences, NO	
University of Bergen, NO	8
Western Norway University of Applied Sciences, NO	
University of Nordland, NO	
Karlstad University, SE	
Linköping University, SE	2
Lund University, SE	12
Malmö University, SE	
Nordic Africa Institute, SE	
University of Gothenburg, SE	4
University West, SE	
Uppsala University, SE	3
Sum	73



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SECTION 3: FACULTY AND SUPPORT SERVICE ENTITY REPORTS ON INTERNATIONAL ACTIVITIES

3.1 FACULTY OF ECONOMIC AND MANAGEMENT SCIENCES:

INTERNATIONAL
OFFICIAL
DELEGATION VISITS
(INCOMING)

Ms Pretorius and Ms Venter met with Mr Werner Beylefeld from the University of Regina, Canada, on 5 September 2017 at the UFS' Internationalisation Office. The purpose was to deepen cooperation between the two institutions and to explore new opportunities of collaboration between the universities.

STUDENT MOBILITY OUTGOING STUDENT MOBILITY:

- Mr S Kirsten, an exchange student to the University of Bremen, from March to July 2017. Completed two subjects towards his MCom degree.
- First semester: Six EMS faculty undergraduate students participated in the international exchange student programme and studied at the University of Bremen, Germany, from March to July 2017. They successfully completed their modules at the university.

INTERNATIONAL
PARTNERSHIP
ENGAGEMENTS
(STAFF AND
STUDENT
MOBILITY)

INCOMING STUDENT MOBILITY:

- Twenty-seven first-year and 27 second-year students from Southern African Development Community countries enrolled for the Master's in Development Studies in 2017 (These were students from Lesotho, Zambia, Malawi, Swaziland, Namibia, Zimbabwe, Kenya and Nigeria.
- First semester: Eight incoming international exchange students. The FeesMustFall protest in 2016 had an impact on the number of incoming international exchange students in the first semester of 2017 as the Faculty usually hosts a minimum of 13 incoming students per semester.
- Second-semester incoming: The EMS Faculty currently hosts 12 incoming international exchange students for the second semester of 2017.

STAFF MOBILITY (INCOMING):

- Ms Nancy Bos from University of Utrecht in the Netherlands, participated in the staff mobility programme. She is studying towards a Master's of International Development. Dr D van Rooyen from UFS was co-supervisor.

OUTGOING STAFF MOBILITY: GUEST LECTURING - Mr A Coetzee, was a guest lecturer at Bremen University in Germany, from 10 June-2 July 2017. He lectured "Services Marketing" at a Master's Summer School. - Dr J Nel was a guest lecturer at Bremen University from 19-30 June 2017. - Prof Philippe Burger was at Columbia University (New York City) on sabbatical INTERNATIONAL research with a Fulbright Exchange Scholarship from September 2016-31 May 2017. PARTNERSHIP Dr Johan Coetzee was at Kufstein University of Applied Sciences in Austria, teaching: **ENGAGEMENTS** Investment Management from 3-7 April 2017. (STAFF AND Dr Johan Coetzee was at Salzburg University of Applied Sciences in Austria, teaching: STUDENT Investment Management from 24 April-16 May 2017. MOBILITY) - Dr Arno van Niekerk was at Salzburg University of Applied Sciences, teaching: International Economics from 23 March-8 April 2017. **INCOMING STAFF MOBILITY:** - Prof Tilo Halszovich of Bremen University visited the Department of Business Management from 27 February to 10 March 2017 for lecturing and research purposes. INTERNATIONAL **PENDING EU-FUNDED PROJECT:** Common Good First www.commongoodfirst.com **FUNDING** - UFS contacts Dr D van Rooyen and Mr W Ellis. **CONFERENCE ATTENDANCE:** - Dr J Nel presented a paper at the European Marketing Academy Conference in England from 23-26 May 2017. - Dr C Hendriks presented a conference paper at the 2017 the International Association of Schools and Institutes of Administration (IASIA) Conference held in Palestine from 3-7 July 2017. PROF H KROUKAMP VISITED THE FOLLOWING INTERNATIONAL INTERNATIONAL **DESTINATIONS:** ACADEMIC - Lectured at Radboud University, Nijmeigen, in the Netherlands, from 9-10 February **ENGAGEMENTS** - Attended IASIA Board of Management meeting in Brussels, Belgium, from 13-14 February 2017. - Visited universities of Ghent and Leuven, collaborative research agreements from 15-16 February 2017. Delivered paper at the Network of Institutes and Schools of Public Administration in Central and Eastern Europe (NISPAcee) annual conference in Kazan, the Republic of Tatarstan, and Russia. - Delivered paper at Joint IASIA MENAPAR Conference in Palestine from 3-7 July 2017. **RESEARCH PUBLICATION:** Halaszovich, T. and Nel, J. 2017. Customer-brand engagement and Facebook fan page "Like"-intention. Journal of Product & Brand INTERNATIONAL Management, 26(2), pp.120-134. RESEARCH UNDER-REVIEW: Prof P Burger's book. Date of publication in 2018. **COLLABORATIONS** BENCHMARKING: Prof H van Zyl visited Ceeman in Bled, Slovenia, from 3-7 April 2017, to discuss the way forward in obtaining international accreditation.

3.2 FACULTY OF THEOLOGY AND RELIGION

INTERNATIONAL OFFICIAL DELEGATION VISITS	 DEPARTMENT OF PRACTICAL AND MISSIONAL THEOLOGY: Prof CH Hermans, Radboud University, visited the department on the 20-23 February 2017 for a workshop with master's and doctoral students. Prof RR Ganzevoort, of Vrije Universiteit, Amsterdam, visited to the department on 25-27 July 2017; and held one workshop with master's and doctoral students.
PARTNERSHIP ENGAGEMENTS (STUDENT AND STAFF MOBILITY)	INCOMING STUDENT MOBILITY: - Prodola Co-operation: A South American empowerment academic organisation. One student has completed a PHD at UFS. Contact: Prof C van Engen from the US. - UFS/VU Collaboration: Dr KJ Pali (lecturer) completed the first joint PhD degree at the end of 2016.
NEW AGREEMENTS	This year, the MoU between UFS and Justo Mwale University in Lusaka, Zambia, was renewed.
PENDING INTERNATIONAL AGREEMENTS	NEW INITIATIVES: Lutheran Theological seminary in Hong Kong. Akademie Fur Reformatorische Theologie in Germany.
INTERNATIONAL ACADEMIC ENGAGEMENTS	CONFERENCE ATTENDANCE: - The Department of Old and New Testament Studies: the Faculty of Theology and Yale Divinity School in the US, held a conference on Apocalyptic Literature and Mysticism jointly on 7 August 2017 at the Faculty of Theology at UFS. Prof Pieter de Villiers acted as chair of this meeting, and read the first paper. Furthermore, three renowned international academics from Yale Divinity School read papers, as well as one leading New Testament scholar from the University of Zurich, Switzerland. - Prof De Villiers read a paper at the Third Biennial Meeting of the Society for the Study of Christian Spirituality, in Kappel, Switzerland from 26–29 June, 2017). Furthermore, he will read the presidential address at the Society for the Study of Christian Spirituality at the American Academy of Religion, Boston, in the US, (17–21 November 2017). He was also involved in a joint research project with Prof Huub Welzen of the Titus Brandsma Institute, Radboud University, Nijmegen, in the Netherlands, on Thomas a Kempis' The Imitation of Christ (16 June 2017). - Dr Marlene Oosthuizen read a paper at an international conference on the Song of Songs at Humboldt University, Berlin, Germany on 3–5 August 2017. - Prof Francois Tolmre read/will read papers at the following international events: Colloquium loanneum held in Jerusalem, Israel, from 28 August-2 September 2017, a New Testament conference at the University of Mainz, Germany, from 10–11 November 2017, and a conference on the preaching of the Gospel of John I at Gordon College in the US, (16 November 2017).
STRATEGIC PERSPECTIVES	The MoU with James Madison University, in the US, is of great strategic importance to the department and the faculty in order to develop a master's-doctoral programme with this institution. The aim is also to develop a joint research project on theology and development.

3.3 FACULTY OF NATURAL AND AGRICULTURAL SCIENCES (NAS)

Noteworthy: The Faculty of NAS has developed an in-house electronic newsletter titled "I heard it through the Science Vine", which depicts the most recent events, projects and international conference attendance by colleagues across the faculty. This pro-active initiative depicts the international activities that transpire within the faculty thereby assisting the OIA in collating the international narrative for the faculty.

Listed below, are some of the faculty's achievements for the 2017 academic year:

NRF RATINGS:

All newly re-evaluated researchers received their NRF Ratings as follows:

NAME	DEPARTMENT	RATING	PREVIOUS RATING
Prof JH Meyer	Mathematics and Applied Mathematics	B2	B2
Prof CH Pohl-Albertyn	Microbiology	C2	C2
Prof Maryke Labuschagne	Plant Science	C1	C2
Prof P Grobler	Genetics	C2	C2
Prof A Roodt	Chemistry	B2	C1
Prof Rob Bragg	Microbiology	C1	C3
Dr Marieka Gryzenhout	Genetics	C2	Y2

DEPARTMENT OF PHYSICS:

- The best postdoctoral poster prize was awarded to Trilok Pathak (postdoc) for poster 34 titled "Effect of annealing temperature on structural and luminescence properties of Eu doped NaYF4 phosphor". A Young Scientist Award accompanies the prize from the International Association of Advanced Materials.
- Prof Hendrik Swart received funding for for another five years for the Research Chair in Solid State Luminescent and Advanced Materials from SARChi.
- Two PhD students' papers in the Department of Physics were recently accepted in high-impact factor Journals (Small IF = 8.643; Nano Energy IF = 12.343). The students are Prasant Mishra (currently in Sweden at the University of Linkoping supervisors: Prof A Tiwari and HC Swart) and Cornelia van der Walt (who received her PhD during the last graduation ceremony supervisors: Prof JJ Terblans and Prof HC Swart).
- Prof HC Swart, JJ Terblans, and two MSc students E Lee and L Erasmus, attended the "The 9th international conference on Advanced Materials", ROCAM 2017, Bucharest, Romania, from 11-14 July 2017. Prof Swart gave an invited talk and the others presented their work at the conference. They visited the labs of Prof V Craciun at the Laser Department National Institute for Lasers, Plasma and Radiation Physics, in Magurele, Bucharest, where they prepared thin films with Pulsed Laser Deposition.

DEPARTMENT OF PLANT SCIENCES:

 Prof Maryke Labuschagne was re-elected as the South African representative to the American Association for Cereal Chemists.

DEPARTMENT OF URBAN AND REGIONAL PLANNING:

• Dr Thulisile Mphambukeli was invited to form part of the South African delegation of experts to attend the 2017 BRICS Academic Forum in Fuzhou, China.

CENTRE OF ENVIRONMENTAL MANAGEMENT:

• Tshiamo Legoale, a master's student at the Centre for Environmental Management, was named the FameLab International Champion at the Cheltenham Science Festival in the UK on 8 July 2017. Her mini-dissertation research is on how to use wheat in the harvesting of leftover gold.

DEPARTMENT OF MICROBIAL, BIOCHEMICAL AND FOOD BIOTECHNOLOGY:

• The Department is currently hosting 11 postdoctoral fellows, of which five are international students.

INSTITUTE FOR GROUNDWATER STUDIES:

• Prof Abdon Atangana received the African award of applied mathematics in Morocco in early November 2017.

DEPARTMENT OF SOIL, CROP AND CLIMATE SCIENCES:

 Prof Cornie van Huyssteen and his students (Anizka Stolk, Zikhona Gk, and Khumo Jaola) attended the National Wetlands Indaba where they presented three papers. The indaba was held from 16-19 October 2017 at the Wild Coast Sun, Port Edward.

DEPARTMENT OF AGRICULTURAL ECONOMICS:

- The Department of Agricultural Economics participated fully in ALFA 2017 held at the Afri-Dome, Parys, from 12-14 September 2017. Besides having a stall, the department was actively involved in the ALFA schools competition, which included 13 agricultural schools (roughly 120 learners) from across the country. Two trophies were sponsored by the department and were awarded during the closing function.
- Frikkie Maré from the Department of Agricultural Economics, and Dr Johan van Zyl from Economic and Management Sciences, attended the 21st congress of the International Farm Management Association (IFMA) from 2-7 July 2017 in Edinburgh, Scotland. David Human, from Zoetis South Africa sponsored Frikkie to attend the conference and Phillip Oosthuizen, a former MSc student from Agricultural Economics and currently working for Sernick. Frikkie, Johan and Phillip each presented a paper at the congress.

DEPARTMENT OF ANIMAL, WILDLIFE AND GRASSLAND SCIENCES:

 Dr Francois Deacon from the Department of Animal, Wildlife and Grassland Sciences at UFS, led a multi-specialist research group of more than 30 people from 10 different countries to collect information about giraffes during October 2017.

DEPARTMENT OF SUSTAINABLE AGRICULTURE:

• The UFS' Centre for Sustainable Agriculture was represented at the International Food and Agribusiness Management Association's (IFAMA) Conference in Miami, Florida, from 17-21 June 2017, by JW Swanepoel. JW, a PhD student at the centre, did his department proud by not only presenting results from his PhD in the academic track of the conference, but also by being part of an advanced case study team representing South African universities, which won IFAMA's International Student Case Competition.

FACULTY EVENTS:

• Dr Antonie Geyer hosted Prof Klaus Maas and Prof Stefan Wolf from the Hochschule Ostwestfalen-Lippe University of Applied Sciences in Germany, from 30 October-1 November 2017. They discussed possible collaboration on the development of a new agricultural programme at their university.

3.3.1 DEPARTMENT OF URBAN AND REGIONAL PLANNING

INTERNATIONAL STAFF AND STUDENT MOBILITY	 INCOMING STAFF MOBILITY: Hosted Dr S Speak from Newcastle University from 10-15 September 2017 to conduct a research workshop for UFS PhD and research master's students. The workshop focused on finalising proposals, literature reviews and research methods. The department also organised a workshop for inexperienced PhD supervisors on the supervisory process, as workshops of this nature are beneficial to both students and supervisors.
INTERNATIONAL FUNDING	 UFS staff members from the departments of Geography (Dr Ruth Massey), Urban and Regional Planning (Prof Verna Nel and Mr Stuart Denoon Stevens) and the University of Birmingham (UK) were awarded a joint Economic and Social Research Council (ESRC)/National Research Foundation (NRF) Higher Education in Africa Grant in October 2016. The funding is to assess the appropriateness, usefulness and impact of the current urban planning curriculum in SAHE and the project will run for the next 30 months (from January 2017). Rouve Bingle and Stuart Denoon Stevens will be meeting with team members of the ESRC and NRF at the University of Birmingham during September and October 2017. Rouve is an NRF bursary holder and is currently a full-time registered PhD student in the Department of Urban and Regional Planning, while Mr Denoon is a Junior Lecturer.
INTERNATIONAL	CONFERENCE ATTENDANCE:
ACADEMIC ENGAGEMENTS	- Prof Verna Nel, Dr Thulisile Mphambukeli and Mr Denoon presented
(INTERNATIONAL CONFERENCE	papers at the II International Conference "African Urban Planning". The
ATTENDANCES, INTERNATIONAL	conference took place at the Institute of Geography and Spatial Planning,
SCIENTIFIC VISITS)	University of Lisbon, from 7-8 September 2017.
INTERNATIONAL RESEARCH COLLABORATIONS, INCLUDING CO-AUTHORED PAPERS	- The Department of International Relations and Cooperation (DIRCO), the National Institute for Humanities and Social Sciences (NIHSS) and the South African BRICS Think Tank (SABTT) invited Dr Mphambukeli to become a member of the South African Brazil, Russia, India, China, and South Africa (BRICS) Think Tank Academic Forum.

3.3.2. DEPARTMENT OF MATHEMATICS DATA ON THE RESEARCH VISIT BY PROF TOMAS VETRIK TO BANDUNG INSTITUTE OF TECHNOLOGY.

OUTGOING STAFF MOBILITY:

INTERNATIONAL STAFF AND STUDENT MOBILITY

- Prof Tomas Vetrik spent four weeks from 6 August-3 September 2017 at the Department of Mathematics at the Bandung Institute of Technology in Bandung, Indonesia.

Prof Vetrik gave a seminar talk about the metric dimension of graphs on 28 August 2017. He also gave four lectures in Algebraic graph theory for master's students and two lectures for undergraduate students.

INTERNATIONAL ACADEMIC ENGAGEMENTS (INTERNATIONAL CONFERENCE ATTENDANCES, INTERNATIONAL SCIENTIFIC VISITS)

CONFERENCE ATTENDANCE:

- He attended the International Conference on Graph Theory and Information Security ICGTIS 2017 in Jakarta, Indonesia, from 7-9 August 2017, and the International Conference on Research and Education in Mathematics ICREM8 in Bandung, Indonesia from 11-13 August 2017. He presented a lecture entitled: "The metric dimension and the partition dimension of circulant graphs".

INTERNATIONAL RESEARCH COLLABORATIONS, INCLUDING CO-AUTHORED PAPERS

LISTED BELOW, ARE THE OUTCOMES OF THE SIZE RAMSEY NUMBER.

- The main collaborator for this initiative is Prof Edy Baskoro. Regular research meetings provided strong results on the size Ramsey number. Erdos and Faudree studied the size Ramsey number for the general cycle and matchings. The work done by Profs Vetrik and Baskoro considerably improved their upper bound. Their paper containing upper bounds was submitted for publication to one of the best Graph theory journals.

RESULTS ON THE LOCAL METRIC DIMENSION AND MULTISET DIMENSION

Prof Vetrik obtained results in collaboration with Prof Rinovia Simanjuntak.
 Both professors will continue doing research together and should favourable results be obtained, there is a possibility of a joint publication/ research paper on the local metric dimension and multiset dimension of graphs.

3.3.3. DEPARTMENT OF PLANT SCIENCES

INTERNATIONAL
OFFICIAL
DELEGATION VISITS
(INCOMING)

On 14 September 2017, the Department of Plant Sciences (Plant Breeding) hosted a one-day visit for the delegation from SLU Alnarp, in Sweden, which consisted of Erik Alexandersson (SLU); John Baison (SLU); Lerato Matsaunyane (ARC-Roodeplaat); Flip Steyn (ARC-Roodeplaat) and Dr Angie van Biljon (UFS). The purpose of the visits was to discuss the South African-Sweden Research Cooperation collaboration

MOBILITY: OUTGOING STUDENT AND STAFF MOBILITY:

- MSc student Schae-Lee Olckers joined Michigan State University in the US from 1 April 2017 to the end of 2018 to do her MSc research as part of an informal collaboration (her co-supervisor, Prof. Perry Ng, is an affiliated professor at UFS). She is registered at UFS with her main supervisor being Prof MT Labuschagne.
- Dr Rudo Ngara undertook a research visit to Durham University, in the UK, from 30 April-3 June 2017. This visit was funded by her Royal Society-Newton Advanced Fellowship grant, Grant Number NA160140, for the period 2016-2019.
- Tatenda Goche (UFS student number 2015276153), a PhD student of Dr Ngara, is at Durham University for the period 31 July-31 October 2017. Tatenda is working on a range of experimental work, which forms a core part of his PhD project.
- Dr Marcelo Sandoval is a postdoctoral student of the Department of Plant Sciences but is stationed at CBS in the Netherlands based on the collaboration with Prof Pedro Crous of CBS.
- From 16-20 July 2017, Rouxléne van der Merwe visited the Northeast Institute of Geography and Agroecology (Harbin), Chinese Academy of Sciences in China. Rouxléne established collaboration with Prof Qiuying Zhang, an edamame breeder, from the Institute during 2014 as part of the NRF SA-China exchange programme, funded by the NRF. During her visit to the Institute, Rouxléne obtained laboratory training in sugar and sucrose analyses on edamame varieties, which forms part of her NRF Thuthuka-funded project. She also visited edamame breeding trials in Harbin and Suihua city to evaluate different edamame phenotypes grown on these sites.
- 2014-2017. Magdalena Sobol, Earth Sciences Centre, University of Toronto, 22
 Russell St, Toronto M5S 3B1, Canada, PhD candidate and collaborator visited Prof L
 Scott at Plant Sciences in 2014 and 2015, Project "Modern pollen-based predictions of Southern African vegetation and palaeovegetation". Four years. Study leaders
 Prof Sarah Finkelstein and Michael Chazan in Toronto.
- 2016-2018. Saul Manzano Rodriguez, Department of Plant Biology, University of Murcia, Spain, PhD candidate and collaborator visited Prof Scott at Plant Sciences for four months in 2016. Project. "A 13 ka pollen and isotope record from alluvial deposits in the Succulent Karoo Biome near Uniondale" Three years. Study leader Prof J S Carrion in Murcia.
- 2017-2018. Juan Ochando Tomas, Department of Plant Biology, University of Murcia, Spain. PhD candidate and collaborator visited Prof Scott at Plant Sciences from September to December 2017. Project "Palynology of Hominid deposits from Taung, South Africa". Two or three years. Study leader Prof Carrion in Murcia.
- Dr Lize Joubert was on a 21-month research visit to the Department of Plant Sciences of the University of Cambridge, in the UK, from April 2016 to December 2017. The purpose of this visit was to engage in research and learn practical skills focusing on evolutionary development of flower characters important for pollination in angiosperms.
- S Kirsten: exchange student to University of Bremen, in Germany, from March to July 2017. Completed two subjects towards his MCom degree.

- Consultation agreement signed with Agricultural University of Sweden through the Research Office (Mr Gerhard Verhoef). Responsible person: Prof Maryke Labuschagne. - Dr Frank Neumann, a postdoc from Germany, collaborated on various research projects on fossil and modern pollen with Prof Scott. According to an agreement, he is currently stationed in the Palynology Laboratory in Plant Sciences at UFS and **NEW** funded by the RAiN Project. **INTERNATIONAL** -Plant Sciences can process laboratory samples in return for support for laboratory **AGREEMENTS** assistant Mr Petrus Chakane and research collaboration with Dr Neumann on other existing projects. - Dr Jose S Carrion, Department of Plant Biology, University of Murcia, Spain, collaborates with Dr Andri van Aardt and Prof Scott in his project on past environments at sites associated with human evolution. - The department mostly has informal collaboration without any written agreements. - Malaria Project, Turkey, Dr Alan Greaves, Senior Lecturer Archaeology, Classics and Egyptology University of Liverpool. Plant Sciences can process laboratory samples in return for support for laboratory assistant Mr Chakane. Collaboration with Prof Scott PENDING and Dr Van Aardt. **INTERNATIONAL** AGREEMENTS/ - Project to describe and identify Neogene pollen and vegetation. Dr Fridgeir Grimsson INFORMAL fridgeir.grimsson@univie.ac. at Reinhard Zetter, reinhard.zetter@univie.ac. at **COLLABORATIONS** Institut für Paläontologie Geozentrum, UZA II Althanstraße 14A – 1090, Wien. Plant Sciences can negotiate to provide pollen from herbarium material. The results will contribute to our ongoing Neogene past environments research project of the South Western Cape. Collaboration with Prof Scott and Dr Van Aardt. - Prof MT Labuschagne is receiving funding through students from the Bill and Melinda Gates Foundation (one PhD project), and the International Centre for the Improvement of Wheat and Maize (CIMMYT) International (six PhD projects). INTERNATIONAL - Prof Wijnand Swart received funding of R550 000 from Ekhaga Foundation in **FUNDING** Sweden for a collaborative project with the University of Stellenbosch and Lund in Sweden, titled "Groundcover management in organic and conventional fruit orchards in South Africa: Trade-off between above- and below- ground ecosystem services." Total grant was R2 million. **INTERNATIONAL** - A total of 21 research publications which are all recorded on the RIMS database RESEARCH COLLABORATIONS. **INCLUDING CO-AUTHORED PAPERS**

INTERNATIONAL STAFF AND STUDENT MOBILITY

INTERNATIONAL

ACADEMIC

ENGAGEMENTS

(INTERNATIONAL

CONFERENCE

ATTENDANCES,

INTERNATIONAL

SCIENTIFIC VISITS)

CONFERENCE ATTENDANCE:

- Expert Working Group meeting of the International Wheat Initiative, 19-21 April 2017, Vienna, Austria Prof Labuschagne.
- International Wheat Genetics Symposium, 23-28 April 2017, Tulln, Austria (authored and co-authored five posters). Prof Labuschagne, Prof L Herselman, Dr
- Labuschagne was invited to attend, all costs covered by them).
- First International Association for Cereal Science and Technology Asia-Pacific Grains Conference. Xiamen, China, 21-24 May (Prof Labuschagne was a keynote
- Prof Labuschagne travelled to Sweden in September 2017 as part of the Swedish AgriFoSe project "Plant Breeding Priorities for the Grand Challenges" as a consultant (contract signed by UFS).
- Dr Ngara attended a one-day training workshop Public Speaking for Early Career Academics held on 1 June 2017 at Durham University, in the UK.
- Dr Sandy Steenhuisen attended the XIX International Botanical Congress (IBC 2017) in Shenzhen, China, 23-29 July 2017. She was an invited speaker for a symposium on Pollination by non-flying mammals. Oral presentation given: "When flowers smell cheesy: An investigation into functional floral traits of African and Australian mammal-pollinated proteas (Proteaceae)".
- Scott L. (South Africa), Gil-Romera G. (Spain), Brook, G.A. (US) and Marais E. Spain, (OSM http://www.pages-osm.org/) in May 2017, titled, "Holocene vegetation change recorded in Late Quaternary faecal deposits of the Namib Desert and boundary region".
- Workshop in October 2017.
- Dr Lize Joubert presented a poster at the International Botanical Congress held in Shenzhen, China, from 23-29 July 2017. She is also co-author on a poster presented at the New Phytologist Next Generation Scientists meeting held in Norwich, in the UK, from 24-26 July 2017.
- Rothmann, LA, Steyn, C, McLaren, NW "Epidemiology of Sclerotinia Stem Rot of soybean: A South African perspective". (Poster Presentation) 15th National
- Project finalisation meetings: (Prof N McLaren and Lisa Rothmann) (Projects ended End-Use Product Development for Increased Food Security; Cowpea Focus Group: Biotic and Abiotic Stress in Sub-Saharan Africa; Dr Gary Odvody and Dr Jamie US, 21–24 January 2017; Dr Gary Peterson, Texas AgriLife Research and Extension Centre, Lubbock, Texas ,25-28 January, 2017.
- Prof McLaren was a co-chair Scientific Programme (local organising committee) for the Sorghum in the 21st Century Global Conference, 9-12 April 2018, in Cape Town.

- WHP Boshoff.
- Commonwealth Science Conference, 13-16 June 2017, Singapore (Prof
- speaker).

- (Namibia), presented a poster at the PAGES Open Science Meeting in Zaragoza,
- Van Aardt A.C. Attendance of the PAGES "Global Paleofire Working Group" Montreal
- Sclerotinia Initiative, 18-20, 2017 Minneapolis, Minnesota, in the US.
- 2016): Ukulima Farm Collaborative Research Programme: Sorghum Production and Improved Cowpea Varieties and Pulse Legume-Based Cropping Systems to Reduce Foster, Texas AgriLife Research and Extension Centre, Corpus Christi, Texas, in the

3.4 FACULTY OF HEALTH SCIENCES

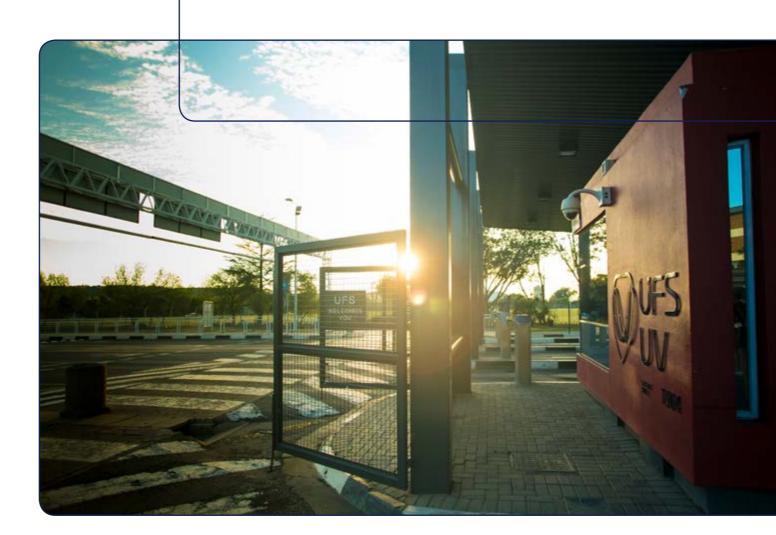
3.4.1 OFFICE OF THE DEAN

INTERNATIONAL **ACADEMIC ENGAGEMENTS** (INTERNATIONAL **CONFERENCE ATTENDANCES, INTERNATIONAL SCIENTIFIC** VISITS)

DIVISION HEALTH SCIENCES EDUCATION:

- 17th Ottawa Conference and the ANZAHPE 2016 Conference, held at the Perth Exhibition and Conference Centre, Perth, Western Australia, from 1 **9–23 March 2016.** Van Wyk, C, Nel, M.M. and Van Zyl, G.J. 2016. A framework to orient and develop the newly appointed health professions educator.
- 2017 European Society of Human Genetics (ESHG) Conference: 27–30 May **2017, Copenhagen, Denmark.** Presenter in workshop: Van Wyk, C. Genetics is part of my DNA.

Fellowship awarded by the ESHG for conference attendance.



INTERNATIONAL

ACADEMIC

ENGAGEMENTS

(INTERNATIONAL

CONFERENCE

ATTENDANCES,

INTERNATIONAL

SCIENTIFIC VISITS)

3.4.2 SCHOOL FOR ALLIED HEALTH PROFESSIONS

PROF SANTIE VAN VUUREN:

- Oral presentation: Reflections on simulated learning experiences of occupational therapy students in a clinical Skills Unit - Prato, Italy - 21-24 May 2017
- Article: An Integrated literature review of undergraduate peer teaching in allied health professions. African Journal of Health Professions education. 2017; 9-12. DOI:10.7196/AJHE.2017.v9i1.588

MS TANIA RAUCH VAN DER MERWE:

- Oral presentation: From Epistemic Alienation to Epistemic Freedom through an Archaeological Excavation of Occupational Therapy Knowledge. Occupational Therapy Africa Regional Group International Congress (OTARG); 10-13 September 2017, Accra, Ghana.
- Keynote address: Toward Epistemic Freedom: From excavation to praxis. Keynote address at Decolonisation and Transformation in Higher Education Research Colloquium, UFS, in collaboration with Vrije Universiteit Amsterdam and University of California Los Angeles (UCLA), 2-3 February 2017, Bloemfontein.

MS ANNAMARIE VAN JAARSVELD:

- Oral presentation: Designing a professional master's curriculum for sensory integration training. European Congress for Sensory Integration 2017. 2-3 June 2017, Vienna, Austria.
- Oral presentation: Training in sensory integration an international perspective. Invited as plenary speaker Iberia Congress for Sensory Integration. October 2017, Alicante, Spain.
- Involved as country lead for the international normative data collection for the Evaluation of Ayres Sensory Integration test for children aged 3-12 years. The research project is run by the Occupational Therapy Department of the Thomas Jefferson University in the US.
- Involved in the establishment of the International Council for Education in Ayres Sensory Integration (ICEASI), working specifically on the committee responsible for the constitution of the organisation.

MS HEIDI MORGAN:

- Oral presentation: Unite to heal: inter-professional health professions education in the rural Free State, South Africa. Morgan H, Hagemeister DT, Cairncross J, Joubert A, Botha R. International Congress of Health Workforce Education and Research (Future Education in Healthcare) on 27–29 June, Porto, Portugal 2017.
- Input in international publication: University Community Engagement and Lifelong Learning: The Porous University by Julia Preece (2017). Edu-village (H Morgan created framework) discussed as case example in her book) Pages 134-144.

3.4.3 SCHOOL OF BIOMEDICAL SCIENCES

INTERNATIONAL OFFICIAL DELEGATION **VISITS (INCOMING)**

- Dr Carlos Machado, adjunct Professor of Clinical Cardiology, University of Saint Augustine, Austin in the US, visited the Department of Basic Medical Sciences, 20 April 2017. As guest lecturer, he presented lectures to MBChB students and staff members of the School of Medicine.
- Dr Nicholas Krohn, Managing Director of Eurofins GeneScan, Freiburg, Germany, visited the GMO Testing Facility, GMO Unit on 9 November 2017. The visit was part of the ongoing collaboration between the two institutions on food authenticity. He presented technical lectures to staff in the GMO Testing Facility.

CONFERENCE ATTENDANCE:

- Mr Beynon Abrahams attended the LIMSC (Leiden International (Bio-) Medical Student Conference and a range of daily workshops in Leiden, Amsterdam, 15-19 March 2017. The programme included a number of internationally acclaimed speakers such as Prof Dr Jon van Rood (Chairperson of the Eurotransplant and Europdonor Foundation) and Prof Dr Harry Büller (Chairperson of the Vascular Medicine Working Group).
- Dr T Gerber attended an International Conference on Education, Teaching and Learning, in Dubrovnik (Croatia), 27-30 September 2017.
- Dr Walter Janse van Rensburg from the Department of Haematology presented research at the 26th Congress of the International Society on Thrombosis and Haemostasis (ISTH) in Berlin, Germany, 8-13 July 2017.
- D Litthauer and QC Meyer: First general meeting: WHO-National Control Laboratory Network for Biologicals (Who-Nnb). 31 October-2 November 2017. National Institute of Biologicals, Noida, India. This was the inaugural meeting of the International Laboratory Network. Prof Litthauer was one of the steering committee members who were tasked with defining the terms of reference for the network at a meeting held in the Netherlands in 2016. The network currently consists of full members from 15 countries. Dr QC Meyer gave a presentation on developments at the NCL in 2017.
- Prof CD Viljoen (GMO Unit) attended the TRG IV Regional Coordinators Meeting on LMO Detection hosted by the European Commission, Joint Research Centre, Varese, Italy, from 19–20 July 2017.
- Prof CD Viljoen (GMO Unit) was appointed as technical advisor to the MCP ICLT (Multi-Country Project to Strengthen Institutional Capacities on LMO Testing in Support of National Decision Making comprising laboratories in Angola, Democratic Republic of the Congo, Lesotho, Madagascar, Malawi and Mozambique) funded by the United Nations Environment Programme and coordinated by RAEIN-Africa.

INTERNATIONAL SCIENTIFIC VISITS

- Prof D Litthauer and Dr QC Meyer visited the National Institute for Biologicals in Noida, India, from 31 October-2 November 2017.

INTERNATIONAL **ACADEMIC ENGAGEMENTS** (INTERNATIONAL CONFERENCE ATTENDANCES. **INTERNATIONAL SCIENTIFIC VISITS)**

INTERNATIONALISATION REPORT

INTERNATIONAL RESEARCH COLLABORATIONS, INCLUDING CO-AUTHORED PAPERS	 Dr Annelize Vorster has served as UFS Faculty Adviser for IMPULSE since 2015. IMPULSE is an undergraduate, international and inter-institutional journal for neuroscience publications. The UFS IMPULSE site is one of 37 peer review sites worldwide that has been established since 2010. Student research manuscripts are submitted and distributed from the Appalachian State University in the US to associate editors and their student reviewers at institutions around the world, who then participate in the peer-reviewing process according to specific guidelines and standards. UFS & KU Leuven: Tersteeg C, Roodt J, J. Van Rensburg W, Dekimpe C, Vandeputte N, Pareyn I, Vandenbulcke A, Plaimauer B, Lamprecht S, Deckmyn H, Lopez JA, De Meyer SF and Vanhoorelbeke K. N-acetylcysteine in preclinical mouse and baboon models of thrombotic thrombocytopenic purpura. Blood 2017; 129(8):1030-1038. UFS and VU University Medical Centre, Amsterdam, the Netherlands. De Groot JJB, Webb MJ, Raubenheimer JE, Struwig MC, Louw VJ. Concomitant HIV infection in newly diagnosed multiple myeloma patients is hard to recognise and should be tested for routinely in areas of high endemicity. SAMJ 2017; 107(9): 781-787. The NCL participated in a WHO Collaborative study of 14 international laboratories to establish international standards for potency assays of oral polio vaccine. The report was published by WHO in October 2017. Expert committee on biological standardisation. Geneva, 17 to 20 October 2017. Report on the WHO Collaborative study to establish International Standards for potency assays of Oral Polio Vaccine. WHO/BS/2017.2313. There is ongoing research collaboration between the GMO Testing Facility, GMO Unit and Eurofins GeneScan, Freiburg, Germany, on Molecular diagnostics with special emphasis on food authenticity. There is ongoing research collaboration between Prof CD Viljoen, GMO Unit and Prof Gretta Abou-Sleymane, Department of Laboratory Science and Technology, American University o
STRATEGIC PERSPECTIVES	 Identify international collaborative research opportunities. Identify potential financial sources for international collaboration. Sustain inter-university links through collaboration and present an opportunity for joint student exchange programmes. Source funding opportunities for international research collaboration.
CONSULTATIONS UNDERTAKEN	Prof CD Viljoen (GMO Unit) made visits to LMO detection laboratories in Angola (Central Laboratory of Agriculture), Malawi (Bunda College of Agriculture and Chitedze Research Laboratory), Mozambique (University of Eduardo Mondlane, Biotechnology Centre and Agricultural Research Institute of Mozambique) and Lesotho (University of Lesotho) during November and December 2017, as part of the MCP-ICLT (Multi-Country Project to Strengthen Institutional Capacities on LMO Testing in Support of National Decision Making) comprising laboratories in Angola, Democratic Republic of the Congo, Lesotho, Madagascar, Malawi and Mozambique) funded by the United Nations

IMPLICATIONS	Identification of collaborative research areas. Collaboration and building research capacity. Build capacity in terms of human resources and expertise. Ensure growth and quality of postgraduate programmes aligns with international standards.
RECOMMENDATIONS	Propose Internationalisation activities to promote research outputs. Identify funding for projects.

3.4.4 SCHOOL OF PATHOLOGY

INTERNATIONAL OFFICIAL DELEGATION VISITS (INCOMING)	 INTERNATIONAL SCIENTIFIC VISITS 26 March-2 April 2017: The Division of Virology hosted Dr Svetoslav Slavov, a visiting senior researcher from the Laboratory of Molecular biology, University of Sao Paulo, Brazil. Dr Slavov gave a presentation entitled: "Application of metagenomics methods for the detection of emerging viruses in tropical regions". Discussions included future collaborations between researchers in the Division and Dr Slavov's research group. 15-16 June 2017: The Division of Virology hosted Dr Philippa Matthews, Welcome Trust Research Fellow and Consultant in Microbiology and Infectious Diseases, Oxford University. Dr Matthews presented: "HBV: more questions than answers". 28 June 2017: Prof Claude Cuvelier, Professor at the Department of Medical and Forensic Pathology, Ghent University, Belgium, visited the Department of Anatomical Pathology. He presented two talks on Coeliac disease and an update on oesophageal and gastric precursor and malignant lesions. 30 June 2017: Prof Pieter Wesseling, Professor in Neuro-oncological Pathology at Radboud University Medical Centre, Nijmegen and VU University Medical Centre, Amsterdam, in the Netherlands, visited the Department of Anatomical Pathology. He presented two talks entitled: "WHO 2016 classification of diffuse gliomas, paediatric CNS tumours and other CNS tumours" and "The diagnosis of CNS tumours – the practice and pitfalls in pathology".
PENDING INTERNATIONAL AGREEMENTS	Cooperation initiated with Dr H-J Mager of the Dutch Centre of Excellence for Hereditary Haemorrhagic Telangiectasia (HHT) at the St Antonius Ziekehuis in Utrecht in the Netherlands, with the Department of Haematology to improve the diagnosis and treatment of patients with HHT in central South Africa.

Environment Programme and coordinated by RAEIN-Africa.

CONFERENCE ATTENDANCE:

- 7-13 July 2017: XXVI ISTH Congress and 63rd Annual Scientific and Standardisation Committee (SSC) Meeting, Berlin, Germany. Posters were presented by staff of the Department of Haematology and Cell Biology:
- Dr Jaco Joubert presented three posters: "Performance evaluation of the Coag-Sense® point-of-care INR-testing system" - "The in vitro and in vivo effects of streptokinase in a Papio ursinus baboon model of acquired thrombotic thrombocytopenic purpura (TTP) _ a pilot study". - "Performance evaluation of the microINR® point-of-care INR-testing system".
- Dr Walter Janse van Rensburg, J. Kloppers "Rapid and Cost-effective FVIII Intron Inversion 22 Screening of the Central South African Haemophilia A Population".
- M. Meiring, M. Khemisi, L.Laker, F. Smit "Tissue-Engineered Small Vessel Conduits _ The Anti-thrombotic Effect of Re-endothelialisation of Decellularised Baboon Arteries".
- Dr G van der Westhuizen from the Department of Anatomical Pathology attended:29th European Congress of Pathology, Amsterdam, the Netherlands, 2-6 September 2017.
- · 10-12 September 2017: Prof FJ Burt attended the Second international conference on Crimean-Congo hemorrhagic fever, held in Thessaloniki, Greece. She was co-chair for the session entitled "Clinical aspects and diagnostics" and was a member of the Scientific Committee involved with organising the conference.
- 11-14 October 2017: Mrs Anneke Van der Spoel van Dijk, a senior scientist at the National Health Laboratory Service (NHLS), Department of Medical Microbiology at UFS, presented her work at the 48th Union World Conference on Lung Health, at a poster discussion session in Mexico. Her visit was supported by a travel grant from the NHLS, while the work was supported by the NRF and UFS. The poster presentation was titled: "Role of next generation sequencing in tuberculosis diagnostics".
- Resolving the clinical dilemma of discrepancies in laboratory findings was part of a poster discussion session titled: "Don't resist! Finding the pattern through sequencing".
- The work was done in collaboration with Dr UM Hallbauer from the Department of Paediatrics and Child Health, UFS, Mr C Mahonono NHLD, Dr M Nyaga M. of the Next Generation Sequencing Unit, UFS, and Dr K Baba from the Department of Pathology and Laboratory Medicine, King Abdullah bin Abdulaziz University Hospital, Saudi Arabia. Her research highlighted solutions to challenges experienced with treatment and diagnosis of tuberculosis in children.
- 20-22 October 2017: Dr T J Naicker of the Department of Chemical Pathology attended the XVI International Congress of Paediatric Laboratory Medicine (ICPLM) held in Durban in 2017 where the following poster was presented: "Clinical review of Classic Galactosaemia paediatric patients seen at a metabolic clinic in South Africa".

INTERNATIONAL **ACADEMIC ENGAGEMENTS** (INTERNATIONAL CONFERENCE ATTENDANCES, INTERNATIONAL SCIENTIFIC VISITS)

- 22-25 October 2017: Dr Naicker attended the International Federation of Clinical Chemists' (IFCC) Worldlab Conference, held in Durban in 2017, where the following poster was presented: "Detection of the presence of Lipoprotein-X using a direct homogenous LDL-Cholesterol assay".
- 21–24 October 2017: Prof JC Heunis of the Centre for Health Systems Research & Development, UFS, presented a poster titled: "Research towards improved tuberculosis control in the Free State, South Africa – a narrative review" with co-authors Dr P Chikobvu from the Information and Research Directorate, Free State Department of Health and Department of Community Health (UFS), Dr NG Kigozi from the Centre for Health Systems Research & Development, UFS, A Van der Spoel-van Dijk A, from Universitas Academic Laboratory, National Health Laboratory Service, Department of Medical Microbiology (UFS) and three authors, Prof HCJ van Rensburg, AP Janse van Rensburg and Dr MC Engelbrecht, also from the Centre for Health Systems Research & Development, UFS, at the ECTMIH 2017 in Belgium. His narrative covers research done on tuberculosis in the Free State from 2004 to 2017.
- 2-3 November 2017: Dr Nerina van der Merwe and Mr Jaco Oosthuizen attended the 19th International conference on Human Genetic disorders and disease in Cape Town and presented two papers:
- -Oosthuizen, J and Van der Merwe NC: "South African breast cancer mutation spectrum, pitfall to copy number variation detection with international multiple ligation dependent probe amplification and NGS panels".
- Van der Merwe NC, Oosthuizen J, Makhetha MF, Adams A, Dajee BK, Schneider S-R. "Contribution of PALB2 and BLM mutations to familial breast cancer risk in BRCA1/2 negative South African breast cancer patients detected using High Resolution Melting Analysis".

WORKSHOP ATTENDANCE:

- 30 Nov-1 Dec 2017: Professor Burt and Ms N Viljoen attended a workshop entitled CCHF diagnostic and treatment using human monoclonal antibodies, held at Folkhälsomyndigheten, Stockholm, Sweden. Professor Burt gave a presentation: "Crimean-Congo haemorrhagic fever virus: an emerging virus." The workshop is part of an ongoing SA Sweden, NRF STINT-funded collaboration between Professor Burt and Prof Ali Mirazimi. Course attendance:
- 20 to 26 March 2017: Marion Malone Memorial Advanced Course in Paediatric Pathology, Dublin, Ireland, attended by Prof J Goedhals from the Department of Anatomical Pathology.

SYMPOSIUM ATTENDANCE:

- 1-2 December 2017: Dr Leriska Haupt of the Department of Haematology and Cell Biology attended the First International Symposium on Von Willebrand Disease, Prague, Czech Republic.

INTERNATIONAL ACADEMIC ENGAGEMENTS (INTERNATIONAL CONFERENCE ATTENDANCES, INTERNATIONAL SCIENTIFIC VISITS)

COLLABORATIONS:

UFS and multi-national team co-authored a review

with the Dept of Medical Microbiology and Virology: "Chikungunya virus: an update on biology and pathogenesis of this emerging pathogen 17(4):e107-e117. Impact Factor: 19.446".

Burt FJ, Chen W, Miner JJ, Lenschow DJ, Merits A, Schnettler E, Kohl A, Rudd PA, Taylor A, Herrero LJ, Zaid A, Ng LFP, Mahalingam S. (2017)

International co-authors' details in order of listing: Institute for Glycomics, Griffith University, Gold Coast, QLD, Australia. Department of Internal Medicine, Washington University School of Medicine, St Louis in the US.

Institute of Technology, University of Tartu, Tartu, Estonia.

Bernhard-Nocht Institute for Tropical Medicine, Hamburg, Germany.

MRC-University of Glasgow Centre for Virus Research, Glasgow, in the UK.

Singapore Immunology Network, Agency for Science, Technology and Research (A*STAR), Biopolis, Singapore; Institute of Infection and Global Health, University of Liverpool in the UK.

INTERNATIONAL RESEARCH
COLLABORATIONS,
INCLUDING
CO-AUTHORED PAPERS

UFS and Oxford University, UK:

The Division of Virology has an ongoing collaboration with Dr Philippa Matthews from Oxford University, including a multi-centre study into hepatitis B virus. Dr Matthews has been awarded a Wellcome Trust Clinical Fellowship which will fund the project. The principal investigator for Bloemfontein is Dr Dominique Goedhals and the team includes Dr Molefi Daniel Morobadi, Dr Sabeehah Vawda, Mr Armand Bester and Dr Cloete van Vuuren (Department of Internal Medicine).

UFS and Canada:

The Division of Human Genetics collaborates and contributes towards the Canadian Komen research foundation, on familial breast and ovarian cancer by screening for mutations in the medium- to high- breast cancer susceptibility genes.

UFS Researchers:

J Oosthuizen, Supervisor: NC vd Merwe Co-supervisor: WD Foulkes "Molecular screening of Coloured South African breast cancer patients for the presence of BRCA mutations using high resolution melting analysis". Canadian collaborators:

Prof WD Foulkes, Professor in the Departments of Medicine, Oncology and Human Genetics at the McGill University in Montreal, Canada.

Dr George Chong, Co-Director, Molecular Diagnostics Laboratory, Sir Mortimer B. Davis Jewish General Hospital, Montreal, Canada.

STRATEGIC PERSPECTIVES	 Identify specific academic international student exchange opportunities in the Faculty of Health Sciences. Identify specific international collaborative research opportunities. Identify potential financial sources for international collaboration. Include a research culture and interconnectedness into student curricula.
IMPLICATIONS	Increase in International student exchange.Identification of collaborative interest in Research Niche areas.Revise/adapt curricula with the focus on a research culture.
RECOMMENDATIONS	 Propose Internationalisation activities to promote research outputs. Establish an open database for all relevant projects in the School of Nursing and record activities and update progress. Identify key roleplayers to drive the various collaborations. Identify funding for projects. Strategised human resources. Determine student/staff selection criteria/policy

SECTION 3:

3.4.5 SCHOOL OF NURSING

	- On 25 January 2017 hosted delegation from Appalachian State University in
	the US, in conjunction with Mr Mdletshe from the OIA.
	- Contact person at App State: Jesse Lutabingwa
	- <u>Purpose of the visit</u> was to explore university-based community
	engagement connections (Jeff Ramsdell and Brian Raichle, lelse Seale and
	Karen Venter).
	- 26 April 2017: Appalachian State University
	- Collaboration driven by lelse Seale and Jesse Lutabingwa
	- Email communication between the SoN, UFS and App State, nursing school
	to finalise collaborations that took place during 2016.
	- Jesse Lutabingwa informed via email that their school of nursing is not yet
INTERNATIONAL OFFICIAL	ready for collaboration (resume the discussions in future).
DELEGATION VISITS	- 2-4 May 2017: Belgium, University of Kortrijk
(INCOMING)	- Hosted by the School of Nursing, Prof Magda Mulder
	- Contact person at the University of Kortrijk: Stephanie Soenen, in the US
	- Purpose was to explore future engagement possibilities
	- 20-27 August 2017: Michigan, Michigan University
	- Hosted by UFS School of Nursing: Dr Marianne Reid
	- Contact person at Michigan University: Prof Daniel Lee
	- Purpose was an academic visit
	- 5 September: Canada: University of Regina
	- Hosted by the Office for International Affairs (attended by lelse Seale and
	Maria Phillips)
	- Contact person at University of Regina: Mr Werner Beylefeld
	- Purpose was to explore engagement opportunities

INTERNATIONAL STAFF AND STUDENT MOBILITY	Sweden: The School of Nursing hosted two exchange students from Jonkoping University during the second semester. (Daniel Olsson and Oskar Kallberg).
NEW INTERNATIONAL AGREEMENTS	 Sweden: Jonkoping University Recently renewed the three-year agreement because the previous agreement had expired. Document facilitated by Mr Mdletshe (OIA), in process to be signed by Professor Mulder (SoN).
PENDING INTERNATIONAL AGREEMENTS	- Belgium, University of Kortrijk (collaboration started by Prof Magda Mulder and Stephanie Soenen). Mr Mdletshe in process with the agreement.
INTERNATIONAL ACADEMIC ENGAGEMENTS (INTERNATIONAL CONFERENCE ATTENDANCES, INTERNATIONAL SCIENTIFIC VISITS)	CONFERENCE ATTENDANCE: - 31 March-5 April 2017: Dr Marissa Wilke attended the 81st annual CUEH conference, Washington, DC. - 18-22 June 2017: The Society of Midwives of SA, was represented by the President (Elgonda Bekker) and Vice-President (Winnie Motlolometsi) of the UFS School of Nursing, at the International Confederation of Midwives (ICM) Council (governing body for midwifery) meeting in Toronto, Canada. The representatives also attended the tri-annual congress. - 11-16 June 2017: lelse Seale presented a workshop at the 7th ISSL conference, Galway, Ireland. - 25 June-1 July 2017: Prof Annemarie Joubert present at the International network for health workforce conference, Porto, Portugal. - 25 July-1 August 2017: Lizemarie Hugo and Dr Lily van Rhyn, present at 28th Nursing Research Congress, Dublin, Ireland - 8-12 August 2017: Professor Yvonne Botma, Swaziland, STTI At Large Chapter attendance20-27 August 2017: Dr Reid arranged a visiting programme for Prof Daniel Lee from Michigan University. He took part in the development of a Sesotho Health Literacy test. - Prof Botma and Prof Joubert visited Paray School of Nursing in Thaba Tseka, Lesotho, to assess whether it was ready to implement the new Competence-Based Three-Year Diploma in Nursing. A report was submitted to the Paray School of Nursing. - 8-12 August 2017: Prof Botma and a master's student (Lesly Talbot), present at a biennial convention, Indianapolis, US, - 17-23 September 2017: Prof Botma, Windhoek, Namibia. Present at the first symposium for inter-professional education in Africa - 24-30 September 2017: Dr Thandi Letsie to visit the Institute for Global Healthcare Leadership - 8-11 October 2017: Dr Reid, International conference on communication in healthcare and research conference, Baltimore, in the US. - 2017: Mrs Nora Olivier enrolled for the International Interprofessional Wound care course (IIWCC) at the Faculty of Medicine, University of Toronto, Canada.

INTERNATIONAL RESEARCH COLLABORATIONS, INCLUDING CO-AUTHORED PAPERS	 UFS AND LESOTHO: Nyoni, C & Botma, Y 2017. "Aligning summative clinical examination with competence-based curriculum: Midwifery educators' experiences in Lesotho". International Journal of Africa Nursing Science 7(2017): 11-17. Botma, Y & Nyoni, C 2015. "What went wrong? A critical reflection educator midwives' inability to transfer education knowledge". Journal of Nursing Education and Practice. 5(6):1-8. UFS AND UNIVERSITY OF VIRGINIA: Pailla, S & Venter, K 2017. "Enhancing the Digital Divide through Participatory Action Learning Action Research (PALAR) and Inclusive Communication Systems (ICS)".
STRATEGIC PERSPECTIVES	 Identify specific academic international student exchange opportunities in the FHS. Identify specific international collaborative research opportunities. Identify potential financial sources for international collaboration. Include a research culture and interconnectedness into student curricula.
CONSULTATIONS UNDERTAKEN	- Prof Magda Mulder - SoN
IMPLICATIONS	 Increase in International student exchange Identification of collaborative interest in research niche areas. Revise/adapt curricula with the focus on a research culture.
RECOMMENDATIONS	 Propose Internationalisation activities to promote research outputs. Establish an open database for all relevant projects in the School of Nursing and record activities and update progress. Identify key roleplayers to drive the various collaborations. Identify funding for projects. Strategised human resources. Determine student/staff selection criteria/policy.

3.5 FACULTY OF THE HUMANITIES

3.5.1 DEPARTMENT OF AFRICAN LANGUAGES

INTERNATIONAL ACADEMIC ENGAGEMENTS (CONFERENCE ATTENDANCES, SCIENTIFIC VISITS – OUTGOING) Lecturer: Mr M Thango

Title of paper: "Using Poetry to Teach Language and Grammar in isiZulu L1".

Title of Conference: Trends and Challenges in Education.

Date: 27-28 March 2017, Malaysia.

3.5.2 DEPARTMENT OF AFRIKAANS AND DUTCH, GERMAN AND FRENCH

Dr C van den Berg attended the 28th international conference of the SAGV (Association of German Studies in Southern Africa) at the University of Stellenbosch, where he presented a paper on a novel by Swiss author, Christian Kracht. The paper was later published in the accredited Acta Germanica. In 2017 Dr Van den Berg successfully applied to present a paper at the esteemed ACLA (American Comparative Literature Association) conference INTERNATIONAL ACADEMIC in Los Angeles, in the US, in 2018. The paper, "Minor Literatures and the **ENGAGEMENTS (CONFERENCE** Politics of Difficult Pasts" will be part of a seminar on "The Politics of Minor ATTENDANCES, SCIENTIFIC Literatures". **VISITS – OUTGOING)** Prof *Prof Naomi Morgan attended two international conferences : *Nous n'irons plus au Congo: traduction et censure du voyagecongolais de Tintin en langue afrikaans ; 'Tintin au XXIe siècle: territoires et temporalités - Imaginaire des territoires',(17-20 May), Université de Louvain-la-Neuve, Belgique. *(Re)traduire Le petit prince en une langue minoritaire : le cas de l'afrikaans ; 'Retranslation in context 3', Centrum voor literatuur in vertaling, Ghent University, 7-8 February 2017 An online course for learning to speak Afrikaans was launched at the end of 2017. People from all over the world will now be able to learn Afrikaans via the online course. On campus, several international students and staff members enrol in the contact-based Gesellig Afrikaans course to learn Afrikaans as foreign language. **INTERNATIONAL STAFF AND** In 2017, Ms C Ellis, Ms M Pretorius and Dr F Smith passed the CNaVT STUDENT MOBILITY (Certificaat Nederlands als Vreemde Taal/Certificate of Dutch as Foreign Language) B1 examination. This certificate is internationally recognised as a proof of language ability in Dutch in the Netherlands and Belgium. The

Towards the end of 2017 Dr Van den Berg visited the Elfriede Jelinek Centre in Vienna, Austria, to do research on the Nobel Prize-winner for Literature. He selected literature from the archive in preparation of a number of planned research articles on Elfriede Jelinek's "Die Kinder der Toten". On 18 December 2017, Ms C Ellis had an (informal) meeting in Vienna with Catharina Loader, the lecturer responsible for the Afrikaans in Europe course at the Universität Wien, The meeting also touched on the Gesellig Afrikaans course, which the Department of Afrikaans and Dutch, German and French is responsible for at the UFS, as well as the Afrikaans course for which she is responsible in Vienna. Possible future collaborations between the departments may come from this. · Mr A Barkhuizen attended the BELC international teaching summer INTERNATIONAL VISITS university at the University of Nantes in France, in July 2017. The workshop offers intensive courses in various aspects of French teaching and didactic innovation. Some of the courses he attended included the status of French as a subject in the world. (mother-tongue, second- and foreign language-French). Working with large adult groups in the classroom. Teaching language through interdisciplinary approaches. Ms T Strauss spent two weeks in Germany in October 2017 with a group of German learners from Grey College on an educational tour through the south of Germany.. - Ms Strauss also spent a week in Leipzig at the Bioinformatics department of Leipzig University with whom she is working on a project concerning word- and syntax-tree alignment between different languages. She will be meeting with these colleagues from Leipzig again in February 2018. Research fellow of the German Section, Prof S Taberner (Leeds University) **BOOKS OR CHAPTERS IN** published a new book titled Transnationalism and German-Language BOOKS Literature in the 21st Century. Mrs T Strauss: The co-supervisor for her PhD on computational linguistics **PENDING INTERNATIONAL** is also from Leipzig University and they are currently working on a AGREEMENTS/INFORMAL project about word frequency distributions across languages. They aim to COLLABORATIONS complete this project by the August 2018 and it will form part of her PhD. The Stichting tot Bevordering van Culturele Betrekkingen Nederland Zuid-Afrika sponsors Inkvars of which Ms C Swart is the editor (a publication of the Bloemfonteinse Skrywersvereniging (BSV)) – co sponsored by the OTHER ACADEMIC Faculty of Humanities, UFS. ACHIEVEMENTS Ms C Swart is the vice-chair of the Friends of the National Afrikaans (E.G. EDITORSHIPS, Literary Museum (NALN) and they had a few overseas visitors presenting **ELECTION ON ACADEMIC** their books at official functions (e.g. Prof Ena Janssen, Kris Karsten) and ASSOCIATION OR UNION) in association with the BSV, the yearly BSV poetry winner, from the US, (previously from the Netherlands), Hilda A Smits, with her debut volume, Die bome reusagtig soos ons was that won the most important prize in poetry in South Africa in 2017, the Ingrid Jonker prize.

certificate is part of the AFNK 2 module offered by Prof A Van Niekerk. The

UFS is approved as an institution to enrol students for this exam.

3.5.3 DEPARTMENT ART HISTORY AND IMAGE STUDIES

INTERNATIONAL STAFF AND STUDENT MOBILITY	 -Prof Annie van den Oever (University of Groningen – appointed as Extraordinary Professor for Film and Visual Media in the UFS Faculty of the Humanities) presented a series of lectures (3-11 May 2017) in Film and Visual Media. She continues to be involved in the development of the programme. -Mr Martin Rossouw continued his PhD studies (part-time, long distance) at the University of Groningen in the Netherlands, under the joint supervision of Prof Liesbeth Korthals-Altes (Professor of General Literature, University of Groningen) and Prof Van den Oever (Associate Professor in Arts, Culture and Media/Film, University of Groningen). He is expected to defend his PhD in Groningen mid-2018. -Dr Francis Halsall continues his affiliation as research associate of the department. He is Co-Director of the Masters Programmes: Art in the Contemporary at the National College of Art and Design in Dublin, Ireland.
NEW INTERNATIONAL AGREE- MENTS	- The department established a two-year postdoctoral agreement with Dr Katja Gentric in 2017. She is also affiliated with the Centre Georges Chevrier, Université de Bourgogne, in France.
PENDING INTERNATIONAL AGREEMENTS/INFORMAL COLLABORATIONS	 Mr Rossouw and Prof Van den Oever are planning a peer review workshop at the UFS in 2018. The UFS Research Directorate (Prof Corli Witthuhn) has approved funding that will enable a yet-to-be-confirmed fellow international scholar to co-present the workshop with Prof Van den Oever. The date of the workshop is still to be finalised. We are in the process of recruiting Nikita Matthias (PhD Candidate, University of Oslo, Norway) as a postdoctoral researcher. He is a published scholar, working in the combined fields of media studies, film studies, and art history. He is about to complete his PhD project ("Mediations of the Sublime: Disaster Cinema and its Historical Formation") in early 2018. In partnership with Prof Van den Oever, we are planning to make use of the forthcoming Nuffic doctoral training agreement between South Africa and the Netherlands to promote PhD mobility with the University of Groningen. (See: http://www.nrf.ac.za/media-room/news/doctoral-training-agreement-between-south-africa-and-netherlands). In order to demonstrate and further consolidate working relations between our department and the University of Groningen, we hope to arrange a Winter School on Art and Technology in June/July 2018, which will be presented by Prof Van den Oever.
INTERNATIONAL VISITORS (INCOMING)	 Lecture series presented by Prof Van den Oever (University of Groningen – appointed as Extraordinary Professor for Film and Visual Media in the UFS Faculty of the Humanities), as noted above, 3-11 May 2017.

3.5.4 CENTRE FOR AFRICA STUDIES

INTERNATIONAL ACADEMIC ENGAGEMENTS (CONFERENCE ATTENDANCES, SCIENTIFIC VISITS – OUTGOING)	- Lecturer: Prof H Hudson - Title of paper: "Gender and post human peacebuilding: A theoretical exploration" - Title of Conference: 6th Annual International Feminist Journal of Politics Conference, "Walking the Talk: Feminist Reflections on International Practices" Date: 9-11 April 2017, New Delhi, India - Lecturer: Prof Hudson - Title of paper: "Writing the gendering of peacebuilding in Africa decolonially: Amos Tutuola, shape shifters and feminist openings" - Title of Conference: 58th Annual International Studies Association Convention - Date: 22-25 February 2017, Baltimore, in the US - Lecturer: Prof Hudson - Title of paper: "The discursive and material gender entanglements of posthuman peacebuilding practices" - Title of Conference: 58th Annual International Studies Association Convention - Date: 22-25 February 2017, Baltimore in the US - Lecturer: Prof Hudson - Toic: "Writing the gendering of peacebuilding in Africa decolonially: Amos Tutuola, shape shifters and feminist openings" - Institution: Jawaharlal Nehru University (Symposium on South Africa, jointly organised by the Centre for African Studies, School of International Studies, Jawaharlal Nehru University and the Centre for Africa Studies, UFS, in collaboration with the African Studies Association of India) - Place: JNU, New Delhi, India - Date: 7 April 2017 - Lecturer: Dr N Lake - Topic: "Gender and Migration in Sub-Saharan Africa" - Institution: University of Kent - Place: Canterbury West, England - Date: 23 September 2017
INTERNATIONAL VISITS	 Lecturer: Dr N Lake Place: Uppsala, Sweden Lecturer: Prof H Hudson Place: Aarhus, Denmark Institution: Uppsala University Date: 27-28 April 2017 Institution: Aarhus University (PhD defence) Date: 15-18 November 2017
INTERNATIONAL VISITORS	Visitor: Dr O Mutanga Institution: University of Oslo Reason of visit: Establish research partnership Date of visit: 21 April 2017

3.5.5 CENTRE FOR HEALTH SYSTEMS RESEARCH AND DEVELOPMENT

INTERNATIONAL ACADEMIC ENGAGEMENTS (CONFERENCE ATTENDANCES, SCIENTIFIC VISITS – OUTGOING) **INTERNATIONAL VISITORS**

- Lecturer: Dr G Kigozi
- Title of paper: Community health workers in tuberculosis control in the Free State province: pointers for service improvement.
- Title of Conference: Community HealthWorkers Symposium
- ComKampal, Uganda
 - Date: 21-23 February 2017
- Visitor: Nina Sommerland
- Institution: University of Antwerp, Belgium
- Reason of visit: Collaboration on the HIV- and TB-Stigma project.
- Visitor: Prof Shoou-Yih Daniel Lee

- Institution: Gillings School of Global Public Health at the University of North

- Carolina in the US
- Reason of visit: To discuss possible collaboration on research projects (21 August)

INTERNATIONAL RESEARCH **COLLABORATIONS, INCLUDING CO-AUTHORED PAPERS**

- Centre for Health Systems Research & Development (CHSR&D) in partnership with University of Antwerp and funded by VLIR-UOS (Belgium): Four-year collaborative research project on stigma among healthcare workers in the Free State. Commenced January 2015 and ending December 2018. Two co-authored papers published 1 November 2017:
- *Wouters, E, Masquillier, C, Sommerland, N Engelbrecht, M, van Rensburg, AJ, Kigozi, G & Rau, A 2017." Measuring HIV- and TB-related stigma among healthcare workers in South Africa: A validation and reliability study". International Journal of Tuberculosis and Lung Disease, 21(Supplement 1): S19-S25(7). DOI: https://doi.org/10.5588/ijtld.16.0749
- Sommerland, N, Wouters, E, Masquillier, C, Engelbrecht, M Kigozi, G, Uebel, K, Janse van Rensburg, A. & Rau, A 2017. Stigma as a barrier to the use of occupational health units for tuberculosis services in South Africa. International Journal of Tuberculosis and Lung Disease, 21 (Supplement 1): S75-S80(6). DOI: https://doi.org/10.5588/ijtld.17.0030

3.5.6 DEPARTMENT OF COMMUNICATION SCIENCE

INTERNATIONAL ACADEMIC ENGAGEMENTS (CONFERENCE ATTENDANCES, SCIENTIFIC VISITS – OUTGOING)

- Prof M Rivera: Training in "Mediation, Conflict Management, Leadership, Trauma Healing & Cross Cultural Communication"
- 29 October-4 November 2017, Switzerland
- Prof I Glenn: Conference on "Coetzee & the Archive" 5-6 October 2017. London
- Prof J de Wet: Rhetoric Society of Europe Conference 3-5 July 2017, Norwich, London
- Dr M Coetzee: The 30th Anniversary of the Disaster Research Unit (DRU
- 14 September 2017, Berlin
- Dr M Coetzee: The 8th Water Research Horizon Conference (WHRC
- 19-20 September 2017, Hamburg
- Dr M Coetzee: The EviDENz project workshop
- 21-22 September 2017, Bonn

3.5.7 DEPARTMENT OF CRIMINOLOGY

INTERNATIONAL ACADEMIC **ENGAGEMENTS (CONFERENCE** ATTENDANCES, SCIENTIFIC VISITS – OUTGOING)

- Lecturer: Prof R Peacock
- Topic: "Institutional victimisation and the impact and consequences on the identity development of the incarcerated adolescent"
- Institution: Inter University Centre of Dubrovnik (33rd Postgraduate Course on Victimology, Victim Assistance and Criminal Justice)
- Place: Croatia
- Date: 22 May 3 June 2017
- Lecturer: Prof R Peacock
- * Member of the international scientific committee of the 16th International Symposium of the World Society of Victimology. Hong Kong: 5-9 July 2018
- OTHER ACADEMIC ACHIEVE-**MENTS (EG. EDITORSHIPS, ELECTION ON ACADEMIC ASSOCIATION OR UNION):**
- Member of the international scientific committee of the 8th Annual Conference of the Victimology Society of Serbia. Victims between security, human rights and justice: Local and global context. Belgrade: 30 November-1 December 2017
 - Lecturer: Prof R Peacock
 - Appointed to the International Advisory Board of Global Advances in Victimology and Psychological Studies, OP Jindal Global University, India
 - Appointed to the Editorial board of the Journal of Victimology and Victim Justice

3.5.8 DEPARTMENT OF DRAMA AND THEATRE ARTS

INTERNATIONAL VISITORS

Lecturer: Carolyn Hepburn

Institution: Producing 101, US consulate

Place: Visual Media Hub Date: 5 June 2017



3.5.9 DEPARTMENT OF ENGLISH

INTERNATIONAL

ACADEMIC

ENGAGEMENTS

(CONFERENCE

ATTENDANCES,

SCIENTIFIC VISITS

- OUTGOING)

- Lecturer: Prof H Strauss
- Title of paper: "Moving Images: Rainbow Anaesthetics and Documentary Form" (invited speaker)
- Title of Conference: "Thinking South Africa Post-2012"
- Date: 19-20 January 2017 at the Johannesburg Institute for Advanced Studies (JIAS)
- Lecturer: Prof H Strauss
- Title of paper: "Moving Images: Rainbow Anaesthetics and Documentary Form".
- Title of Conference: Film Studies Association of Canada
- Date: 27-29 May 2017. Toronto, Canada
- Lecturer: Prof H Strauss
- Title of paper: "Feeling the Fall"
- Title of Conference: Canadian Association for African Studies
- Date: 31 May-2 June 2017, Toronto, Canada.
- Lecturer: Prof H Strauss (invited speaker)
- Title of paper: "Hyperaesthesia, synaesthesia, anaesthesia: recent South African visual and protest cultures as archives of affect"
- Title of Conference: Affective Archives: Theoretical and Methodological Explorations
- Date: June 22-23, 2017, London in the UK
- Lecturer: Dr R Makombe
- Title of paper: "Narratives of Corruption in Zimbabwe: A Critical Analysis of Selected Newspaper Stories in Post-2000 Zimbabwe"
- Title of Conference: The European Conference on Arts & Humanities
- Date: 12 July 2017
- Lecturer: Dr R Makombe
- Title of paper: "Narratives of corruption in Zimbabwe: a critical review of the Zimdef corruption scandal as portrayed in Zimbabwean newspapers"
- Title of Conference: The European Conference on Arts & Humanities
- Date: 11-12 July 2017
- Lecturer: Dr PO Aghoghovwia
- Title of paper: "Interiority as Citizenship in Teju Cole's Open City"
- Title of Conference: American Comparative Literature Association (ACLA) Conference
- Date: 6-9 July 2017, Utrecht, the Netherlands.
- Who: Dr PO Aghoghovwia
- Topic: "Publishing Your First Book"
- Institution: ACLA Publication Committee Panel
- Place: University of Utrecht, Utrecht, the Netherlands
- Date: 6 July 2017
- Lecturer: Dr K Ngara
- Title of paper: "Schizophrenic Urbanities Identity, Spectacle and the Absurd in Ivan Vladislavić's Early Short Stories"
- Title of Conference: African Literature Association Annual Conference 2017, Yale University, in the US
- Date: 14-17 June 2017

- Lecturer: Dr PO Aghoghovwia INTERNATIONAL VISITS - Institution: West African Research Centre (WARC), Dakar, Senegal. - Date: 1 April-31 May 2017 - Lecturer: Dr O Nyambi - Achievement: African Humanities Programme Fellowship OTHER ACADEMIC The African Humanities Programme is a Postdoctoral Fellowship awarded by the **ACHIEVEMENTS (E.G.** American Council of Learned Societies based in New York in the US. The Council **EDITORSHIPS, ELEC**sponsors fellows working in universities in Ghana, Nigeria, South Africa, Tanzania TION and Uganda to write (and publish) monographs/articles based on approved ON ACADEMIC ASSOresearch proposal in a period of 12 months. CIATION OR UNION): - Lecturer: Prof I Manase Achievement: Appointed as a member of the Brill Publishers' Cross/Cultures Series Advisory Board with effect from 1 September 2017.

3.5.10 DEPARTMENT OF GREEK, LATIN AND CLASSICAL STUDIES

Dr Thomas Kraus from Germany (a Research Fellow in the UFS department) who is partly affiliated with the University of Zurich, ,Switzerland, visited the Department of Greek, Latin and Classical Studies from 9–12 August The main reason for his visit was to have personal contact and some intensive working time with Rev Wynand Bezuidenhout, a student in the, department who is busy with his MA dissertation in Greek. Dr Kraus is his supervisor. The subject of the dissertation is "Arms, armour and siege craft of the Graeco-Roman world between 2000 BC and AD 200: the use **INTERNATIONAL VISITS** and translation of terminology". Dr Kraus also presented two lectures for students of the department during his visit. 10 August – "Miniature Books in (Late) Antiquity: books on the go with Classical and Christian texts" · 11 August – "Greek texts outside of the New Testament: why they are so important and what they can tell us today" His visit was a great success and he recently expressed his willingness to visit again – possibly to coincide with the graduation ceremony of Rev Bezuidenhout

3.5.11 DEPARTMENT OF HEBREW

INTERNATIONAL ACADEMIC ENGAGEMENTS (CONFERENCE ATTENDANCES, SCIENTIFIC VISITS – OUTGOING)	 Lecturers: Prof J Naudé, Prof C Miller-Naudé and Daniel J. Wilson Title of paper: "The Negative Existential Cycle in Ancient Hebrew" Title of Conference: "The Negative Existential Cycle from a Historical-Comparative Perspective" (Stockholm University) Date: 4 May 2017 Lecturer: Kevin Chau Title of Conference: "Ethnic Chinese Biblical Colloquium" Place: Madison, New Jersey, US Date: 13-15 January 2017 Lecturer: Grace J Park Topic: "Medical Commentaries and Comment(aries) on Medicine", Babylonian Medicine Workshop 5 Institution: May Planck Institute for the History of Science
	·
	- Date: 20 September 2017
OTHER ACADEMIC	
ACHIEVEMENTS (E.G.	- Lecturer: Grace J Park
EDITORSHIPS, ELECTION ON	- Achievement: Visiting researcher at the Babylonian Medicine Project
ACADEMIC ASSOCIATION OR	(BabMed), Freie Universität Berlin, Germany (from July-December 2017)
UNION):	

3.5.12 DEPARTMENT OF HISTORY

INTERNATIONAL ACADEMIC ENGAGEMENTS (CONFERENCE ATTENDANCES, SCIENTIFIC VISITS – OUTGOING)	 Lecturer: Dr M Oelofse Title of paper: "The knowledge and perceptions of undergraduate history students re South Africa's Truth and Reconciliation Commission" Title of Conference: 19th International Conference on Teaching, Education & Learning, Rome, Italy Date:7 June 2017 Lecturer(s): Drs M Oelofse, C Twala and Prof A Wessels Title of Conference: Annual Osaka University (Japan), University of the Free State and Jawahrlal Nehru University (India) Conference: "A view from the precipice: critical reflections on South Africa and Africa in the 21st century" Place: UFS, Bloemfontein
INTERNATIONAL VISITORS	Date: 13-14 February 2017 - Visitor: Dr Ama Biney - Institution: Independent Researcher/Scholar from London - Reason of visit: Guest Speaker at the "Political and liberation struggle History of the Free State, 1961-2012 Colloquium" organised by C Twala on behalf of the History Department (UFS) and the National Institute of Humanities and Social Sciences (NIHSS) in Bloemfontein - Date of visit: 20-26 February 2017

INTERNATIONAL VISITS	 Lecturer: Prof A Wessels Institution: University of Adelaide, Australia; State Library of South Australia, Adelaide Adelaide Place: Australian Defence Academy, Canberra; Library/Archive of the Australian War Memorial, Canberra; State Library of New South Wales, Sydney Date: 10-24 September 2017
INTERNATIONAL STAFF MOBILITY	- Dr Twala spent a month (October 2017) in the US and Russia – research and delivering papers

3.5.13 DEPARTMENT OF LINGUISTICS AND LANGUAGE PRACTICE

INTERNATIONAL ACADEMIC
ENGAGEMENTS (CONFERENCE
ATTENDANCES, SCIENTIFIC
VISITS – OUTGOING)

- -Dr K Riedel hosted an international conference with Prof Reine Meylaerts at the Catholic University of Leuven in Belgium on 1–2 June 2017. The title was: "Complexity thinking in translation studies: Methodological considerations"
- Dr Riedel was a plenary speaker at the 7th Annual Translation Studies Research Symposium of the Nida School of Translation Studies in New York on 20 October 2017

3.5.14 ODEION SCHOOL OF MUSIC

INTERNATIONAL ACADEMIC ENGAGEMENTS (CONFERENCE ATTENDANCES, SCIENTIFIC VISITS – OUTGOING)	 Lecturer: Mr L Snyman Title of Conference: Data to Dome Place:National Astronomy Observatory of Japan, Mitaka, Tokyo Date: 2-3 March 2017 Lecturer: Mr L Snyman Title of Conference: 17th International Festival of Science, Visualisation Place: Galaxcity, Adachi, Tokyo Date: 5-7 March 2017
INTERNATIONAL VISITS	 Lecturer: Dr G Nöthling Institution: University of Iowa (solo recital and gave masterclasses) Place: Iowa in the US Date: 8-10 March 2017 Lecturer: Dr J Beukes Institution: College of the Arts (gave masterclassesand concert) Place: Windhoek, Namibia Date: 31 March-7 April 2017 Lecturer: Mr A Engelbrecht Institution: College of the Arts (gave masterclasses and concert) Place: Windhoek, Namibia Date: 31 March-7 April 2017

INTERNATIONAL VISITORS	 Visitor(s): Prof Mag Pfatschbacher and Dr. Friedrich Pfatschbacher Institution: International Clarinet Association Reason of visit: Conducting workshop, clarinet masterclasses and conducting of FSYWE concert (Towers of Hope concert) Date of visit: 6-10 August 2017 Visitor: Prof Jacobus Kloppers Institution: Private Reason of visit: Sessions for foreseen book publication and work session with organists, artists and choir for Tribute to Kloppers concert held on 31 August 2017 Date of visit: 22 August 2017-5 September 2017 Visitor: Prof Sylvia Nannyonga-Tamusuza Institution: Makerere University, Uganda Reason of visit: South African tour after delivering keynote address at South African Society for Research in Music (SASRIM) conference Date of visit: 5-7 September 2017

3.5.15 ODEION STRING QUARTET

INTERNATIONAL VISITORS	 Visitor: Decoda Ensemble Institution: Stellenbosch University Reason of visit: To establish DISA, Decoda Institute South Africa Date of visit: 24-28 June
INTERNATIONAL ACADEMIC ENGAGEMENTS (CONFERENCE ATTENDANCES, SCIENTIFIC VISITS – OUTGOING	 Samson Diamond was invited as leader of the second violins of the Chineke Orchestra during two performances in August 2017 at the Snape Maltings in Aldeburgh in Suffolk and at the BBC Proms at the Royal Albert Hall in London, UK. Sharon de Kock was invited to perform the Beethoven Violin Concerto with Prof Eduardo Carpintyero conducting the Meritorious Autonomous University of Puebla (BUAP) Symphony Orchestra in Puebla, Mexico, and gave masterclasses to young violinists at the university and the Conservatorio de Musica in Zacatlan, Mexico during June 2017. Anmari van der Westhuizen visited the Blackmore International Academy in Berlin attending cello masterclasses given by the internationally renowned cellist, Professor Maria Kliegel from 12-16 December 2017. Anmari also attended the farewell gala evening held for Prof Maria Kliegel at the Hochschule Koln in Cologne on 22 December 2017.
INTERNATIONAL VISITS	 The Odeion String Quartet (OSQ) played concerts with international guest artists: Florian Uhlig, a pianist from Germany; Tim Kliphuis, jazz-violinist from the Netherlands and Ilse Schumann, a pianist from Australia. The OSQ also performed with Kontras String Quartet, quartet-in-residence from Western Piedmont Symphony in North Carolina, in the US, during July 2017 at the Vrystaat Arts Festival and invited the Fitzroy String Quartet (UK) as international guests to their chamber music workshop presented at UFS from 29 September-3 October.

3.6.16 OFFICE OF THE DEAN: FACULTY OF THE HUMANITIES

JOURNAL ARTICLES PUBLISHED / ACCEPTED FOR PUBLICATION	 Houtzager, N., Lowie, W., Sprenger, S., & de Bot, C. (2017). A bilingual advantage in task switching? Age-related differences between German monolinguals and Dutch-Frisian bilinguals. Bilingualism: Language and Cognition, 20(1), 69-79. DOI: 10.1017/S1366728915000498 Lowie, W. (2017). Emergentism: wide ranging theoretical framework or just one more meta-theory? Recherches en didactique des langues et des culture, Les cahier de l'Acedle, 14(1). Lowie, W., van Dijk, M., Chan, H., & Verspoor, M. (2017). Finding the key to successful L2 learning in groups and individuals. Studies in Second Language Learning and Teaching, 7(1), 127-148. DOI: 10.14746/ssllt.2017.7.1.7 De Wolf, S., Smit, N., & Lowie, W. (2017). Influences of early English language teaching on oral fluency. ELT Journal, ccw115. DOI: 10.1093/elt/ccw115 Verspoor, M., Lowie, W., Chan, H., & Vahtrick, L. (2017). Linguistic complexity in second language development: variability and variation at advanced stages. Recherches en didactique des langues et des culture, Les cahier de l'Acedle, 14(1).
INTERNATIONAL ACADEMIC ENGAGEMENTS (CONFERENCE ATTENDANCES, SCIENTIFIC VISITS – OUTGOING)	 Lecturer(s): Marilize Pretorius, Elke Ruelens (University of Antwerp in the Netherlands), Christine Fourie (University of Stellenbosch) Title of paper: (Workshop) Scenarios for Teaching and Learning with "Nursing on the Move" Title of Conference: Healthcare Communication in Intercultural Settings: From Challenge to Success Date: 7 June 2017 - Vienna, Austria Lecturer: Albert Weideman Title of Conference: Language Testing Research Colloquium (LTRC 2017) (Annual conference of the International Language Testing Association (ILTA) Place: Bogota, Colombia Date: 18-22 July Lecturer: Marilize Pretorius Topic: "Teaching and Training with NoM: Perspective Taking" Institution: International training conference hosted by Training2000 in conjunction with the University of Antwerp as part of a European Project (Erasmus+) Place: Fano, Italy Date: 25 April 2017 Lecturer(s): Elke Ruelens (University of Antwerp) and Marilize Pretorius Topic: "Supporting online learning" Institution: International training conference hosted by Training2000 in conjunction with the University of Antwerp as part of a European Project (Erasmus+). Place: Fano, Italy Date: 26 April 2017

INTERNATIONAL ACADEMIC

ENGAGEMENTS (CONFERENCE

ATTENDANCES, SCIENTIFIC

VISITS – OUTGOING)

3.5.17 DEPARTMENT OF POLITICAL STUDIES AND GOVERNANCE

- Lecturer: Dr I Gouws
- Title of paper: "When we lose patience with democracy"
- Title of Conference: A view from the precipice: Critical reflections on South Africa and Africa in the 21st century, hosted by the Centre for African Studies, Jawaharlal Nehru University (India), UFS Department of Political Studies and Governance, and the Osaka School of International Public Policy, Osaka University (Japan).
- Date: 13-14 February 2017, Bloemfontein
- Lecturer(s): Ms B Naude
- Title of paper: "The Nelson Mandela factor: South Africa as reparative-charismatic leader of the Global South"
- Title of Conference: A view from the precipice: Critical reflections on South Africa and Africa in the 21st century, hosted by the Centre for African Studies, Jawaharlal Nehru University (India), UFS Department of Political Studies and Governance, and the Osaka School of International Public Policy, Osaka University (Japan).
- Date: 13-14 February 2017, Bloemfontein
- Lecturer: Prof T Neethling
- Title of paper: "The South African Navy and regional maritime (in) security: Diplomatic obligations and political-economic challenges"
- Title of Conference: A view from the precipice: Critical reflections on South Africa and Africa in the 21st century, hosted by the Centre for African Studies, Jawahrlal Nehru University (India), UFS Department of Political Studies and Governance, and the Osaka School of International Public Policy, Osaka University (Japan)
- Date: 13-14 February 2017, Bloemfontein
- Lecturer: Prof H Solomon
- Topic: "The role of non-state actors in Africa's peace and security"
- Institution: Co-hosted by UFS Department of Political Studies and Governance, Jawahrlal Nehru University, India and the Osaka School of International Public Policy, Japan
- Place: Bloemfontein -
 - Date: 14 February 2017
- Lecturer: Dr E Coetzee
- Title of paper: "Trust no-one? Democratic peace theory meets 007"
- Title of Conference: 2017 Conference of the World International Studies Committee (Fifth Global International Studies Conference)
- Date: 1-3 April 2017
- Place: Taipei, Taiwan
- Lecturer: Prof T Neethling
- Title of paper: "South Africa and regional maritime security: Interests, objectives, policies and challenges"
- Title of Conference: 2017 Conference of the World International Studies Committee (Fifth Global International Studies Conference)
- Date: 1-3 April 2017
 - Place: Taipei, Taiwan

- Lecturer: Prof H Solomon
- Title of paper: "The failure of conflict resolution initiatives in Africa: Lessons from the Congo"
- Title of Conference: On Preventive Diplomacy
- Date: 27 April 2017
- Place: Osaka University, Japan
- Lecturer: Prof T Neethling
- Title of paper: "The Dilemma Relating to the Modernisation of the SANDF and its External Role: From Defence Review 1998 to Defence Review 2015"
- Title of Conference: International Political Science Association Research Committee on Democratisation and the Military
- Place: University of Christchurch, New Zealand
- Date: 4-5 July 2017
- Lecturer: Prof H Solomon
- Title of paper: "Ten Painful Lessons from Counter-Terrorism Experiences in Africa"
- Title of Conference: National Counter-Terrorism Strategies in Africa
- Place: Kampala, Uganda
- Date: 24 August 2017
- Lecturer: Prof H Solomon
- Title of paper: "Somalia's Al Shabaab: Between Clan, Islam and Nation
- Title of Conference: Peace and Conflict Resolution Conference, hosted by Tomorrow People Organization
- Place: Bangkok, Thailand
 - Date: 28 November 2017
- Lecturer: Prof H Solomon
- Topic: "Critical reflections of conflict resolution in the Democratic Republic of the Congo
- Institution: Centre for Africa Studies, Jawahrlal Nehru University
- Place: New Delhi, India
- ndia Date: 27 March 2017
- Lecturer: Prof H Solomon
- Topic: "The evolution of Islamic State and its strategic implications"
- Institution: Centre for West Asian Studies, Jawarhlal Nehru University
- Place: New Delhi, India -
- Date: 28 March 2017
- Lecturer: Dr A Botha
- Topic: "Journey Mapping Aggregate Report"
- Institution: United Nations Development Programme
- Place: Nairobi, Kenya
- Date: 27-28 April 2017
- Lecturer: Dr A Botha
- Topic: "Rehabilitation and Reintegration in Somalia"
- Place: NATO Terrorism Experts Conference, Ankara, Turkey
- Date: 24-25 October 2017.
- Conference paper delivered: "The role prisons played in the radicalisation process: UNDP Radicalisation in Africa Project, UNDP/UNODC conference on Preventing Violent Extremism in Prisons"
- Place: Amman, Jordan
- Date: 7-8 November 2018.

INTERNATIONAL ACADEMIC

ENGAGEMENTS (CONFERENCE

	- Lecturer: Dr A Botha
	- Topic: "Somalia's Al Shabaab: Between Clan, Islam and Nation"
	- Conference: G20-International Conference titled, Preventing
	Radicalisation Towards Resilient Societies
	- Date: 13-15 November 2018
	- Lecturer: Dr A Botha
	- Topic: "Terrorism in Africa"
	- Institution: African Centre for Strategic Studies: 2017 National
	Counterterrorism Strategies in Africa workshop
	- Place: Kampala, Uganda
	- Date: 21-25 August 2017
	- Lecturer: Dr A Botha
	- Topic: "Al-Shabaab in Somalia"
INTERNATIONAL ACADEMIC	- Institution: Finn Church Aid
ENGAGEMENTS (CONFERENCE	- Place: Nairobi, Kenya
ATTENDANCES, SCIENTIFIC	- Date: 29 April-1 May 2017
VISITS – OUTGOING)	- Lecturer: Dr A Botha
visits cordelite)	- Topic: Launch of the UNDP report titled, "Journey to Extremism in Africa;
	Drivers, Incentives and the Tipping Point for Recruitment"
	- Institution: United Nations Headquarters
	- Place: New York
	- Date: 5-8 September
	- Lecturer: Ms A Vermeulen
	- Topic: "Blink and you'll miss it. Does the world miss the destruction of
	Africa's heritage sites?"
	- Name of Conference: Historical Heritage and Security Conference, hosted
	by the Osaka School of International Public Policy in collaboration with UFS
	and Mzuzu University in Malawi
	,
	- Place: Osaka, Japan
	- Date: 15 December 2017
	- Lecturer: Prof H Solomon
	- Institution: Jawahrlal Nehru University
INTERNATIONAL VISITS	- Place: New Delhi, India
	- Date: March 2017
	- Lecturer: Dr A Botha
	- Institution: United Nations Development Programme - Place: Nairobi, Kenya
	- Prace. Namobi, Kenya - Date: 26 April-1 May 2017
	- Visitor(s): Prof. Ajay Dubey, Centre for African Studies, Jawahrlal Nehru University, India; Prof. JM Moosa, Centre for African Studies, Jawahrlal
INTERNATIONAL VISITORS	Nehru University, India; Prof. Virgil Hawkins, Osaka University, Japan.
	, , , , , , , , , , , , , , , , , , , ,
	Institution: Department of Political Studies and Governance, UFSReason of visit: Attending a conference hosted by the department
	- Date of visit: 13-14 February 2017
	- Nate of Albit. 12-14 Leningly 501/

INTERNATIONAL STAFF AND STUDENT MOBILITY	 Ms A Vermeulen and Mr M Mahlakeng Attend a conference on Historical Heritage and Security in Osaka, Japan, hosted by the Osaka School of International Public Policy, in collaboration with the University of the Free State in South Africa and Mzuzu University in Malawi, 15 December 2017.
INTERNATIONAL RESEARCH COLLABORATIONS, INCLUDING CO-AUTHORED PAPERS	 -Prof H Solomon Collaboration with Prof. Stephen Emerson of the National Defence University in Washington, DC, with regard to a manuscript on African security which is to be published by Manchester University Press in early 2018.

3.5.18 DEPARTMENT OF PSYCHOLOGY

	- Lecturer(s): Naidoo, P., Fouché, Paul (J.P.), & Osorio, D.
	- Title of paper: "Musician writer and advocate for peace: A psychosocial
	developmental psychobiography of John Lennon"
	- Title of Conference: Pan African Psychology Congress / PAPU
	- Date: 18-22 September 2017
	- Lecturer(s): Fouché, Paul (J.P.), Nel, Carla, & Van Niekerk, R.
	- Title of paper: "The spiritual wellness of anti-apartheid South African
	Parliamentarian: A psychobiographical case study"
	- Title of Conference: Pan African Psychology Congress / PAPU
	- Date: 18-22 September 2017
	- Lecturer(s): Fouché, Paul (J.P.), Holz, T. & Walker, S.
INTERNATIONAL ACADEMIC	- Title of paper: "The psychosocial developmental trajectory-method in
ENGAGEMENTS	psychobiography: Application to Roald Dahl"
(CONFERENCE	- Title of Conference: Pan African Psychology Congress / PAPU
ATTENDANCES,	- Date: 18-22 September 2017
SCIENTIFIC VISITS	- Lecturer(s): Fouché, Paul (J.P.), Rogers, Codi, & Naidoo, P.
- OUTGOING)	- Title of paper: "A psychobiography of Robert Hansen: 'The Butcher Baker'"
,	- Title of Conference: Pan African Psychology Congress / PAPU
	- Date: 18-22 September 2017
	- Lecturer(s): Van Niekerk, R., Prenter, T. & Fouché, Paul (J.P.)
	- Title of paper: "The career development of Ahmed Kathrada"
	- Title of Conference: Pan African Psychology Congress / PAPU
	- Date: 18-22 September 2017
	- Lecturer(s): Naidoo, P., Fouché, Paul (J.P.), & Osorio, D.
	- Title of paper: "Musician writer and advocate for peace: A psychosocial
	developmental psychobiography of John Lennon"
	- Title of Conference: Pan African Psychology Congress / PAPU
	- Date: 18-22 September 2017
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- Lecturer(s): Fouché, Paul (J.P.), Nel, Carla, & Van Niekerk, R.
- Title of paper: "The spiritual wellness of anti-apartheid South African Parliamentarian: A psychobiographical case study"
- Title of Conference: Pan African Psychology Congress / PAPU
- Date: 18-22 September 2017
- Lecturer(s): Fouché, Paul (J.P.), Holz, T. & Walker, S.
- Title of paper: "The psychosocial developmental trajectory-method in psychobiography: Application to Roald Dahl"
- Title of Conference: Pan African Psychology Congress / PAPU
- Date: 18-22 September 2017
- Lecturer(s): Fouché, Paul (J.P.), Rogers, Codi, & Naidoo, P.
- Title of paper: "A psychobiography of Robert Hansen: "The Butcher Baker'"
- Title of Conference: Pan African Psychology Congress / PAPU
- Date: 18-22 September 2017
- Lecturer(s): Van Niekerk, R., Prenter, T. & Fouché, Paul (J.P.)
- Title of paper: "The career development of Ahmed Kathrada"
- Title of Conference: Pan African Psychology Congress / PAPU
- Date: 18-22 September 2017
- Lecturer: Dr L Nel
- Title of paper: "Hope being operationalized: Psychology students' personal and theoretical understanding of the construct of Hope"
- Title of Conference: European Psychology Learning and teaching Conference
- Date: 18-20 September
- Place: Salzburg, Austria
- Lecturers: Smith, T., & Naudé, L.
- Title of paper: "Me, myself and my spirituality: Adolescents' lived experiences regarding spiritual identity development", Name of Conferenec: International Society for Research on Identity, 24th Annual Conference
- Place: Groningen, The Netherlands
- Date: May 2017
- Lecturers: Jansen van Vuuren, C., & Naudé, L.
- Title: "Being South African while living in Qatar: Adolescents' reflections on ethnic identity development"
- Conference: International Society for Research on Identity, 24th Annual Conference
- Place: Groningen, The Netherlands
- Date: May 2017
- Lecturers: Du Toit, N., & Naudé, L.
- Title: "Who am I? Psychology students' journeys towards self-authorship
- Conference: International Society for Research on Identity, 24th Annual Conference
- Place: Groningen, The Netherlands
- Date: May 2017.

INTERNATIONAL **ACADEMIC ENGAGEMENTS** (CONFERENCE ATTENDANCES, SCIENTIFIC VISITS - OUTGOING)

- Lecturers: Fick, L., & Naudé, L.
- Title: "Spiritual identity development of emerging adults in South Africa: Experiences of post-graduate psychology students
- Conference: 8th Conference on Emerging Adulthood
- Date: Washington, DC, November 2017
- Lecturer: Naudé, L.
- Title: "Being born free: The third decade of life for a country and its emerging adults"
- Conference: 8th Conference on Emerging Adulthood
- Place: Washington, DC
- Date: November 2017.
- Lecturers: Adams, B., & Naudé, L.
- Title: "Identity, inclusion, and psychosocial functioning of emerging adults"
- Conference: 8th Conference on Emerging Adulthood, Place: Washington, DC
- Date: November 2017.
- Lecturer: Dr L Nel
- Title of Conference: European Psychology Learning and Teaching Conference.
- Place: Salzburg, Austria
- Date: 18-20 September

INTERNATIONAL RESEARCH COLLABORATIONS, **INCLUDING CO-AUTHORED PAPERS**

Dimitrova, R., Musso, P., Naudé, L., Zahaj, S., Solcova, I. P., Stefenel, D., Blaga, L., Uka, F., Jordanov, V., Jordanov, E., & Tavel, P. (2017). National collective identity in transitional societies: Salience and relations to life satisfaction for youth in South Africa, Albania, Bulgaria, the Czech Republic, Kosovo and Romania. Journal of Psychology in Africa, 27(2), 150-158. http://dx.doi.org/10 .1080/14330237.2017.1301722

3.5.19 DEPARTMENT OF SOCIAL WORK

INTERNATIONAL STAFF AND STUDENT MOBILITY

- -Dr Björn Jonsson School of Health and Welfare, Jönköping University Sweden
- Prof Anna Faul Executive Director and Associate Dean, Institute for Sustainable Health & Optimal Aging, Kent School of Social Work, University of Louisville, Louisville, Kentucky, US.
- -Linnaeus-Palme partnership:
- * Sweden: Exchange: Two Swedish students, the first semester, and one Swedish student, the second semester, registered for first- and secondyear social work modules at the Department of Social Work, UFS.
- * South Africa: Exchange: Two South African students from the Department of Social Work to the School of Health and Welfare during the second semester 2017

(CONFERENCE ATTENDANCES. **SCIENTIFIC VISITS** - OUTGOING)

INTERNATIONAL ACADEMIC

ENGAGEMENTS

NEW INTERNATIONAL AGREEMENTS

- Linnaeus-Palme partnership (renewal for another year)
- A project on cyber bulling between the Department of Social Work, Dr Roelf Reyneke, UFS and Vrije Universiteit, Brussels, Gracienne Lauwers and EduLaw, Paul von Caesbroek. Exchange workshops will be presented in 2018 between South Africa and Belgium, such as legal aspects, trauma social issues, etc.

PENDING INTERNATIONAL AGREEMENTS / INFORMAL **COLLABORATIONS**

Possibility for another year renewal of the Linnaeus-Palme partnership will be evaluated during the end of the first semester in 2018.

INTERNATIONAL VISITORS (INCOMING)

INTERNATIONAL ACADEMIC

ENGAGEMENTS (CONFERENCE

ATTENDANCES, SCIENTIFIC

VISITS – OUTGOING)

- Gracienne Lauwers – Vrije Universiteit Brussels/EduLaw Paul von Caesbroek EduLaw http://edulaweu.eu/ (Law and Rights Modules in Teacher Training Programmes, Erasmus+ Programme 2016-2019)

3.5.20 DEPARTMENT OF SOCIOLOGY

- Lecturer: Prof A Pelser
- Title of paper: "National parks and poverty alleviation in South Africa: Lessons from an integrated conservation and development initiative"
- Title of Conference: 11th Annual International Conference on Sociology
- Date: 1-4 May 2017
- Place: Athens. Greece
- Lecturer: Sethulego Matebesi
- Title of paper: "Yearning for basic municipal services: Evolution and impact of a decade of community protests in post-apartheid South Africa"
- Title of Conference: Joint International Community Development Conference hosted by The Aotearoa Community Development Association and the International Association for Community Development Date: 15–17 February 2017
- Place: Auckland, New Zealand
- Lecturer: Dr S Matebesi
- Title of paper: "Civic response to municipal service provision: Dynamics of community protests in South Africa"
- Title of Conference: International Conference for Social Sciences and Humanities
- Date: 20-23 June 2017
- Place: Venice. Italy
- Lecturer: Prof A Pelser
- Title of paper: "Improving human well-being through conservation initiatives: A South African experience"
- Title of Conference: International Conference for Social Sciences and Humanities
- Date: 20-23 June 2017
- Place: Venice, Italy

W Olivier [NMMU]) - Title of paper: "Understanding mathematics teachers limited use of a

Lecturer(s): André Pelser (with G Stols, R Ferreira, A van der Merwe [UP] and

- technological resource"
- Title of Conference: 9th Annual International Conference on Education and New Learning Technologies (EDULEARN 17)
- Date: 3-5 July 2017
- Place: Barcelona, Spain
- Lecturer: Prof Jan K Coetzee
- Title of paper: "Subjective meaning: narrating fate in sociology and art"
- Title of Conference: The VIIIth Conference of the European Society for the Study of Symbolic Interaction. Studying Everyday Life: Generic Dimensions of Interactionist Inquiry
- Date: 4-8 July 2017
- Place: Lodz. Poland.
- Lecturer(s): Prof A Pelser and Dr S Matebesi
- Title of Conference: International Conference for Social Sciences and Humanities
- Place: Venice, Italy
- Date: 20-23 June 2017
- Lecturer: Prof Jan K Coetzee
- Topic: Seminar to students in Department of Sociology, "Narratives of belonging"
- Institution: University of St Gallen
- Place: Switzerland
- Date: 16 May 2017
- Lecturer: Prof Jan K Coetzee
- Topic: Discussions with members of the Qualitative Sociology Network on The Narrative Study of Lives
- Institution: University of St Gallen
- Place: Switzerland
- Date: 15-18 May 2017
- Lecturer: Prof Jan K Coetzee
- Topic: Seminar to members of the Department of Sociology on "Transformation and identity"
- Institution: University of Agder
- Place: Kristiansand, Norway
- Date: 24 May 2017
- Lecturer: Prof Jan K Coetzee
- Topic: Discussions with the Research Network of Professor Anne Ryen on Narrative Research
- Institution: University of Agder
- Place: Kristiansand, Norway
- Date: 22-26 May 2017

INTERNATIONAL ACADEMIC ENGAGEMENTS (CONFERENCE ATTENDANCES, SCIENTIFIC VISITS – OUTGOING)

- Lecturer: Prof Jan K Coetzee - Institution: Institute of Sociology, University of St Gallen - Place: St Gallen, Switzerland - Date: 15-19 May 2017 **INTERNATIONAL VISITS** - Lecturer: Prof Jan K Coetzee - Institution: Department of Sociology, University of Agder - Place: Kristiansand, Norway - Date: 22-27 May 2017

3.5.21 DEPARTMENT OF SOUTH AFRICAN SIGN LANGUAGE

INTERNATIONAL ACADEMIC **ENGAGEMENTS (CONFERENCE** ATTENDANCES, SCIENTIFIC VISITS – OUTGOING)

- Lecturer: Ms S Lombaard

- Topic: Deaf Education in South Africa

- Institution: Botswana Deaf Association and Botswana Government

- Place: Gaborone, Botswana

- Date: 1-3 June 2017

3.5.22 UNIT FOR LANGUAGE FACILITATION AND EMPOWERMENT

PENDING INTERNATIONAL AGREEMENTS / INFORMAL COLLABORATIONS	NRF project together with Université du Namur, Wallonië, Belgium
INTERNATIONAL ACADEMIC ENGAGEMENTS (CONFERENCE ATTENDANCES, SCIENTIFIC VISITS – OUTGOING)	Staff members of the Unit attended international conferences in Italy and France (July 2017), Nambia (September 2017) and Belgium (November 2017)
INTERNATIONAL RESEARCH COLLABORATIONS, INCLUDING CO-AUTHORED PAPERS	The Unit is closely working with international Research Fellows (Israel, Italy, Australia, Canada) as well as with the universities Bar Ilan and Tel Aviv on collaborative projects
INTERNATIONAL VISITORS (INCOMING)	Prof Luc Vandoorslaer from the Catholic University of Leuven visited the Unit during February 2017. Dr Jeroen Darqueness and Laurence Meurant from the Université du Namur visited the Unit during May 2017

3.5.23 UNIT FOR PROFESSIONAL TRAINING AND SERVICE IN THE BEHAVIOURAL SCIENCES

INTERNATIONAL ACADEMIC	- Lect
ENGAGEMENTS (CONFERENCE	- Title
ATTENDANCES, SCIENTIFIC	- Plac
VISITS – OUTGOING)	- Date

cturer: Prof S Walker

le of Conference: ACBS World Conference 15

ce: Seville, Spain

te: 22-25 June 2017

INTERNATIONAL STAFF AND STUDENT MOBILITY	-UNIBS welcomed Ms Amina Ryffranck to the unit in September 2017. Amina is a master's degree student in School Psychology at KU Leuven, Belgium. UNIBS has been accredited by the latter university as an internship site for their master's degree students in this programme. She will complete her internship at the end of April 2018.
NEW INTERNATIONAL AGREEMENTS	 A faculty level Implementation Programme in terms of the MoU entered into and between the UFS Faculty of Humanities, and the Faculty of Psychology and Educational Sciences, KU Leuven, Belgium, in 2016, was formally agreed upon and duly authorised in July 2017. According to this Implementation Programme (with specific reference to the internship exchange programme at UNIBS) a framework for further cooperation through both educational and academic exchanges was established. Both parties affirmed their intent to promote international academic, cultural and scientific exchange. Ms Silke Grossen's application for a joint PhD (Psychology) degree was considered and duly accepted by the academic authorities of both UFS and KU Leuven, Belgium. Her promoters are: Prof Marlies Lacante (KUL and research fellow UFS) and Prof Adelene Grobler (UNIBS, UFS)
PENDING INTERNATIONAL AGREEMENTS / INFORMAL COLLABORATIONS INTERNATIONAL ACADEMIC ENGAGEMENTS (CONFERENCE ATTENDANCES, SCIENTIFIC VISITS – OUTGOING)	-Prof Grobler was accepted by the academic authorities of the Katholieke Universiteit Leuven, Belgium, for a short study visit (30 August-12 September) under the VLIR-UOS programme Global Minds. She was invited as a Visiting Fellow in the Faculty of Psychology and Educational Sciences at this university.
INTERNATIONAL RESEARCH COLLABORATIONS, INCLUDING CO-AUTHORED PAPERS CO-AUTHORED PAPERS	 Grossen, S., Grobler, A.A., & Lacante, M. (2017). Today's Choices Shape Tomorrow's Successes: A Career Competencies Intervention in a township school, in B. Alvarez, B. A. Irving, M.F. Sanchez & B. Malik (Eds). Promoting Equity through Guidance: practice and research around the World - Promover la equidad a través de la Orientación: iniciativas prácticas y de investigación en el mundo. Madrid: UNED. In Press. -Grossen, S., Grobler, A.A., & Lacante, M. (2017). Repeated retention or dropout? Disputing Hobson's choice in South African township schools. South African Journal of Education, 37(2), 1-11.
INTERNATIONAL VISITORS (INCOMING)	Dr Elliott Connie (Texas, in the US) 10-12 July 2017

3.6 FACULTY OF LAW

INTERNATIONAL OFFICIAL
DELEGATION VISITS
(INCOMING)

Io data

STUDENT MOBILITY: OUTGOING STUDENT MOBILITY:

J-M McDonald, CMD Rawson, M Martins, HC Haasbroek, L Steenkamp and M Prinsloo, undergraduate and postgraduate students in the Faculty, participated in the 24th annual Willem C Vis Moot Court Competition in Vienna. This competition was initiated by former Secretaries of the United Nations Commission on International Trade Law. The team was accompanied by two coaches, Prof Elizabeth Snyman-Van Deventer and Dr Manie Moolman, both from the Faculty of Law.

INCOMING STUDENT MOBILITY:

Prof Shaun de Freitas served as co-promoter for a doctoral candidate registered for a joint Doctor of Law at the Universiteit Antwerpen and the Vrije Universiteit van Brussel (Student: Dr. Georgia du Plessis – 2017). Served as co-promoter with Prof G Lauwers (Vrije Universiteit van Brussel) and Prof D Vanheule (Universiteit Antwerpen).

STAFF MOBILITY (INCOMING)

No data

OUTGOING STAFF MOBILITY: GUEST LECTURING

- Dr Denine Smit visited the University of Uppsala and the University of Stockholm in Sweden in September 2017. She also visited the major trade union in Stockholm. The purpose of the visit was to further research workplace bullying in the international context.
- Dr Mariette Reyneke took part in an internship in Belgium from 23 September-1 October 2017 on "Introducing Modules on Law and Rights in Programmes of Teacher Training and Educational Sciences"
- Dr Reyneke was part of the jury for the evaluation and public defence of a PhD student on 29 August and 29 September 2017 respectively. This was a joint PhD by the Vrije Universiteit, Brussel and the University of Antwerp.
- Mr Albert Nel, lecturer at the Faculty of Law, is enrolled for a PhD in International Criminal Law Theory at the University of Birmingham under the supervision of Prof Robert Cryer and Dr Bosko Tripkovic.
- Ms Laetitia Fourie is currently busy with her PhD at the University of Leiden in the Netherlands under the supervision of Prof Barentsen and Prof Boot. She writes on the reasonable accommodation of employees with disabilities.

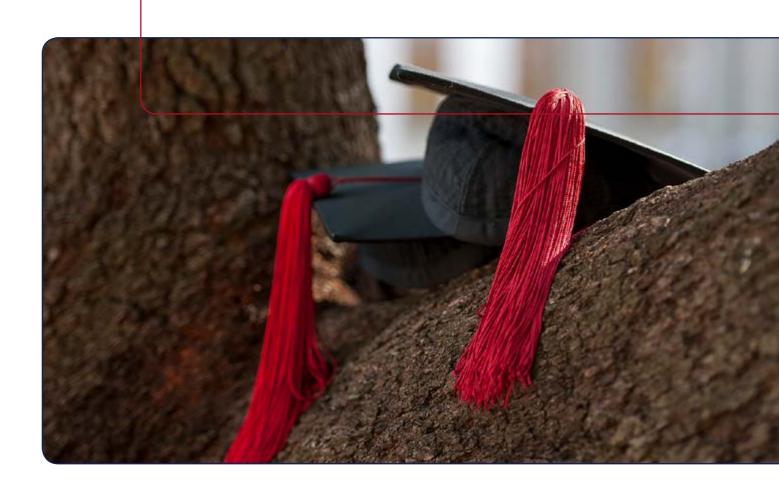
INCOMING STAFF MOBILITY:

- The Faculty hosted Prof Gracienne Lauwers from the Vrije Universiteit Brussels from 27 November -- 3 December 2017.
- In 2017 Prof Mwiza Nkatha from the University of Malawi was a visiting postdoctoral scholar hosted in the Free State Centre for Human Rights.
- The Free State Centre for Human Rights appointed a number of internationally renowned research fellows.

CONFERENCE ATTENDANCE

ACADEMIC ENGAGEMENTS

- Ms Gerda du Toit, Dr Denine Smit, Mr Khanya Motshabi, Ms Leani van Niekerk and Mr Pieter Brits all presented conference papers at the 2017 Annual Conference of the Southern African Law Teachers Association held in January 2017 in Swakopmund, Namibia.
- As members of the Industrial Law Society of the United Kingdom, Ms Maralize Conradie, Mr Grey Stopforth, Dr Denine Smit, Mr Quintin Cilliers and Ms Laetitia Fourie attended the annual Industrial Law Society conference in Oxford during September 2017.
- Prof Shaun de Freitas delivered a paper for the LARSN Conference on Law and Religion, 19 May 2017, Centrum voor Religie en Recht, Vrije Universiteit van Amsterdam titled "A critique of Ronald Dworkin's relegation of religion against the background of the accommodation of 'passive' forms of religious expression in public spaces".
- Ms Laetitia Fourie attended the International Labour Organisation's Decent Work Conference in Geneva, Switzerland on 3-5 July 2017.



INTERNATIONAL
PARTNERSHIP
ENGAGEMENTS (STAFF
AND STUDENT MOBILITY)

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3.7 SUPPORT SERVICE ENTITIES

3.7.1 INSTITUTIONAL ADVANCEMENT

Funding: International funding secured by UFS staff for projects not aimed at internationalisation.

SOURCE	AMOUNT	PURPOSE	UFS CONTACT PERSON
Kresge Foundation (US)	R1,33 million	IA Development	Annamia van den Heever
Kresge Foundation (US)	R1.4 million	Siyaphumelela (CTL)	Francois Strydom
Moshal Scholarship Program (UK)	R3 million	Bursaries	Annamia van den Heever
Andrew Mellon Foundation (US)	R16,6 million (three to four years since 2016)	Humanities & Art Projects	Annamia van den Heever
Joffe Charitable Trust (UK)	R475 000	Schools Partnership Project	Carol Bunn
Michael & Susan Dell Foundation (US)	R472 000	Bursaries	Patricia Lamusse
Ms Abbe Levin (US)	\$35 000	Bursaries	Patricia Lamusse
Silicon Valley Community Foundation (US)	R9 239	Bursaries	Cynthia Miller-Naudé

Funding secured by the International Office

SOURCE	AMOUNT	PURPOSE	UFS CONTACT PERSON
Academic	€3000	Promotion of credit mobility within Europe, and	Mr Zenzele Mdletshe or
Cooperation		to assist with reinforcing exchange links within	Ms Chevon Jacobs
Association (ACA)		existing and new university partnerships.	

Academic Engagements:

Ms Annamia van den Heever (Director: Institutional Advancement) attended the CASE Seminar on Data Management Essentials which was held at the Business School of Strathmore at the University, in Kenya from 5-6 July 2017

Ms Patricia Lamusse (Deputy Director: Institutional Advancement) and Ms Helen Namponya (Alumni Officer) attended the CASE Annual Europe Conference in Birmingham from 28 August-1 September 2017.

Alumni Data: Outside South Africa as extracted from DevMan Customer Relations System

COUNTRY	NUMBER OF ALUMNI	PERCENTAGE OF ALUMNI
Lesotho	2150	1.91
Namibia	635	0,57
Zimbabwe	206	0,18
Botswana	136	0,12
Kenya	82	0,07
Zambia	66	0,06
Swaziland	48	0,04
United Kingdom	39	0,03
Australia	24	0,02
Canada	24	0,02

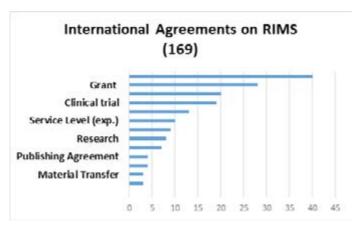




SECTION 4: DATA ON INTERNATIONALISATION

4.1 DATA ON RESEARCH INTERNATIONALISATION AS EXTRACTED FROM THE RIMS SYSTEM

GRAPH 1



GRAPH 2

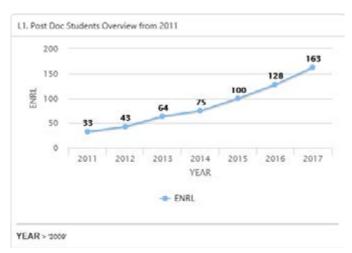


NOTE: Graphs 1 and 2 depict the UFS involvement in international research projects, international research networks and the acquisition of international research funding for the period 2015–2017.

4.1.2. DATA ON POSTDOCTORAL FELLOWS AT UFS

4.1.2.1. GRAPH 3:

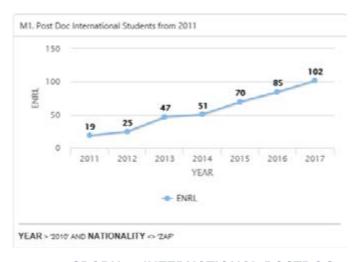
POSTDOCTORAL OVERVIEW PERIOD 2011-2017



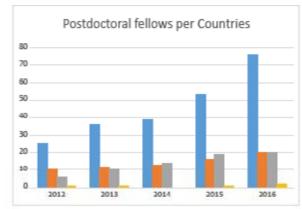
Note: Graphs 3, 4 and 5 depict a dramatic increase of 80% in the number of postdoc students affiliated to UFS for the 2011-2017 period. Of the 163, 102 are international postdocs, which constitute 63% of the postdoc population at UFS, most of whom hail from the African continent.

4.1.2.2 GRAPH 4:

POSTDOC INTERNATIONAL



4.1.2.3. GRAPH 5: INTERNATIONAL POSTDOC BREAKDOWN PER COUNTRY



4.2. DATA FROM SCIVAL DATABASE

According to the data on the SciVal database, the UFS, for the period 2014–2017, has been collaborating with 1253 institutions worldwide and co-authored 1751 publications.

WORLD REGION	NO OF PUBLICATIONS
North America	281
South America	63
Europe	516
Middle East	60
Africa	118
Asia Pacific	215
TOTAL	1253

Below is an illustration of the international, national, and institutional collaboration for the period 2014-2017.

COLLABORATION	%	PUBLICATIONS	CITATIONS	CITATIONS PER PUBLICATION	FIELD-WEIGHTED CITATION IMPACT
International collaboration	40,9%	1343	6230	4.6	1.55
Only national collaboration	15,4%	504	1347	2.7	0.80
Only institutional collaboration	24,6%	807	1571	1.9	0.60
Single authorship (no collaboration)	19,2%	630	722	1.1	0.68

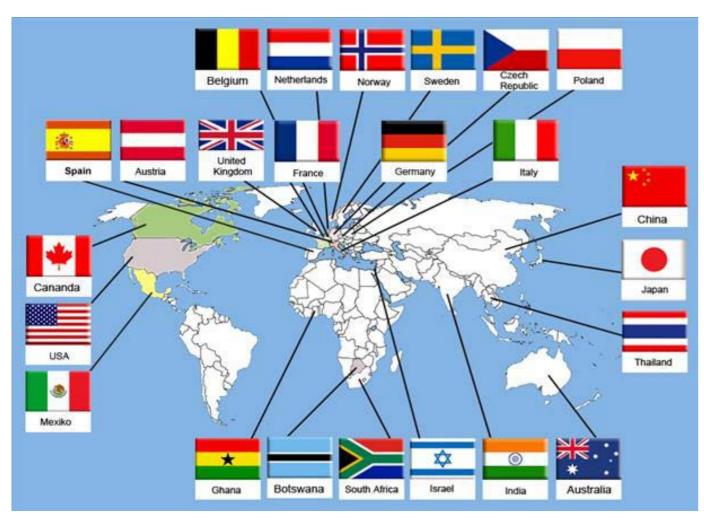
NOTE: See attached annexure for a comprehensive list of all the institutions worldwide that are currently collaborating with UFS.

4.3. STATISTICAL INFORMATION ON EXISTING AGREEMENTS

The scope of institutional agreements gernerally allow for:

- 1. Student (UG and PG) and staff exchanges
- 2. Organisation of joint research programmes and activities
- 3. Organisation of joint conferences, seminars, symposia etc.
- 4. Exchange of publications for scientific, scholarly, teaching and information purposes

In the period under review, the UFS has 78 cooperation agreements, which consist of institutional, and faculty level agreements. The breakdown per country is as follows:



Australia= 1	Namibia=1
Austria=3	Netherlands=13
Belgium=11	Norway=1
Botswana=2	Poland=1
Canada=2	South Africa=1
China=2	Spain=1
Czech Republic=1	Sweden=2
England=1	Thailand=1
France=4	USA=8
Germany=4	Zambia=2
Ghana=2	Zimbabwe=1
India=2	
Israel=1	
Italy=1	
Japan=2	
Lesotho=2	
Mexico=1	
Mozambique=1	

NOTE: The OIA has a comprehensive list of the MoU matrix and is currently working with the DRD to integrate these cooperation agreements into the RIMS system. Expected date of completion for integration is 30 April 2018.

4.4 INTERNATIONAL JOINT DEGREE PROGRAMMES

These are the joint degree initiatives as recorded for the 2017 academic year:

NAME	UNIVERSITY	DEPARTMENT/FACULTY	TOPIC
Ms Silk Grossen	KU Leuven Belgium	UNIBS/Humanities	Promoting Career Adaptability: a programme for at-risk learners in South Africa.
Ms Alba Gomez-Arias	Huelva University - Spain	Groundwater Studies /NAS	Hydrogeochemical assessment, water treatment and revalorisation of dumps, tailings and drainages produced at Phalaborwa Industrial Complex
Ms Keamogetsi Morwe	University of Malaga,- Spain	School of Higher Educa- tion Studies /Education	Violence as a mechanism to solve problems with authority among students at South African universities

NOTE: The OIA is currently working on two other joint degree requests from Huelva University in Spain and Cologne University in Germany.



4.5 INTERNATIONAL STUDENTS REGISTERED FOR THE **2017 ACADEMIC YEAR:**

4.5.1 INTERNATIONAL FULL DEGREE STUDENTS

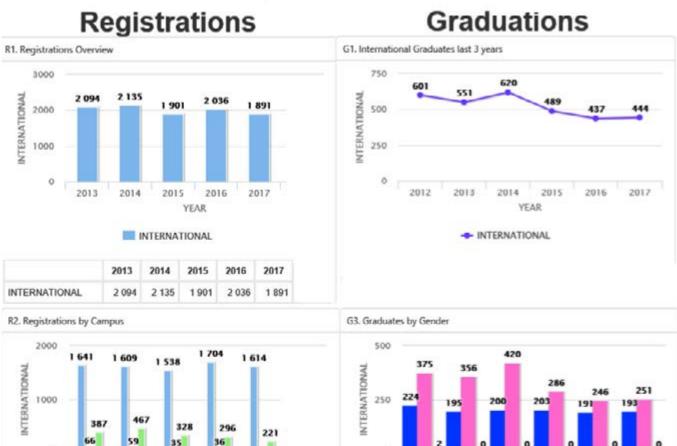
TOTAL OF REGISTERED INTERNATIONAL STUDENTS					
	2013	2014	2015	2016	2017
Angola	4	5	5	4	4
Australia		1	1	2	2
Austria		2	1	1	2
Belgium	5	4	3	4	3
Benin	2	2	1	1	
Burkina Faso	1			1	1
Bangladesh	1	3	2	1	2
Botswana	50	39	33	29	25
China	43	39	29	20	16
Cameroon	17	13	15	15	9
Dem. Rep. Congo	5	3	6	9	6
Congo	4	3	1	1	1
Czech Republic		3	2	2	1
Germany	23	16	22	21	18
Egypt					1
Eritrea	3	3	1	1	
Spain			1	2	2
Ethiopia	7	13	16	17	16
France	3	5	4	3	3
UK of GB and NI	8	7	9	8	7
Ghana	10	14	9	9	11
India	1	3	4	4	5
Ireland	1	1	3	3	1
Istrael		1	1	1	1
Italy	1	3	4	1	
Japan				3	1
Kneya	19	26	18	17	16
South Korea	8	4	5	5	4
Libya		3	3	4	3
Lesotho	1223	1232	1024	1056	965
Mozambique	2	5	5	8	7
Mauritius	3	3	2	1	
Malawi	19	17	18	17	16
Namibia	180	192	188	192	187
Nigeria	34	37	44	44	39

TOTAL OF REGISTERED INTERNATIONAL STUDENTS					
	2013	2014	2015	2016	2017
Netherlands	8	8	16	11	11
Pakistan	1	1	3	3	1
Palestina	3				
Rwanda		4	2	2	2
Sudan	5	5	8	3	7
Sweden	3	5	2	5	5
Swaziland	25	25	24	38	26
Tanzania	2	3	3	8	5
Uganda	14	13	13	23	18
United States of	18	25	18	18	19
America					
Zambia	38	35	30	32	34
Zimbabwe	289	298	291	377	78
Other	11	11	11	9	10
Grand Total	2 094	2 135	1 901	2 036	1891

4.5.2 INCOMING INTERNATIONAL EXCHANGE STUDENTS-**FIRST AND SECOND SEMESTER FOR 2017**

				FIRST SEMESTER	SECOND SEMESTER
PARTNER UNIVERSITY	COUNTRY	FUNCTION	HOSTING UFS FACULTY	NO OF STUDENTS	NO OF STUDENTS
Bremen University	Germany	Student exchange	Economic & Man. Sciences	6	6
Czech University of Life Sciences	Czech Republic	Student exchange	Economic & Man. Sciences		1
University of Kufstein (student doing his second semester)	Austria	Student exchange	Economic & Man. Sciences	1	2
Science PO Bordeaux (each student was here for two semesters)	France	Student exchange	Humanities	1	1
VU Amsterdam	The Netherlands	Student exchange	Humanities	2	2
University of Applied Sciences, Amsterdam	The Netherlands	Student exchange	Economic & Man. Sciences		1
Jonkoping University	Sweden	Student exchange	Humanities, Social Work and Nursing	2	3
Appalachian State University	US	Student exchange	Humanities	1	
National University of Public Service	Budapest, Hungary	Student exchange	Natural & Agric. Sciences; DiMTEC	1	
		Electives	Health Sciences		2
KU Leuven	Belgium	Student Intern	Humanities: Psychology		1
Ghent University	Belgium	Student exchange	Economic & Man. Sciences		1
Groningen University	The Netherlands	Student exchange	Humanities		5
,		Electives	Health Sciences		2
Osaka University	Japan	Observer	Humanities		1
Van Hall Lavenstein	The Netherlands	Post Graduate	Natural & Agri. Sciences	1	1
TOTAL				15	29

4.6 INTERNATIONAL STUDENT PROFILE AS PER HEDA DASHBOARD (DIRAP STATS) FOR THE 2017 ACADEMIC YEAR



O 2013 2014 2015 2016 2017 CAMPUS	0 2012 2013 2014 2015 2016 201 GENDER
MAIN QWA SOUTH	MALE FEMALE UNKNOWN
Registrations by Faculty	

,					
FACULTY > ENTRANCE GRP	2013	2014	2015	2016	2017
PACULITY ENIRANCE GRP	STDNT	STDNT	STDNT	STDNT	STDNT
ECONOMIC AND MANAGEMENT SCIENCES	477	441	454	505	480
HUMANITIES	227	246	262	286	285
HEALTH SCIENCE	125	130	105	112	102
NATURAL AND AGRICULTURAL SCIENCES	500	527	505	515	494



ANNEXURES

INSTITUTIONS COLLABORATING WITH THE UNIVERSITY OF THE FREE STATE

Entity	University of The Free State
Year range	2014 to 2017
Filtered by	Not filtered
Types of publications included	All publication types
Self-citations	Included
Data source	Scopus
Date last updated	21 February 2018
Date exported	20 March 2018

Institution	Country	Co-authored publications	Co-authored publications (growth %)	Citations	Co-authors	Co-authors (growth %)	Citations per Publication	Field-Weighted Citation Impact
CONICET	Argentina	5	-100	66	7	-100	13,2	6,06
Universidad de Buenos Aires	Argentina	3	-	50		-	16,7	9,01
Museo Argentino de Ciencias Naturales Bernardino Rivadavia	Argentina	3	100	8		-33,3	2,7	0,96
Comision Nacional de Energia Atomica	Argentina	1	0	49	3	7 0	49	26,64
Instituto Nacional de Tecnologia Agropecuaria	Argentina	1	0	11		2 0	11	0,85
Universidad Nacional de Cordoba	Argentina	1	0	49	1	5 0	49	26,64
Universidad Nacional de La Plata	Argentina	1	0	49		7 0	49	26,64
Universidad Nacional de Mar del Plata	Argentina	1	-100	16		-100	16	1,37
Universidad Nacional de Rosario	Argentina	1	0	49		2 0	49	26,64
Universidad Nacional de Tucuman	Argentina	1	0	0		1 0	0	0
Universidad Nacional de San Juan	Argentina	1	0	49		1 0	49	26,64
Universidad Nacional de San Martin	Argentina	1	0	49	2	7 0	49	26,64
Universidad Tecnologica Nacional	Argentina	1	0	49		3 0	49	26,64
Armenian Academy of Sciences - Yerevan Physics Institute	Armenia	32	-72,7	348		2 0	10,9	2,29
National Academy of Sciences of the Republic of Armenia	Armenia	32	-72,7	348		-40	10,9	2,29
University of Adelaide	Australia	35	-54,5	355	3	7 42,9	10,1	2,18
University of Sydney	Australia	10	0	119	1	-20	11,9	4,03
University of Melbourne	Australia	8	-50	100		-33,3	12,5	5,22
University of New South Wales	Australia	8	100	102	1	2 200	12,8	7,89
University of Queensland	Australia	8	100	38		100	4,8	1,72
CSIRO	Australia	7	-100	135	1	-100	19,3	7,39
Monash University	Australia	7	-	93	2	-	13,3	5,44
Australian National University	Australia	5	-	77	3	2 -	15,4	9,35
Griffith University Queensland	Australia	4	-100	42		-100	10,5	3,94
La Trobe University	Australia	4	0	22		3 0	5,5	6,13
University of Western Australia	Australia	4	0	53	2	0	13,3	7,06
Swinburne University of Technology	Australia	3	0	55	1	9 0	18,3	10,38
University of Canberra	Australia	3	0	6		1 0	2	0,39
University of Newcastle	Australia	3	-100	46		-100	15,3	2,39
University of Tasmania	Australia	3	0	2		4 0	0,7	0,73
Western Sydney University	Australia	3	_	12		-	4	1,57
Queensland Department of Agriculture and Fisheries	Australia	3	-100	55		-100	18,3	8,37

Westmead Hospital	Australia	3	-50	51	4	-50	17	2,7
Curtin University of Technology	Australia	2	0	54	25	0	27	15,19
James Cook University Queensland	Australia	2	0	0	1	0	0	0
Macquarie University	Australia	2	_	5	2	_	2,5	0,86
Murdoch University	Australia	2	-100	48	2	-100	24	3,49
Southern Cross University	Australia	2	0	14	1	0	7	1,65
University of Southern Queensland	Australia	2	0	7	1	0	3,5	9,06
University of Wollongong	Australia	2	0	14	1	0	7	1,65
Royal Adelaide Hospital	Australia	2	0	33	2	0	16,5	3,22
Royal Women's Hospital	Australia	2	0	13	2	0	6,5	1,37
Murdoch Children's Research Institute	Australia	2	0	13	2	0	6,5	1,37
Hunter Medical Research Institute	Australia	2	-100	28	3	-100	14	2,3
Deakin University	Australia	1	0	0	2	0	0	0
Queensland University of Technology	Australia	1	0	6	1	0	6	1,16
Australian Catholic University	Australia	1	0	5	1	0	5	5,76
NSW Department of Primary Industries	Australia	1	0	0	1	0	0	0
Princess Alexandra Hospital Brisbane	Australia	1	-100	25	1	-100	25	2,64
Queensland Museum	Australia	1	-	1	1	-	1	0,39
Royal Melbourne Hospital	Australia	1	-	7	1	-	7	3,02
St. Vincent's Hospital Melbourne	Australia	1	0	0	1	0	0	0
St. Vincent's Hospital Sydney	Australia	1	-100	25	1	-100	25	2,64
University of Notre Dame Australia	Australia	1	-	5	1	-	5	2,19
Australian Research Council	Australia	1	0	0	1	0	0	0
South Australian Health And Medical Research Institute	Australia	1	0	0	10	0	0	0
University of Innsbruck Innsbruck Medical University	Austria Austria	35	-72,7	368	19	-20	10,5	2,32
University of Vienna	Austria	21	-50	248 55	17 15	14,3	11,8	3,2 1,12
Austrian Academy of Sciences	Austria	14	-100	24	8	-100	3,9	1,59
University of Leoben	Austria	3	-50	-	2	0	1	0,13
International Atomic Energy Agency	Austria	3	0	2	3	0	0,7	0,11
Medical University of Vienna	Austria	2	0	2	3	0	1	0,19
University of Graz	Austria	2	-100	19	2	-100	9,5	1,18
University of Veterinary Medicine Vienna	Austria	2	-100	-	6	-100	3,5	1,39
University of Natural Resources and Applied Life Sciences	Austria	1	0	25	1	0	25	5,23
Vienna University of Technology	Austria	1	0	1	1	0	1	0,12
International Institute for Applied Systems Analysis, Laxenburg	Austria	1	0	7	1	0	7	34,26
Paracelsus Private Medical University	Austria	1	0	0	1	0	0	0
Rudolfstiftung Hospital	Austria	1	-	7	1	-	7	1,05
Vienna Biocenter (VBC)	Austria	1	0	15	2	0	15	1,86
Gregor Mendel Institute of Molecular Plant Biology (GMI)	Austria	1	0	15	2	0	15	1,86
University of Dhaka	Bangladesh	1	0	0	1	0	0	0
University of the West Indies at Cave Hill	Barbados	1	-100	20	1	-100	20	2,86
KU Leuven	Belgium	41	160	149	70	130	3,6	1,32
University of Antwerp	Belgium	32	200	81	25	80	2,5	1,04
Ghent University	Belgium	17	166,7	156	19	133,3	9,2	3,71
Vrije Universiteit Brussel	Belgium	11	-	57	15	-	5,2	2,73
Universite Catholique de Louvain	Belgium	4	0	55	2	0	13,8	2,8

Universite Libre de Bruxelles	Belgium	4	_	101	15	_	25,3	11,43
European Commission Joint Research Centre Institute	Belgium	4	_	34	3	-	8,5	13,22
Hasselt University	Belgium	3	0	18	5	200	6	0,74
Institute of Tropical Medicine Antwerp	Belgium	2	-	3	2	-	1,5	0,46
CHU Saint-Pierre	Belgium	2	-	51	1	-	25,5	9,31
Royal Belgian Institute of Natural Sciences	Belgium	2	0	0	2	0	0	0
Free Universities of Brussels	Belgium	1	-	1	2	-	1	0,45
Universite de Mons	Belgium	1	0	49	1	0	49	26,64
Royal Museum for Central Africa	Belgium	1	-	1	1	-	1	0,39
University of Abomey-Calavi	Benin	1	-	0	3	-	0	0
University of Botswana	Botswana	2	-100	47	5	-100	23,5	3,57
Botswana International University of Science and Technology	Botswana	1	0	0	1	0	0	0
Universidade de Sao Paulo	Brazil	8	-	78	26	-	9,8	4,63
Universidade Federal de Pernambuco	Brazil	3	-	2	10	-	0,7	1,11
Universidade Federal da Bahia	Brazil	2	0	0	2	0	0	0
Universidade Federal do Rio de Janeiro	Brazil	2	-	96	10	-	48	20,26
Universidade Federal do Rio Grande do Norte	Brazil	2	0	49	9	0	24,5	13,32
Universidade Estadual de Feira de Santana	Brazil	2	0	49	3	0	24,5	13,32
Centro Brasileiro de Pesquisas Fisicas	Brazil	1	0	49	2	0	49	26,64
Instituto Nacional de Pesquisas Espaciais	Brazil	1	0	49	6	0	49	26,64
Pontificia Universidade Catolica do Rio de Janeiro	Brazil	1	0	1	1	0	1	1,01
Universidade de Brasilia	Brazil	1	0	0	13	0	0	0
Universidade Estadual de Campinas	Brazil	1	0	49	8	0	49	26,64
Universidade Federal de Pelotas	Brazil	1	0	0	1	0	0	0
Universidade Federal de Santa Catarina	Brazil	1	0	49	2	0	49	26,64
Universidade Federal de Uberlandia	Brazil	1	0	0	1	0	0	0
Universidade Federal de Vicosa	Brazil	1	0	0	6	0	0	0
Universidade Federal do Parana	Brazil	1	0	49	1	0	49	26,64
Universidade Federal do Rio Grande do Sul	Brazil	1	0	0	1	0	0	0
Universidade Federal Fluminense	Brazil	1	0	49	2	0	49	26,64
Universidade Federal Rural de Pernambuco	Brazil	1	0	0	2	0	0	0
Universidade Tecnologica Federal do Parana	Brazil	1	0	1	1	0	1	1,06
Instituto Nacional de Pesquisas Da Amazonia	Brazil	1	0	0	1	0	0	0
Petrobras	Brazil	1	0	0	1	0	0	0
Universidade Federal de Mato Grosso	Brazil	1	0	0	3	0	0	0
Universidade Federal de Sergipe	Brazil	1	0	49	2	0	49	26,64
Universidade Presbiteriana Mackenzie	Brazil	1	0	·	1	0	1	1,01
Universidade Federal do ABC	Brazil	1	0	49	1	0	49	26,64
Universidade Federal de Alfenas	Brazil	1	0	49	1	0	49	26,64
Universidade Regional de Blumenau	Brazil	1	0	0	1	0	0	0
Universidade Federal do Reconcavo da Bahia	Brazil	I	0	0	1	0	0	0
Instituto De Pesquisas Jardim Botanico Do Rio De Janerio	Brazil	I	0		1	0	0	26.64
Centro Federal De Educacao Tecnologica Celso Suckow Da Fonseca	Brazil	1	0	49	1	0	49	26,64
Universidade Regional do Cariri Observatorio Nacional	Brazil Brazil	1	0	40	1	0	0	26.64
Universidade do Estado do Rio Grande do Norte	Brazil	1	0	49	8	_	49	26,64
	Brunei Darussalam	1	0		1	0	-	0
University of Brunei Darussalam	Di ullei Dalussalam	I	_	0		-	0	U

Bulgarian Academy of Sciences	Bulgaria	2	0	25	3	0	12,5	2,62
University of Sofia	Bulgaria	1	0	0	1	0	0	0
National Center of Infectious and Parasitic Diseases Bulgaria	Bulgaria	1	-	1	1	-	1	0,17
University of Yaounde I	Cameroon	3	-100	40	11	-100	13,3	1,74
University of Buea	Cameroon	2	-100	1	2	-100	0,5	0,08
University of Dschang	Cameroon	1	-100	40	1	-100	40	5,23
University of Douala	Cameroon	1	-	2	3	-	2	0,58
University of Toronto	Canada	15	100	162	21	50	10,8	4,09
University of British Columbia	Canada	14	33,3	72	20	14,3	5,1	3,52
University of Alberta	Canada	8	-	69	30	-	8,6	4,26
AgriFood Canada	Canada	7	-100	75	9	-100	10,7	1,55
McMaster University	Canada	7	150	75	18	700	10,7	2
McGill University	Canada	4	-100	74	8	-100	18,5	7,82
Simon Fraser University	Canada	4	0	16	2	0	4	1,12
University of Waterloo	Canada	4	0	17	4	0	4,3	1,78
Ecole Polytechnique de Montreal	Canada	4	-	37	4	-	9,3	11,32
Universite du Quebec a Montreal	Canada	3	0	19	5	0	6,3	1,71
Brock University	Canada	2	0	14	1	0	7	1,65
Dalhousie University	Canada	2	-	11	1	-	5,5	2,75
Memorial University of Newfoundland	Canada	2	0	9	1	0	4,5	0,86
Queen's University Kingston	Canada	2	0	15	2	0	7,5	2,03
Universite de Montreal	Canada	2	0	18	2	0	9	2,05
Universite de Sherbrooke	Canada	2	0	22	1	0	11	24,02
University of Calgary	Canada	2	-	7	1	-	3,5	0,65
University of Manitoba	Canada	2	-100	44	2	-100	22	5,07
University of Ottawa	Canada	2	0	14	1	0	7	1,65
University of Winnipeg	Canada	2	0	14	1	0	7	1,65
Wilfrid Laurier University	Canada	2	0	14	1	0	7	1,65
Public Health Agency of Canada	Canada	2	0	13	3	0	6,5	1,37
Concordia University	Canada	1	-	0	1	-	0	0
Universite Laval	Canada	1	0	0	1	0	0	0
University of Guelph	Canada	1	-	2	1	-	2	1,1
University of Regina	Canada	1	-	0	1	-	0	0
Western University	Canada	1	-	7	1	-	7	3,02
York University Toronto	Canada	1	-	3	1	-	3	2,05
Royal Ontario Museum	Canada	1	-100	13	1	-100	13	1,74
Brandon University	Canada	1	-100	13	- 1	-100	13	1,74
Pontificia Universidad Catolica de Chile	Chile	2	0	67	5	0	33,5	20,64
Universidad de Chile Universidad Andres Bello	Chile Chile	2	0	67	4	0	33,5	20,64
	Chile	2	0	67	3	0	33,5	20,64
Universidad de Valparaiso Universidad de Antofagasta	Chile	2	0	67	2	0	33,5	20,64
UNIVERSIDAD DE LA SERENA	Chile	1	0	49	2	0	49	26,64
Chinese Academy of Sciences	China	8	0	125	133	-14,3	15,6	7,63
University of Electronic Science and Technology of China	China	3	0	123	2	-14,5	0,7	1,05
Beijing Forestry University	China	2	-100	55	3	-100	27,5	12,55
Nanjing University	China	2	-100	54	5	-100	27,3	16,01
Harijing Oniversity	Cilila		_	34	3	-	21	10,01

Shantou University	China	2	_	. 8	2	_	4	1,76
Southwest University of Science and Technology	China	2	C	5	3	0	2,5	1,81
CAS - Institute of High Energy Physics	China	2	C	59	101	0	29,5	13,92
CAS - Institute of Microbiology	China	2	-100		4	-100	10	9,93
Ministry of Agriculture of the People's Republic of China	China	2	C	5	1	0	2,5	1,81
Kunming Institute of Botany Chinese Academy of Sciences	China	2	-100	61	5	-100	30,5	4,37
Beijing Normal University	China	1	C	49	3	0	49	26,64
Capital Normal University	China	1	-	. 1	2	-	1	0,27
China Agricultural University	China	1	C	2	1	0	2	0,42
China University of Mining And Technology	China	1	C	0	1	0	0	0
East China University of Science and Technology	China	1	-	. 4	2	-	4	1,12
Guilin University of Electronic Technology	China	1	C	49	1	0	49	26,64
Huazhong Agricultural University	China	1	-	. 5	4	-	5	0,92
Hubei University	China	1	-	. 1	1	-	1	0,18
Jiangsu University	China	1	C	0	1	0	0	0
Ministry of Education China	China	1	C	49	3	0	49	26,64
Nanjing Normal University	China	1	C	49	1	0	49	26,64
Peking University	China	1	-	. 5	1	-	5	1,25
South China University of Technology	China	1	-	. 3	1	-	3	0,85
Tianjin Normal University	China	1	(49	1	0	49	26,64
Tsinghua University	China	1	(49	15	0	49	26,64
CAS - National Astronomical Observatories	China	1	(49	4	0	49	26,64
CAS - Purple Mountain Observatory	China	1	(49	7	0	49	26,64
CAS - Shanghai Institute of Materia Medica	China	1	(2	1	0	2	1,74
Shenyang Institute of Chemical Technology	China	1	-100	1	3	-100	1	1,44
Shenyang Normal University	China	1	-	. 2	1	-	2	1,1
Shenyang University	China	1	-100	1	3	-100	1	1,44
Hefei Institutes of Physical Sciences Chinese Academy of Sciences	China	1	-	- 5	1	-	5	5,39
Institute of Genetics and Developmental Biology Chinese Academy of Sciences	China	1	-	. 1	5	-	1	0,46
Shanghai Astronomical Observatory Chinese Academy of Sciences	China	1	C	49	1	0	49	26,64
New York University Shanghai	China	1	-	. 5	1	-	5	1,25
Universidad de Los Andes Colombia	Colombia	2	C	1	2	0	0,5	1,15
Universidad Industrial de Santander	Colombia	1	(49	5	0	49	26,64
Fundacion Cardioinfantil - Instituto de Cardiologia	Colombia	1	-	- 7	1	-	7	3,02
Universidad de Pamplona	Colombia	1	-100	20	1	-100	20	2,86
University of Zagreb	Croatia	4	(14	5	0	3,5	0,94
Ruder Boskovic Institute	Croatia	1	(0	5	0	0	0
University of Rijeka	Croatia	1	(1	1	0	1	0,12
Czech Academy of Sciences	Czech Republic	28	-50	250	31	0	8,9	1,83
Charles University	Czech Republic	19	-88,9	215	12	0	11,3	3,04
Masaryk University	Czech Republic	3	-	- 8	5	-	2,7	0,21
Mendel University of Agriculture and Forestry	Czech Republic	2	(0	4	0	0	0
Palacky University	Czech Republic	2	-	- 49	6	-	24,5	13,32
Institute of Hematology and Blood Transfusion	Czech Republic	2	(13	2	0	6,5	1,37
Czech Technical University	Czech Republic	1	C	15	1	0	15	13,78
University of Chemistry and Technology, Prague	Czech Republic	1	C	0	2	0	0	0

University of South Bohemia	Czech Republic	1	0	3	1	0	3	2,44
University of Veterinary and Pharmaceutical Sciences	Czech Republic	1	0	0	3	0	0	0
Czech University of Life Sciences Prague	Czech Republic	1	0	0	1	0	0	0
Research Institute of Crop Production	Czech Republic	1	0	0	1	0	0	0
University of Copenhagen	Denmark	8	_	74	31	-	9,3	5,94
Technical University of Denmark	Denmark	4	-	79	6	-	19,8	9,41
Aarhus University	Denmark	3	0	58	3	0	19,3	6,68
DHI Water - Environment - Health	Denmark	3	-	9	1	-	3	1,05
Syddansk Universitet	Denmark	1	-100	2	1	-100	2	0,44
Universidad de las Americas - Ecuador	Ecuador	1	-100	48	1	-100	48	6,99
Escuela Superior Politecnica del Litoral	Ecuador	1	-	0	1	-	0	0
PONTIFICIA UNIVERSIDAD CATOLICA DEL ECUADOR	Ecuador	1	0	0	3	0	0	0
National Research Center, Cairo	Egypt	3	-	11	4	-	3,7	1,59
Ain Shams University	Egypt	2	0	58	1	0	29	4,87
Cairo University	Egypt	2	-	1	2	-	0,5	0,09
Mansoura University	Egypt	2	0	5	1	0	2,5	0,51
Suez Canal University	Egypt	2	_	6	2	-	3	2,08
Zagazig University	Egypt	2	0	58	1	0	29	4,87
Alexandria University	Egypt	1	-100	0	1	-100	0	0
Assiut University	Egypt	1	-100	15	1	-100	15	2,06
American University in Cairo	Egypt	1	-	9	2	-	9	2,96
Damanhour University	Egypt	1	0	0	1	0	0	0
University of Tartu	Estonia	3	0	26	9	66,7	8,7	3,09
Addis Ababa University	Ethiopia	7	100	51	9	200	7,3	1,03
Bahar Dar University	Ethiopia	6	-	5	4	-	0,8	0,95
International Livestock Research Institute Addis Ababa	Ethiopia	1	-	1	1	-	1	0,49
Haramaya University	Ethiopia	1	0	7	2	0	7	0,79
University of Turku	Finland	22	-	119	27	-	5,4	2,75
University of Helsinki	Finland	2	0	13	5	-75	6,5	0,87
University of Jyvaskyla	Finland	2	0	0	2	0	0	0
University of Oulu	Finland	2	0	14	2	0	7	1,65
Aalto University	Finland	1	-100	32	2	-100	32	4,27
University of Eastern Finland	Finland	1	0	0	1	0	0	0
CNRS	France	51	-38,5	_	224	-9,4	9,2	2,27
Universite Paris Saclay	France	41	-72,7		82	-41,2	9,1	1,96
PSL Research University	France	37	-45,5		75	0	9,8	2,17
Universite de Bordeaux	France	35	-75	-	17	-33,3	10,5	2,29
CEA	France	34	-72,7		42	10	10,4	2,29
Ecole Polytechnique	France	34	-72,7		17	42,9	10,4	2,31
Universite Paris 7	France	34	-63,6		70	3,1	11,7	2,67
Observatoire de Paris	France	33	-72,7		59	-9,1	10,7	2,36
Universite Pierre et Marie Curie	France	33	-50		41	25	14,1	3,39
Universite de Savoie	France	32	-72,7	1	41	-35,3	10,9	2,29
IN2P3 Institut National de Physique Nucleaire et de Physique des Particules		32	-66,7		198	26,9	10,7	2,42
Universite Grenoble Alpes	France	30	-80	-	22	-66,7	11,4	2,43
Laboratoire d'Annecy-le-Vieux de Physique des Particules LAPP	France	21	-40	-	38	-26,7	12,4	3,05
Institute of Research into the Fundamental Laws of the Universe	France	16	-100	145	34	-100	9,1	2,73

Universite Paris Sorbonne - Paris IV	France	14	_	178	36	_	12,7	5,07
Aix Marseille Universite	France	14	_	158	28	_	11,3	3,87
IRD	France	10	_	94	13	_	9,4	5,25
INRA Institut National de La Recherche Agronomique	France	5	_	23	6	_	4,6	1,11
Museum National d'Histoire Naturelle	France	5	100		4	0	7,4	2,66
Ecole Nationale Superieure de Chimie de Paris	France	3	_	8	2	_	2,7	0,83
INSERM	France	3	0	63	2	0	21	6,45
Institut Pasteur Paris	France	3	-	18	3	-	6	1,26
Universite d'Orleans	France	3	0	57	1	0	19	10,88
Universite de Strasbourg	France	3	-100		4	-100	18,7	10,27
Universite Paris-Sud	France	3	0	66	25	0	22	10,35
AgroParisTech	France	3	0	5	4	0	1,7	0,34
Irstea	France	3	-	34	2	-	11,3	7,01
CIRAD	France	3	O	9	6	0	3	0,65
Institut d 'Astrophysique de Paris	France	3	C	68	12	0	22,7	13,8
College de France	France	2	C	49	10	0	24,5	13,32
Observatoire de la Cote d'Azur	France	2	C	54	2	0	27	15,19
Universite Blaise Pascal	France	2	C	54	2	0	27	15,19
Universite Claude Bernard Lyon 1	France	2	C	52	3	0	26	13,74
Universite de Haute Alsace	France	2	C	54	4	0	27	15,19
Universite de Nantes	France	2	_	66	2	-	33	16,79
Universite du Sud Toulon - Var	France	2	C	54	2	0	27	15,19
AP-HP Assistance Publique - Hopitaux de Paris	France	2	_	50	1	-	25	8,74
Institut Universitaire de France	France	2	C	54	3	0	27	15,19
Universite Toulouse III - Paul Sabatier	France	2	C	49	6	0	24,5	13,32
Universite de Toulouse	France	2	C	50	5	0	25	13,38
Ecole Normale Superieure	France	1	C	49	8	0	49	26,64
ESPCI	France	1	С	.,	2	0	49	26,64
Institut Pasteur de Lille	France	1	-100	13	1	-100	13	1,89
International Agency for Research on Cancer	France	1	С	6	3	0	6	1,51
Universite d'Auvergne	France	1	С	77	1	0	49	26,64
Universite de Bourgogne	France	1	-100		1	-100	13	1,74
Universite de Rennes 1	France	1	C		1	0	49	26,64
Universite de Versailles	France	1	C	-	1	0	0	0
Centre d'Ecologie Fonctionnelle et Evolutive	France	1	C		1	0	2	0,32
CNES Centre National d'Etudes Spatiales	France	1	C		2	0	49	26,64
Ecole des Mines de Nantes	France	1	C		1	0	49	26,64
Institut de Physique Nucleaire Orsay	France	1	C		23	0	49	26,64
Service Hospitalier Frederic Joliot	France	1	C		1	0	0	0
Universite de La Reunion	France	1	C	•	1	0	4	0,79
EPHE Ecole Pratique des Hautes Etudes	France	1			2	0	0	0
Institut d'Imagerie Biomedicale Minister of Culture and Communication, Paris	France	1	-100		1	-100	0	2.22
Medical Research Council Laboratories Gambia	France Gambia	3	-100		3	-100	13 19	2,33
Georgian Academy of Sciences		3	-100		3	-100	49	2,94
Humboldt-Universitat zu Berlin	Georgia Germany	39	-66,7		29	6,7	9,5	2,29
University of Heidelberg	Germany	39			26	0,7	10,2	2,29
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Ludwig, Maximilans- University Munchen Germany 3 0 59 7 0 19,7 9,46 European Southern Observatory Germany 3 0 68 77 0 22,7 113,8 Max-Planck-Institut fur Astrophysik Germany 3 0 77 7 0 25,7 14,16 Chemist University of Technology Germany 2 0 6 6 33,3 3 0,05 Chemist University of Technology Germany 2 0 6 6 33,3 3 0,05 Research Centre Julich (FZ)) Germany 2 0 18 3 0 9 1,18 Research Centre Julich (FZ)) Germany 2 0 4 12 0 2 1,65 Freid Inversitat Berlin Germany 2 00 15 2 -100 7,5 3,33 Martin- Luther- Universitat Palle- Wittenberg Germany 2 00 7 2	·	,	3	0		3	0		
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European Southern Observatory		,	3	-100	-	7	-100	-	
Max-Planck-Institut fur Astrophysik Germany 3 0 77 7 0 25,7 14,16 Max-Planck-Institut fur Physik (Werner-Heisenberg-Institut) Munchen (Germany) Germany 3 0 57 3 0 19 10,88 European Molecular Biology Laboratory Germany 2 0 6 6 6 33,3 3 0,05 European Molecular Biology Laboratory Germany 2 0 4 12 0 9 1,11 Research Centre Julich (F27) Germany 2 0 4 12 0 2 10 0,29 Friedich Schiller-Universital Berlin Germany 2 -100 15 2 100 7,5 3,33 Martin-Luther-Universitat Berlin Germany 2 0 0 7 2 0 3,5 9,00 RWTH Aschen University Germany 2 0 5 39 0 22,5 15,57 Technische Universitat Siegen Ge		,	3	0	68	17	0	-	
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European Molecular Biology Laboratory Germany 2 0 18 3 0 9 1,11	Chemnitz University of Technology	Germany	2	0	6	6	33,3	3	0,65
Freie Universitat Berlin Germany 2 — 2 2 — 1 0,39 Friedfich-Schiller-Universitat Lena Germany 2 —100 15 2 —100 7,5 3,33 Martin-Luther-Universitat Haller-Wittenberg Germany 2 — 0 7 2 0 3,5 3,90 Charite - Universitat Haller-Wittenberg Germany 2 —100 7 2 0 3,5 9,06 RWTH Aschen Universitat Ferlin Germany 2 —100 2 3 —100 1 0,11 RWTH Aschen Universitat Berlin Germany 2 —0 55 39 —0 27,5 15,57 Technische Universitat Berlin Germany 2 —0 55 39 —0 27,5 15,57 Technische Universitat Berlin Germany 2 —0 55 39 —0 27,5 15,57 Technische Universitat Berlin Germany 2 —0 50 </td <td></td> <td>Germany</td> <td>2</td> <td>0</td> <td>18</td> <td>3</td> <td>0</td> <td>9</td> <td>1,11</td>		Germany	2	0	18	3	0	9	1,11
Friedrich-Schiller-Universitat Jena	Research Centre Julich (FZJ)	Germany	2	0	4	12	0	2	1,65
Martin-Luther-Universitat Halle-Wittenberg Germany 2 0 7 2 0 3,5 9,06 Charite- Universitat Serlin Germany 2 -100 2 3 -100 1 0,11 RWTH Aachen University Germany 2 0 55 39 0 27,5 15,75 Technische Universitat Berlin Germany 2 0 22 2 0 11 24,02 Universitat Berlin Germany 2 0 50 15 0 25 13,38 Universitat Flannover Germany 2 0 50 15 0 25 13,38 University of Bremen Germany 2 0 50 10 0 25 14,21 University of Oldenburg Germany 2 0 0 1 0 0 0 0 Max-Planck-Institut fur extraterrestrische Physik Germany 2 0 67 15 0 33,	Freie Universitat Berlin	Germany	2	_	2	2	-	1	0,39
Charite - Universitatsmedizin Berlin Germany 2 -100 2 3 -100 1 0,11 RWTH Aachen University Germany 2 0 55 39 0 27,5 15,57 Technische Universitat Berlin Germany 2 0 0 22 2 0 11 24,02 Universitat Hannover Germany 2 0 50 15 0 25 13,38 Universitat Siegen Germany 2 0 50 10 0 25 14,21 University of Bremen Germany 2 0 50 10 0 25 14,21 University of Oldenburg Germany 2 0 0 1 2 0 0,5 1,04 Max-Planck-Institut fur extraterrestrische Physik Germany 2 0 67 15 0 33,5 20,64 Max-Planck-Institut fur extraterrestrische Physik Germany 2 0 67 <td< td=""><td>Friedrich-Schiller-Universitat Jena</td><td>Germany</td><td>2</td><td>-100</td><td>15</td><td>2</td><td>-100</td><td>7,5</td><td>3,33</td></td<>	Friedrich-Schiller-Universitat Jena	Germany	2	-100	15	2	-100	7,5	3,33
RWTH Aachen University Germany 2 0 55 39 0 27.5 15.57 Technische Universitat Berlin Germany 2 0 50 22 2 0 0 11 24.02 Universitat Berlin Germany 2 0 50 15 0 25 13.38 Universitat Siegen 0 50 15 0 25 13.38 Universitat Siegen 0 50 10 0 25 14.24 University of Bremen Germany 2 0 50 10 0 25 14.24 University of Bremen Germany 2 0 0 1 1 2 0 0.5 1.04 University of Oldenburg Germany 2 0 0 1 1 2 0 0.5 1.04 University of Oldenburg Germany 2 0 0 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Martin-Luther-Universitat Halle-Wittenberg	Germany	2	0	7	2	0	3,5	9,06
Technische Universitat Berlin Germany 2 0 22 2 0 11 24,02	Charite - Universitatsmedizin Berlin	Germany	2	-100	2	3	-100	1	0,11
Universitat Hannover Germany 2 0 50 15 0 25 13,38	RWTH Aachen University	Germany	2	0	55	39	0	27,5	15,57
Universitat Siegen Germany 2 0 50 10 0 25 14,21 University of Bremen Germany 2 0 1 2 0 0,5 1,04 University of Oldenburg Germany 2 0 0 1 0 0 0 Max-Planck-Institut fur extraterrestrische Physik Germany 2 0 67 15 0 33,5 20,64 Max-Planck-Institut fur Astronomie Germany 2 0 67 3 0 33,5 20,64 Max-Planck-Institut fur Radioastronomie Germany 2 0 67 3 0 33,5 20,64 Max-Planck-Institut fur Radioastronomie Germany 2 0 54 7 0 27 15,19 Max Planck Institute for Gravitational Physics (Albert Einstein Institute) Germany 2 0 54 7 0 27 15,19 Max Planck Institut fur Radioastronomie Germany 2 0 <t< td=""><td>Technische Universitat Berlin</td><td>Germany</td><td>2</td><td>0</td><td>22</td><td>2</td><td>0</td><td>11</td><td>24,02</td></t<>	Technische Universitat Berlin	Germany	2	0	22	2	0	11	24,02
University of Bremen	Universitat Hannover	Germany	2	0	50	15	0	25	13,38
University of Oldenburg Germany 2 0 0 1 0 0 0 Max-Planck-Institut fur extraterrestrische Physik Germany 2 0 67 15 0 33,5 20,64 Max-Planck-Institut fur Astronomie Germany 2 0 67 3 0 33,5 20,64 Max-Planck-Institut fur Radioastronomie Germany 2 0 54 7 0 27 15,19 Max Planck Institute for Gravitational Physics (Albert Einstein Institute) Germany 2 0 50 98 0 25 13,38 Leibniz Centre for Agricultural Landscape Research (ZALF), Muncheberg Germany 2 - 9 3 - 4,5 4,73 Fachhochschule Stralsund? University of Applied Sciences Stralsund Germany 2 0 14 1 0 7 1,65 Cologne Business School (CBS) Germany 2 0 14 1 0 7 1,65 Hamburg University of Technology	Universitat Siegen	Germany	2	0	50	10	0	25	14,21
Max-Planck-Institut fur extraterrestrische Physik Germany 2 0 67 15 0 33,5 20,64 Max-Planck-Institut fur Astronomie Germany 2 0 67 3 0 33,5 20,64 Max-Planck-Institut fur Radioastronomie Germany 2 0 54 7 0 27 15,19 Max Planck Institute for Gravitational Physics (Albert Einstein Institute) Germany 2 0 50 98 0 25 13,38 Leibniz Centre for Agricultural Landscape Research (ZALF), Muncheberg Germany 2 - 9 3 - 4,5 4,73 Fachhochschule Stralsund? University of Applied Sciences Stralsund Germany 2 0 14 1 0 7 1,65 Cologne Business School (CBS) Germany 2 0 14 1 0 7 1,65 Hamburg University of Technology Germany 1 0 0 2 0 0 0 0 0 11	University of Bremen	Germany	2	0	1	2	0	0,5	1,04
Max-Planck-Institut fur Astronomie Germany 2 0 67 3 0 33,5 20,64 Max-Planck-Institut fur Radioastronomie Germany 2 0 54 7 0 27 15,19 Max Planck Institute for Gravitational Physics (Albert Einstein Institute) Germany 2 0 50 98 0 25 13,38 Leibniz Centre for Agricultural Landscape Research (ZALF), Muncheberg Germany 2 - 9 3 - 4,5 4,73 Fachhochschule Stralsund? University of Applied Sciences Stralsund Germany 2 0 14 1 0 7 1,65 Cologne Business School (CBS) Germany 2 0 14 1 0 7 1,65 Hamburg University of Technology Germany 1 0 0 2 0 0 0 Heinrich-Heine-University Dusseldorf Germany 1 0 11 4 0 11 1,37	University of Oldenburg	Germany	2	0	0	1	0	0	0
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Max Planck Institute for Gravitational Physics (Albert Einstein Institute)Germany20509802513,38Leibniz Centre for Agricultural Landscape Research (ZALF), MunchebergGermany2-93-4,54,73Fachhochschule Stralsund? University of Applied Sciences StralsundGermany20141071,65Cologne Business School (CBS)Germany20141071,65Hamburg University of TechnologyGermany1002000Heinrich-Heine-University DusseldorfGermany101140111,37	Max-Planck-Institut fur Astronomie	Germany	2	0	67	3	0	33,5	20,64
Leibniz Centre for Agricultural Landscape Research (ZALF), Muncheberg Germany 2 - 9 3 - 4,5 4,73 Fachhochschule Stralsund? University of Applied Sciences Stralsund Germany 2 0 14 1 0 7 1,65 Cologne Business School (CBS) Germany 2 0 14 1 0 7 1,65 Hamburg University of Technology Germany 1 0 0 0 2 0 0 0 Heinrich-Heine-University Dusseldorf Germany 1 1 1 1 1 1 1 1 1,37	Max-Planck-Institut fur Radioastronomie	Germany	2	0	54	7	0	27	15,19
Fachhochschule Stralsund? University of Applied Sciences Stralsund Germany Cologne Business School (CBS) Germany Germany Germany Germany Definition-Heine-University Dusseldorf Germany Definition-Heine-University Dusseldorf Germany Definition-Heine-University Dusseldorf Germany Definition-Heine-University Dusseldorf Definition-Heine-University Dusseldorf Definition-Heine-University Dusseldorf Germany Definition-Heine-University Dusseldorf Germany Definition-Heine-University Dusseldorf Germany Definition-Heine-University Dusseldorf Germany Definition-Heine-University Dusseldorf Definition-Heine-University Dusseldorf Germany Definition-Heine-University Dusseldorf Definition-Heine-University Dusseldorf Definition-Heine-University Dusseldorf	Max Planck Institute for Gravitational Physics (Albert Einstein Institute)	Germany	2	0	50	98	0	25	13,38
Cologne Business School (CBS) Germany 2 0 14 1 0 7 1,65 Hamburg University of Technology Germany 1 0 0 2 0 0 0 Heinrich-Heine-University Dusseldorf Germany 1 0 11 4 0 11 1,37	Leibniz Centre for Agricultural Landscape Research (ZALF), Muncheberg	Germany	2	_	9	3	-	4,5	4,73
Hamburg University of TechnologyGermany100200Heinrich-Heine-University DusseldorfGermany101140111,37	Fachhochschule Stralsund ? University of Applied Sciences Stralsund	Germany	2	0	14	1	0	7	1,65
Heinrich-Heine-University Dusseldorf Germany 1 0 11 4 0 11 1,37	Cologne Business School (CBS)	Germany	2	0	14	1	0	7	1,65
	Hamburg University of Technology	Germany	1	0	0	2	0	0	0
Justus-Liebig-University Giessen Germany 1 0,17	Heinrich-Heine-University Dusseldorf	Germany	1	0	11	4	0	11	1,37
	Justus-Liebig-University Giessen	Germany	1	-	1	1	-	1	0,17

Otto van Cuarieka University Maddehurd	Cormoni	1		17	1		17	6.04
Otto-von-Guericke University Magdeburg	Germany	1		17	1	-	17	6,94
Saarland University	Germany	1	0	3	1	0	3	0,71
Universitat Bielefeld	Germany	1	0	5	1	0	5	3,75
Universitat Dortmund	Germany	1	0	49	12	0	49	26,64
Karlsruhe Institute of Technology KIT	Germany	1	0	49	42	0	49	26,64
University of Freiburg	Germany	1	-	2	1	-	2	0,59
University of Kiel	Germany	1	0	3	1	0	3	2,88
University of Konstanz	Germany	1	0	2	1	0	2	4,91
University of Mainz	Germany	1	0	49	12	0	49	26,64
University of Wuppertal	Germany	1	0	49	25	0	49	26,64
Bayer	Germany	1	0	0	2	0	0	0
Bernhard Nocht Institute for Tropical Medicine	Germany	1	0	11	1	0	11	6,95
Federal Institute for Materials Research and Testing Berlin	Germany	1	-	2	2	-	2	0,77
German Primate Center	Germany	1	-	1	1	-	1	0,55
Leibniz Institute for Natural Product Research and Infection Biology - Hans Knoll Institute (HKI), J	Germany	1	-100	13	1	-100	13	1,74
Leibniz Institute of Plant Genetics and Crop Plant Research (IPK), Gatersleben	Germany	1	-	3	1	-	3	1,37
Leibniz Institute for Zoo and Wildlife Research (IZW), Berlin	Germany	1	0	0	3	0	0	0
Staatliches Museum fur Naturkunde	Germany	1	-	2	2	-	2	0,77
Max-Planck-Institut fur Sonnen system forschung	Germany	1	0	1	1	0	1	0,12
Max Planck Institute of Molecular Cell Biology and Genetics	Germany	1	0	4	3	0	4	3,48
Max-Plack-Institut fur demografische Forschung	Germany	1	0	5	1	0	5	1,78
Fraunhofer Institute for Building Physics	Germany	1	0	1	1	0	1	1,06
Fachhochschule Kiel - University of Applied Sciences Kiel	Germany	1	0	0	1	0	0	0
Kwame Nkrumah University of Science and Technology	Ghana 1	0	50	73	11	-50	7,3	2,2
University of Ghana	Ghana	3	-75	110	18	-92,9	13,8	2,33
Council for Scientific and Industrial Research Ghana	Ghana	5	-	9	3	-	1,8	2,37
University for Development Studies Ghana	Ghana	1	-100	40	2	-100	40	5,23
Foundation for Research and Technology-Hellas	Greece	3	0	39	4	-33,3	13	2,11
Institute of Electronic Structure and Laser	Greece	3	0	39	4	-33,3	13	2,11
University of Athens	Greece	2	0	19	2	0	9,5	3,54
Aristotle University of Thessaloniki	Greece	1	-	1	1	-	1	0,17
University of Crete	Greece	1	-100	20	1	-100	20	1,97
Chinese University of Hong Kong	Hong Kong	3	0	62	14	50	20,7	9,79
University of Hong Kong		3	0	55	2	0	18,3	10,38
University of Szeged		3	0	79	7	-75	26,3	11,77
Hungarian Academy of Sciences		3	-100	64	5	-100	21,3	9,87
Eotvos Lorand University		2	-100	62	5	-100	31	14,19
Szent Istvan University	Hungary	1	-100		3	-100	5	0,66
University of Miskolc	Hungary	1	0	2	1	0	2	1,23
University of Iceland		6	0	89	4	0	14,8	8,43
Shri Mata Vaishno Devi University	India 4	_	-16,7	300	15	37,5	7,1	1,44
Indian Institute of Technology, Delhi		1	-	75	4	-	3,6	1,79
Indian Institute of Technology, Dhanbad		6	20		18	37,5	28,7	4,22
Gurukula Kangri Vishwavidyalaya		3	500	88	4	200	6,8	2,24
Inter University Accelerator Centre India		1	-25		7	-60		
Inter University Accelerator Centre India	india 1	1	-25	79	7	-60	7,2	1,45

Paralle Horseword Para	Rashtrasant Tukadoji Maharaj Nagpur University	India	11	-	31	6	_1	2,8	0,95
Descript (Windows) and Management Sciences India 10			-	-50			-50		
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Indian Institute of Extraphysics India 2 0 66 15 0 33.3 30.04.	·			-100	52		-100		
Inter-University Centre for Astronomy and Astrophysics India	·			-			-		-
Sabonal Institute of Technology Rorkela India 2 100 1 1 100 0.5 2.39				0	1		0		
Deliversity of Jammu				-100	-	1	-100	-	-
SMM University				0		1		1	
Samt Longowal Institute of Engineering and Technology	·		2	0	3	5	0	1,5	
Bhomogal University			2	-100	22	3	-100		
Arms University			2	_		1	-	4,5	
Indian Agricultural Research Institute India 1 0 3 3 0 3 2.72 Indian Institute of Indian Institute India 1 0 8 1 0 8 8.3 Indian Institute of Technology, Bombay India 1 0 49 4 0 49 2.6,64 Indian Institute of Technology, Bombay India 1 0 49 1 0 49 2.6,64 Indian Institute of Technology, Madras India 1 0 49 1 0 49 2.6,64 Indian Institute of Technology, Madras India 1 0 0 0 1 0 0 0 Jackspoyr University India 1 0 0 0 1 0 0 0 0 Jackspoyr University India 1 0 0 0 1 0 0 0 0 0	·	India	1	0	1	1	0	1	
Indian institute of Technology, Rombay Indian institute of Technology, Indian Indian Indian Indian Indian Indian Indian Indian Indian Indiantian Indiantiantian Indiantiantiantiantiantiantiantiantiantiant	·	India	1	0	3	3	0	3	
Indian Institute of Technology, Bombay India Institute of Technology, Madras India India I		India	1	0	8	1	0	8	
Indian Institute of Technology, Madras India 1 0 49 1 0 49 26,64 Indian Gandrii Centre of Atomic Research India 1 0 0 0 0 0 0 Saha Institute of Nuclear Physics India 1 0 0 0 1 0 0 0 0 Saha Institute of Nuclear Physics India 1 0 0 0 1 0 0 0 0 Saha Institute of Nuclear Physics India 1 0 0 0 1 0 0 0 1 0 University of Calcutta India 1 0 0 48 2 0 0 48 6,99 University of Lucknow India 1 0 0 0 4 0 0 0 0 0 University of Pune India 1 0 0 4 6 0 0 0 0 0 0 0 University of Pune India 1 0 0 4 6 0 0 0 0 0 0 0 0 0		India	1	0	49	4	0	49	
India Gardhi Centre for Atomic Research India		India	1	0	49	1	0	49	-
Jadavpur University India 1 0 0 1 0 0 0 0 0 0		India	1	-100	2	1	-100	2	
University of Calcutta	Jadavpur University	India	1	0	0	1	0	0	0
University of Lucknow	Saha Institute of Nuclear Physics	India	1	-	7	1	-	7	1,48
University of Pune India 1 0 0 0 4 0 0 0 0 0 0 1 0 1 1 1 0 0 0 0	University of Calcutta	India	1	-100	48	2	-100	48	6,99
Institute for Plasma Research	University of Lucknow	India	1	-100	15	1	-100	15	2,15
Jai Narain Vyas University, Jodhpur India	University of Pune	India	1	0	0	4	0	0	0
National Centre for Cell Science	Institute for Plasma Research	India	1	0	49	6	0	49	26,64
Physical Research Laboratory India	Jai Narain Vyas University, Jodhpur	India	1	0	8	1	0	8	4,29
AMITY UNIVERSITY India 1 0 3 1 1 0 3 2,88 Indian Institute of Science Education and Research Pune India 1 0 49 1 0 49 26,64 Indian Institute of Technology Gandhinagar India 1 0 49 1 0 49 26,64 Indian Institute of Technology Hyderabad India 1 0 49 1 0 49 26,64 Indian Institute of Technology Hyderabad India 1 0 49 1 0 49 26,64 Indian Institute of Management Calcutta India 1 0 1 1 0 1 2,21 Motilal Nebru National Institute of Technology India 1 0 9 3 3 0 9 1,28 Indian Institute of Management Calcutta India 1 0 9 9 3 0 0 9 1,28 Indian Institute of Technology India 1 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0	National Centre for Cell Science	India	1	0	0	4	0	0	0
Indian Institute of Science Education and Research Pune India 1 0 49 1 0 49 26,64 Indian Institute of Technology Gandhinagar India 1 0 49 1 0 49 26,64 Indian Institute of Technology Hyderabad India 1 0 49 1 0 49 26,64 Indian Institute of Management Calcutta India 1 0 49 1 0 49 26,64 Indian Institute of Management Calcutta India 1 0 1 1 0 1 2,1 Malaviya National Institute of Technology India 1 0 9 3 0 9 1,28 Malaviya National Institute of Technology India 1 0 0 1 0 <td>Physical Research Laboratory India</td> <td>India</td> <td>1</td> <td>0</td> <td>49</td> <td>1</td> <td>0</td> <td>49</td> <td>26,64</td>	Physical Research Laboratory India	India	1	0	49	1	0	49	26,64
Indian Institute of Technology Gandhinagar India 1 0 49 1 0 49 26,64 Indian Institute of Technology Hyderabad India 1 0 49 1 0 49 26,64 Indian Institute of Management Calcutta India 1 0 1 1 0 1 2,21 Motilal Nehru National Institute of Technology India 1 0 9 3 0 9 1,28 Malaviya National Institute of Technology India 1 0 0 1 0 0 9 1,28 Malaviya National Institute of Technology India 1 0 0 1 0	AMITY UNIVERSITY	India	1	0	3	1	0	3	2,88
Indian Institute of Technology Hyderabad India 1 0 49 1 0 49 26,64 Indian Institute of Management Calcutta India 1 0 1 1 0 1 2,21 Motilal Nehru National Institute of Technology India 1 0 9 3 0 9 1,28 Malaviya National Institute of Technology India 1 0 0 1 0	Indian Institute of Science Education and Research Pune	India	1	0	49	1	0	49	26,64
Indian Institute of Management Calcutta India 1 0 1 1 2,21 Motilal Nehru National Institute of Technology India 1 0 9 3 0 9 1,28 Malaviya National Institute of Technology India 1 0 0 1 0	Indian Institute of Technology Gandhinagar	India	1	0	49	1	0	49	26,64
Motilal Nehru National Institute of Technology India 1 0 9 3 0 9 1,28 Malaviya National Institute of Technology India 1 0 0 1 0 0 0 Indian Institute of Management Kozhikode India 1 - 5 1 - 5 2,69 Indian Institute of Space Science and Technology India 1 0 49 1 0 49 26,64 Institute of Chartered Financial Analysts of India (ICFAI) India 1 0 1 1 0 1 0,79 Aryabhatta Research Institute of Observational Sciences India 1 0 49 1 0 49 26,64 University of Tehran Iran 10 - 20 1 - 2 0,95 Ferdowsi University of Mashhad Iran 5 0 9 5 100 1,8 0,81 Islamic Azad University Iran 2 -100 3	Indian Institute of Technology Hyderabad	India	1	0	49	1	0	49	26,64
Malaviya National Institute of Technology India 1 0 0 1 0 0 0 Indian Institute of Management Kozhikode India 1 - 5 1 - 5 2,69 Indian Institute of Space Science and Technology India 1 0 49 1 0 49 26,64 Institute of Chartered Financial Analysts of India (ICFAI) India 1 0 1 1 0 1 0,79 Aryabhatta Research Institute of Observational Sciences India 1 0 49 1 0 49 26,64 University of Tehran Iran 10 - 20 1 - 2 0,95 Ferdowsi University of Mashhad Iran 5 0 9 5 100 1,8 0,81 Islamic Azad University Iran 2 -100 3 2 -100 1,5 0,34	Indian Institute of Management Calcutta	India	1	0	1	1	0	1	2,21
Indian Institute of Management Kozhikode India 1 - 5 1 - 5 2,69 Indian Institute of Space Science and Technology India 1 0 49 1 0 49 26,64 Institute of Chartered Financial Analysts of India (ICFAI) India 1 0 1 1 0 1 0,79 Aryabhatta Research Institute of Observational Sciences India 1 0 49 1 0 49 26,64 University of Tehran Iran 10 - 20 1 - 2 0,95 Ferdowsi University of Mashhad Iran 5 0 9 5 100 1,8 0,81 Islamic Azad University Iran 2 -100 3 2 -100 1,5 0,34	Motilal Nehru National Institute of Technology	India	1	0	9	3	0	9	1,28
Indian Institute of Space Science and Technology India 1 0 49 1 0 49 26,64 Institute of Chartered Financial Analysts of India (ICFAI) India 1 0 1 1 0 1 0,79 Aryabhatta Research Institute of Observational Sciences India 1 0 49 1 0 49 26,64 University of Tehran Iran 10 - 20 1 - 2 0,95 Ferdowsi University of Mashhad Iran 5 0 9 5 100 1,8 0,81 Islamic Azad University Iran 2 -100 3 2 -100 1,5 0,34	Malaviya National Institute of Technology	India	1	0	0	1	0	0	0
Institute of Chartered Financial Analysts of India (ICFAI) India 1 0 1 1 0,79 Aryabhatta Research Institute of Observational Sciences India 1 0 49 1 0 49 26,64 University of Tehran Iran 10 - 20 1 - 2 0,95 Ferdowsi University of Mashhad Iran 5 0 9 5 100 1,8 0,81 Islamic Azad University Iran 2 -100 3 2 -100 1,5 0,34	Indian Institute of Management Kozhikode	India	1	-	5	1	-	5	2,69
Aryabhatta Research Institute of Observational Sciences India 1 0 49 1 0 49 26,64 University of Tehran Iran 10 - 20 1 - 2 0,95 Ferdowsi University of Mashhad Iran 5 0 9 5 100 1,8 0,81 Islamic Azad University Iran 2 -100 3 2 -100 1,5 0,34		India	1	0	49	1	0	49	26,64
University of Tehran Iran 10 - 20 1 - 2 0,95 Ferdowsi University of Mashhad Iran 5 0 9 5 100 1,8 0,81 Islamic Azad University Iran 2 -100 3 2 -100 1,5 0,34		India	1	0	1	1	0	1	
Ferdowsi University of Mashhad Iran 5 0 9 5 100 1,8 0,81 Islamic Azad University Iran 2 -100 3 2 -100 1,5 0,34	Aryabhatta Research Institute of Observational Sciences	India	1	0	49	1	0	49	26,64
Islamic Azad University Iran 2 -100 3 2 -100 1,5 0,34	University of Tehran	Iran	10	-	20	1	-	2	0,95
	,	Iran	5	0	9	5	100	1,8	0,81
Mazandaran University Iran 2 -100 3 1 -100 1,5 5,57	•	Iran	2	-100	3	2	-100	1,5	
	Mazandaran University	Iran	2	-100	3	1	-100	1,5	5,57

Shiraz University	Iran	1	0	1	1	0	1	1,68
Tarbiat Modarres University	Iran	1		0	2	-	0	0
University of Isfahan	Iran	1		7	1	_	7	3,56
Pasteur Institute of Iran	Iran	1	_	1	1	_	1	0,17
Shahrood University of Technology	Iran	1		2	1	_	2	1,34
University of Mohaghegh Ardebili	Iran	1	0	0	1	0	0	0
University of Baghdad	Iraq	1	0	0	2	0	0	0
Dublin Institute for Advanced Studies	Ireland	34	-72,7	359	8	0	10,6	2,21
University College Dublin	Ireland	8	-75	73	11	-71,4	9,1	6,1
University College Cork	Ireland	5		17	6	-	3,4	0,85
World Rugby	Ireland	2	_	14	1	_	7	4,11
Dublin City University	Ireland	1	0	10	2	0	10	1,2
Royal College of Surgeons in Ireland	Ireland	1	-	7	1	-	7	1,05
Beaumont Hospital, Dublin	Ireland	1	_	7	1	-	7	1,05
Tel Aviv University	Israel	13	-	87	9	-	6,7	2,58
Israel Electric Corporation Ltd.	Israel	7	0	6	1	0	0,9	3,56
Hebrew University of Jerusalem	Israel	4	-	53	6	-	13,3	7,82
Ben-Gurion University of the Negev	Israel	3	-	17	1	-	5,7	1,96
Weizmann Institute of Science	Israel	3	0	68	5	0	22,7	13,8
Ashkelon Academic College	Israel	2	0	14	1	0	7	1,65
Agricultural Research Organization of Israel	Israel	1	0	34	1	0	34	5,52
Technion-Israel Institute of Technology	Israel	1	-	1	1	-	1	0,5
University of Haifa	Israel	1	0	7	1	0	7	10,52
Sheba Medical Center at Tel Hashomer	Israel	1	0	3	1	0	3	3,58
Israel Ministry of Health	Israel	1	-	47	1	-	47	13,89
JDC-Brookdale Institute Israel	Israel	1	0	1	2	0	1	3,68
University of Bologna	Italy	9	-100	138	8	-100	15,3	5,15
University of Padova	Italy	9	-	108	14	-	12	11,01
University of Rome La Sapienza	Italy	7	-	81	24	-	11,6	7,18
CNR	Italy	6	-50	72	6	-50	12	5,18
INFN	Italy	6	0	81	246	0	13,5	8,52
Universita di Palermo	Italy	5	-	14	5	-	2,8	0,84
University of Bari	Italy	5	0	73	14	0	14,6	6,92
University of Modena and Reggio Emilia	Italy	5	-66,7	77	5	-75	15,4	3,55
University of Rome Tor Vergata	Italy	5	-	107	17	-	21,4	10,02
University of Naples Federico II	Italy	4	0	62	20	0	15,5	9,1
University of Perugia	Italy	4	-100	70	5	-100	17,5	8,59
University of Pisa	Italy	4	0	62	21	0	15,5	9,1
University of Trieste	Italy	4	0		9	0	15,8	8,34
INAF Istituto di Astrofisica Spaziale e Fisica Cosmica, Bologna	Italy	4	-	57	26	-	14,3	8,16
Politecnico di Milano	Italy	3	-	51	5	-	17	9,31
University of Catania	Italy	3	0	72	7	0	24	15,01
University of Florence	Italy	3	-100	24	5	-100	8	3,43
University of Turin	Italy	3	0		5	0	19	10,88
Astronomical Observatory of Padua	Italy	3	0		14	0	22,3	13,76
Osservatorio Astronomico di Brera	Italy	3	0	67	14	0	22,3	13,76
Osservatorio Astronomico di Capodimonte	Italy	3	0	67	8	0	22,3	13,76

Italian Space Agency	Italy	3	0	57	11	0	19	10,88
Politecnico di Bari	Italy	2	0	51	10	0	25,5	14,07
University of Ferrara	Italy	2	-	20	2	-	10	5,63
Universita Degli Studi Di Genova	Italy	2	0	54	6	0	27	15,19
University of Milan	Italy	2	0	53	5	0	26,5	15,06
University of Udine	Italy	2	0	8	1	0	4	3
Abdus Salam International Centre for Theoretical Physics	Italy	2	-	2	2	-	1	0,29
Istituto Nazionale Malattie Infettive Lazzaro Spallanzani	Italy	2	-	54	3	-	27	7,47
Osservatorio Astronomico di Trieste	Italy	2	0	55	2	0	27,5	15,57
Istituto Nazionale Di Astrofisica, Rome	Italy	2	0	54	42	0	27	15,19
Osservatorio Astrofisico Di Arcetri, Florence	Italy	1	0	49	3	0	49	26,64
Scuola Normale Superiore di Pisa	Italy	1	0	49	2	0	49	26,64
Universita degli Studi dell'Insubria	Italy	1	0	49	1	0	49	26,64
Universita di Salerno	Italy	1	0	49	3	0	49	26,64
University of Camerino	Italy	1	0	49	2	0	49	26,64
University of L'Aquila	Italy	1	0	49	2	0	49	26,64
University of Salento	Italy	1	0	49	8	0	49	26,64
University of Parma	Italy	1	0	49	1	0	49	26,64
University of Sannio	Italy	1	0	49	5	0	49	26,64
University of Siena	Italy	1	0	49	3	0	49	26,64
University of Trento	Italy	1	0	49	5	0	49	26,64
University of Urbino	Italy	1	0	49	8	0	49	26,64
University of Verona	Italy	1	-100	40	1	-100	40	5,23
Enrico Fermi Center	Italy	1	0	49	1	0	49	26,64
International Centre for Genetic Engineering and Biotechnology	Italy	1	0	0	1	0	0	0
Laboratori Nazionali di Legnaro	Italy	1	-	9	1	-	9	2,31
Osservatorio Astrofisico di Catania	Italy	1	0	49	1	0	49	26,64
Osservatorio Astronomico Roma	Italy	1	0	49	13	0	49	26,64
Sincrotrone Trieste	Italy	1	0	6	1	0	6	0,75
University of Milan - Bicocca	Italy	1	0	49	1	0	49	26,64
Agricultural Research Council of Italy	Italy	1	-	0	1	-	0	0
IRCCS Istituto Dermatologico San Gallicano	Italy	1	-	47	1	-	47	13,89
Rikkyo University	Japan	8	0	60	7	0	7,5	4,28
Kyoto University	Japan	6	-	61	14	-	10,2	5,4
University of Tokyo	Japan	6	0	78	12	0	13	13,07
Tottori University	Japan	5	-	8	8	-	1,6	0,99
Nagoya University	Japan	4	-100	74	17	-100	18,5	7,3
Osaka University	Japan	4	-100	50	9	-100	12,5	6,69
JAXA Institute of Space and Astronautical Science	Japan	4	0	51	7	0	12,8	7,03
Hiroshima University	Japan	3	0	57	10	0	19	10,88
Hokkaido University	Japan	3	-	7	4	-	2,3	2,14
Japan Aerospace Exploration Agency	Japan	2	0	49	11	0	24,5	13,32
National Institute of Advanced Industrial Science and Technology	Japan	2	0	22	1	0	11	24,02
Tohoku Gakuin University	Japan	2	-100	0	1	-100	0	0
National Institutes of Natural Sciences - National Astronomical Observatory of Japan	Japan	2	0	50	18	0	25	13,38
Aoyama Gakuin University	Japan	1	0	49	6	0	49	26,64

Chiba University	Japan	1	0	49	8	0	49	26,64
Chuo University	Japan	1	0	49	4	0	49	26,64
University of Hyogo	Japan	1	0	49	6	0	49	26,64
Hirosaki University	Japan	1	-100	13	1	-100	13	1,74
Kagoshima University	Japan	1	0	49	1	0	49	26,64
Kanagawa University	Japan	1	0	49	2	0	49	26,64
Konan University	Japan	1	0	49	1	0	49	26,64
Mie University	Japan	1	-100	48	1	-100	48	6,99
Nagoya Institute of Technology	Japan	1	0	1	1	0	1	0,53
Nihon University	Japan	1	0	49	4	0	49	26,64
Obihiro University of Agriculture and Veterinary Medicine	Japan	1	0	5	3	0	5	2,25
Osaka City University	Japan	1	0	49	1	0	49	26,64
RIKEN	Japan	1	0	49	10	0	49	26,64
Ritsumeikan University	Japan	1	-	5	1	-	5	1,72
Shinshu University	Japan	1	0	0	2	0	0	0
Toho University	Japan	1	0	49	1	0	49	26,64
Tohoku University	Japan	1	0	49	1	0	49	26,64
Tokyo Institute of Technology	Japan	1	0	49	11	0	49	26,64
University of Miyazaki	Japan	1	0	49	3	0	49	26,64
Waseda University	Japan	1	0	49	3	0	49	26,64
Kobe Gakuin University	Japan	1	-	5	1	-	5	2,19
Kyoto Prefectural University	Japan	1	0	0	1	0	0	0
Kyoto Sangyo University	Japan	1	0	1	2	0	1	0,12
National Museum of Nature and Science	Japan	1	0	0	1	0	0	0
Yarmouk University	Jordan	1	0	0	2	0	0	0
University of Nairobi	Kenya	8	400	59	13	300	7,4	1,89
Kenyatta University	Kenya	7	-	26	2	-	3,7	0,99
University of Eldoret	Kenya	6	200	10	6	66,7	1,7	0,49
International Centre of Insect Physiology and Ecology Nairobi	Kenya	5	0	59	6	50	11,8	2
National Museums of Kenya	Kenya	4	0	9	3	0	2,3	5,7
Africa Nazarene University	Kenya	4	-	2	4	-	0,5	1,42
International Livestock Research Institute	Kenya	3	0	5	3	0	1,7	0,43
Moi University	Kenya	2	-	52	2	-	26	9,77
Maasai Mara University	Kenya	2	-	2	1	-	1	0,41
South Eastern Kenya University	Kenya	2	-100	3	1	-100	1,5	0,23
Egerton University	Kenya	1	0	7	2	0	7	0,9
Kenya Agricultural Research Institute: Affiliation	Kenya	1	-100	9	1	-100	9	1,33
Jomo Kenyatta University of Agriculture and Technology	Kenya	1	0	3	1	0	3	2,44
Jaramogi Oginga Odinga University of Science and Technology	Kenya	1	-	1	1	-	1	0,33
Academic Model Providing Access to Healthcare (AMPATH)	Kenya	1	-	47	1	-	47	13,89
Kuwait Institute for Scientific Research	Kuwait	1	0	8	1	0	8	8,3
American University of Beirut	Lebanon	3	-100		4	-100	1,7	0,34
National University of Lesotho	Lesotho	4	100	1	3	100	0,3	0,06
Vilnius University	Lithuania	1	-	17	1	-	17	6,94
University of Malawi	Malawi	3	-100	50	4	-100	16,7	2,51
University of Nottingham Malaysia Campus	Malaysia	5	-	3	3	-	0,6	0,15
Universiti Putra Malaysia	Malaysia	4	-100	6	2	-100	1,5	1,62

Universiti Kebangsaan Malaysia	Malaysia	1	_	5	1	_	5	1,71
University of Malaya	Malaysia	1	_	5	7	_	5	1,25
University of Mauritius	Mauritius	4	0	72	5	200	18	3,26
Mauritius Sugarcane Industry Research Institute	Mauritius	1	-100	1	2	-100	1	0,2
International Maize and Wheat Improvement Center (CIMMYT)	Mexico	6	-	66	10	-	11	5,68
Centro Nacional de Investigacion y Desarrollo Tecnologico, Mexico	Mexico	5	0	13	1	0	2,6	4,07
Universidad Nacional Autonoma de Mexico	Mexico	2	_	54	31	-	27	14,18
Benemerita Universidad Autonoma de Puebla	Mexico	1	0	49	10	0	49	26,64
CINVESTAV-IPN	Mexico	1	0	49	3	0	49	26,64
Instituto Mexicano del Seguro Social	Mexico	1	0	0	1	0	0	0
Instituto Nacional de Astrofisica Optica y Electronica	Mexico	1	0	49	10	0	49	26,64
Instituto Politecnico Nacional	Mexico	1	0	49	3	0	49	26,64
Universidad de Guadalajara	Mexico	1	0	49	2	0	49	26,64
Universidad de Sonora	Mexico	1	0	1	1	0	1	15,98
Universidad Michoacana de San Nicolas de Hidalgo	Mexico	1	0	49	8	0	49	26,64
Hospital de Especialidades	Mexico	1	0	0	1	0	0	0
Instituto Nacional de Enfermedades Respiratorias	Mexico	1	-	47	1	-	47	13,89
Instituto Nacional de Investigaciones Forestales, Agricolas y Pecuarias	Mexico	1	0	50	1	0	50	11,75
Universidad Autonoma del Estado de Hidalgo	Mexico	1	0	49	2	0	49	26,64
Universidad Autonoma de Chiapas	Mexico	1	0	49	6	0	49	26,64
Mongolian Academy of Sciences	Mongolia	1	0	49	14	0	49	26,64
Mohammed V University in Rabat	Morocco	3	-	72	9	-	24	11,63
Universite Mohammed Premier Oujda	Morocco	3	-	72	4	-	24	11,63
Universite Moulay Ismail	Morocco	3	-100	2	2	-100	0,7	0,97
Ibn Sina Hospital	Morocco	1	-	18	1	-	18	4,51
Universite Abdelmalek Essaadi	Morocco	1	-	18	2	-	18	4,51
Institut Pasteur du Maroc	Morocco	1	-	18	1	-	18	4,51
Universidade Eduardo Mondlane	Mozambique	4	-	3	6	-	0,8	0,36
Instituto Nacional de Saude Maputo	Mozambique	1	-100	40	1	-100	40	5,23
University of Namibia	Namibia	34	-72,7	359	11	-40	10,6	2,25
Namibia University of Science and Technology	Namibia	3	0	3	6	-80	1	0,25
University of Amsterdam	Netherlands	33	-28,6	394	29	83,3	11,9	3,02
Wageningen University & Research	Netherlands	22	250	85	27	225	3,9	3,36
FOM-Institute of Subatomic Physics - NIKHEF	Netherlands	18	-50	239	44	150	13,3	3,33
Delft University of Technology	Netherlands	9	-33,3	98	10	-50	10,9	1,59
University of Groningen	Netherlands	9	-66,7	110	14	-60	12,2	4,3
Radboud University Nijmegen	Netherlands	8	-100	93	33	-100	11,6	6,34
Utrecht University	Netherlands	8	0	77	11	-66,7	9,6	6,89
Centraalbureau voor Schimmelcultures	Netherlands	5	0	95	11	-80	19	3,78
Erasmus University Rotterdam	Netherlands	4	0	60	4	-50	15	4,8
Leiden University	Netherlands	4	-	55	6	-	13,8	7,86
Vrije Universiteit	Netherlands	4	-	73	5	-	18,3	10,72
ASTRON	Netherlands	3	0	55	7	0	18,3	10,38
Royal Netherlands Institute for Sea Research - NIOZ	Netherlands	3	-	56	3	-	18,7	10,4
NHTV Breda University of Applied Sciences	Netherlands	3	-100	14	6	-100	4,7	1,1
SRON Netherlands Institute for Space Research	Netherlands	2	0	67	5	0	33,5	20,64
Eindhoven University of Technology	Netherlands	1	-	8	1	-	8	2,12

National Institute of Public Health and the Environment	Netherlands	1	0	1	1	0	1	1,06
University of Twente	Netherlands	1	0	2	2	0	2	2,81
Crucell NV	Netherlands	1	0	15	1	0	15	1,86
University of Canterbury	New Zealand	5	0	65	7	0	13	6,43
University of Otago	New Zealand	5		23	4	-	4,6	2,53
Auckland University of Technology	New Zealand	4	-100	15	5	-100	3,8	2,6
University of Auckland	New Zealand	3	-100	64	8	-100	21,3	9,43
Massey University	New Zealand	2	0	50	2	0	25	13,38
Victoria University of Wellington	New Zealand	2	0	1	2	0	0,5	0,06
NIWA	New Zealand	1	0	49	1	0	49	26,64
University of Waikato	New Zealand	1	-	0	2	-	0	0
GNS Science	New Zealand	1	0	0	1	0	0	0
Landcare Research	New Zealand	1	-100	13	2	-100	13	1,74
New Zealand Rugby	New Zealand	1	0	5	1	0	.5	5,76
Covenant University	Nigeria	6	50	75	10	133,3	12,5	2,1
International Institute of Tropical Agriculture (IITA), Ibadan	Nigeria	5	0	27	10	200	5,4	1,37
University of Lagos	Nigeria	4		11	4		2,8	1,86
Obafemi Awolowo University	Nigeria	3	0	41	4	100	13,7	1,96
University of Ibadan	Nigeria	3	-100	52	9	-100	17,3	2,52
University of Ilorin	Nigeria	3	-100	1	2	-100	1,3	1,13
Federal University of Technology, Minna	Nigeria	2	-100	10	5	-100	5	2,19
University of Abuja, Gwagwalada	Nigeria	2	-100	50	3	-100	25	3,76
Ahmadu Bello University		1	-100	40	1	-100		5,23
University of Nigeria	Nigeria Nigeria	1	-100	40	2	-100	40	5,23
University of Agriculture, Makurdi	Nigeria	1	-100	0	1	0	40	0
Ekiti State University		1	0	0	1	0	0	0
University of Tromso	Nigeria	17	0	83	11	25	4.0	
University of Fromso University of Bergen	Norway	5	-100	83	11	-100	4,9 16,6	0,79 6,61
University of Oslo	Norway Norway	3	-100	8	4	-100	2	•
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Norwegian University of Science and Technology	Norway Pakistan	3	<u>-</u>	30	3	-	10	3,67
The University of Lahore		1	- 100	22	1	-	1	0,2
Islamic University of Gaza	Palestine	6	100	22	2	0	3,7	0,58
Instituto De Investigaciones Cientificas Y Servicios De Alta Tecnologia, INDICASAT-AIP	Panama	1	0	25	1	0	25	5,23
Centro Internacional de la Papa	Peru	1	0	8	2	0	8	8,3
Polish Academy of Sciences	Poland	40	-36,4	379	47	-11,1	9,5	2,01
University of Warsaw	Poland	37	-54,5	378	31	100	10,2	2,49
Nicolaus Copernicus Astronomical Center of the Polish Academy of Sciences	Poland	34	-63,6	355	16	-30	10,4	2,2
Henryk Niewodniczanski Institute of Nuclear Physics of the Polish Academy of Sciences	Poland	32	-72,7	348	20	-50	10,9	2,29
Jagiellonian University in Kraków	Poland	32	-72,7	354	19	-53,3	11,1	2,43
Nicolaus Copernicus University in Torun	Poland	32	-72,7	348	8	-83,3	10,9	2,29
Adam Mickiewicz University in Poznan	Poland	2	0		2	0	24,5	13,32
Wroclaw Medical University	Poland	2	_	17	3	-	8,5	3,47
Institute of Bioorganic Chemistry of the Polish Academy of Sciences	Poland	2	0	17	1	0	8,5	1,8
University of Bialystok	Poland	1	0		1	0	49	26,64
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University of Lódz	Poland	1	0	49	5	0	49	26,64
University of Wroclaw	Poland	1	-100	1	1	-100	1	0,2
University of Zielona Gora	Poland	1	0	49	1	0	49	26,64
Warsaw University of Technology	Poland	1	0	49	1	0	49	26,64
Institute of Electron Technology	Poland	1	0	49	1	0	49	26,64
Polish Geological Institute	Poland	1	_	5	1	_	5	1,72
Institute of Organic Chemistry of the Polish Academy of Sciences	Poland	1	_	1	3	_	1	0,21
Institute of Mathematics of the Polish Academy of Sciences	Poland	1	0	49	2	0	49	26,64
Space Research Center of the Polish Academy of Sciences	Poland	1	_	2	1	_	2	0,59
Universidade de Lisboa	Portugal	6	_	76	23	_	12,7	7,45
Universidade do Algarve	Portugal	2	0	0	2	0	0	0
Universidade do Porto	Portugal	2	0	11	2	0	5,5	1,2
Universidade Nova de Lisboa	Portugal	2	_	1	3	_	0,5	0,31
University of Coimbra	Portugal	2	0	14	3	100	7	2,4
Universidade de Tras-os-Montes e Alto Douro	Portugal	1	_	2	2	_	2	0,51
University of Aveiro	Portugal	1	0	0	3	0	0	0
University of Minho	Portugal	1	-100	48	4	-100	48	5,2
Hospital de Sao Jose	Portugal	1	0	3	1	0	3	3,58
University of Puerto Rico	Puerto Rico	1	_	7	1	_	7	2,34
Qatar University	Qatar	28	_	118	3	_	4,2	1,37
Aspire Academy	Qatar	1	_	2	1	_	2	0,93
National Institute for Laser, Plasma and Radiation Physics	Romania	2	-100	11	3	-100	5,5	1,7
University Politehnica of Bucharest	Romania	1	0	49	1	0	49	26,64
Horia Hulubei National Institute of Physics and Nuclear Engineering	Romania	1	0	49	7	0	49	26,64
Far Eastern Federal University	Russian Federation	18	_	11	2	_	0,6	0,35
RAS	Russian Federation	15	100	142	34	366,7	9,5	2,82
Tyumen State University	Russian Federation	12	0	15	2	0	1,3	2,22
Altai State University	Russian Federation	9	-	5	2	_	0,6	0,34
St. Petersburg State University	Russian Federation	6	_	20	25	_	3,3	0,95
St. Petersburg National Research University of Information Technologies, Mechanics and Optics (ITMO)	Russian Federation	6	0	11	2	0	1,8	3,49
Moscow State University	Russian Federation	4	-100	74	22	-100	18,5	8,31
RAS - Siberian Branch	Russian Federation	4	-	1	1	-	0,3	0,07
I. M. Gubkin Russian State University of Oil and Gas	Russian Federation	3	-	10	2	-	3,3	0,63
Moscow Institute of Physics and Technology	Russian Federation	2	0	51	2	0	25,5	14,19
Perm State National Research University	Russian Federation	2	-	0	1	-	0	0
RAS - Space Research Institute	Russian Federation	2	0	59	7	0	29,5	13,92
Immanuel Kant Baltic Federal University	Russian Federation	2	-	1	2	-	0,5	0,17
Kazan Volga Region Federal University	Russian Federation	1	-100	8	1	-100	8	1,07
Irkutsk State University	Russian Federation	1	0	49	3	0	49	26,64
Moscow Engineering Physics Institute	Russian Federation	1	0	49	1	0	49	26,64
RAS - Institute of Applied Physics	Russian Federation	1	0	49	3	0	49	26,64
RAS - Institute of Solar-Terrestrial Physics SB	Russian Federation	1	0	49	1	0	49	26,64
RAS - Ioffe Physico Technical Institute	Russian Federation	1	0	49	9	0	49	26,64
RAS - Keldysh Institute of Applied Mathematics	Russian Federation	1	0	49	7	0	49	26,64
RAS - Pulkovo Astronomical Observatory	Russian Federation	1	0	49	1	0	49	26,64

Higher School of Economics	Russian Federation	1	0	49	1	0	49	26,64
Ulyanovsk State Pedagogical University	Russian Federation	1	-	0	1	-	0	0
University of Rwanda	Rwanda	1	-100	0	1	-100	0	0
King Saud University	Saudi Arabia	22	1100	204	7	200	9,3	3,36
King Abdulaziz University	Saudi Arabia	19	250	99	17	-16,7	5,2	1,78
King Khalid University	Saudi Arabia	3	0	3	1	0	1	1,06
King Fahd University of Petroleum and Minerals	Saudi Arabia	2	-	8	2	-	4	1,29
Alfaisal University	Saudi Arabia	2	0	7	7	0	3,5	7,31
Al-Imam Muhammad Ibn Saud Islamic University	Saudi Arabia	1	-	4	1	-	4	1,02
Jazan University	Saudi Arabia	1	0	0	1	0	0	0
Universite Cheikh Anta Diop	Senegal	1	-100	40	1	-100	40	5,23
Institut Pasteur de Dakar	Senegal	1	_	1	1	-	1	0,17
University of Belgrade	Serbia	8	-75	35	14	-92,3	4,4	0,6
University of Novi Sad	Serbia	6	0	30	38	-21,4	5	0,86
University of Nis	Serbia	1	_	17	1	-	17	6,94
Mathematical Institute SANU	Serbia	1	-100	10	1	-100	10	1,08
Agency for Science, Technology and Research (A*STAR)	Singapore	1	0	11	1	0	11	6,95
National University of Singapore	Singapore	1	-100	20	1	-100	20	2,86
Slovak Academy of Sciences	Slovakia	2	0	3	2	0	1,5	0,22
Slovak University of Technology	Slovakia	1	0	1	1	0	1	2,88
University of Ljubljana	Slovenia	5	0	65	10	0	13	5,96
J. Stefan Institute	Slovenia	1	0	49	3	0	49	26,64
University of Nova Gorica	Slovenia	1	0	49	11	0	49	26,64
Scientific Research Centre of the Slovenian Academy of Sciences and Arts	Slovenia	1	-	1	6	-	1	0,18
University of Pretoria	South Africa	159	51,4	645	170	38,8	4,1	1,12
University of the Witwatersrand	South Africa	138	-10,3	864	166	-23,1	6,3	1,85
University of Stellenbosch	South Africa	112	10,7	490	130	33,3	4,4	1,19
University of Cape Town	South Africa	102	37,5	597	180	18,6	5,9	1,9
North West University	South Africa	100	-46,4	466	85	76,2	4,7	1,26
Agricultural Research Council	South Africa	93	17,4	316	119	106,9	3,4	1,04
University of KwaZulu-Natal	South Africa	77	60	427	106	43,3	5,5	1,51
University of the Western Cape	South Africa	58	-27,8	314	52	5,3	5,4	1
Council for Scientific and Industrial Research South Africa	South Africa	46	77,8	340	37	-20	7,4	2,26
University of South Africa	South Africa	44	77,8		33	150	2,6	1,14
Nelson Mandela University	South Africa	32	25		36	7,7	5,9	1,25
Rhodes University	South Africa	29	28,6		26	62,5	4,3	1,45
University of Johannesburg	South Africa	28	-14,3		35	83,3	6,3	2,19
University of Fort Hare	South Africa	27	40		24	-40	2,1	0,96
Tshwane University of Technology	South Africa	26	125		30	142,9	1,9	0,72
Central University of Technology	South Africa	25	-50	15	38	81,8	0,6	0,25
South African Medical Research Council	South Africa	18	100		37	42,9	14,6	2,86
National Institute for Communicable Diseases	South Africa	16	100	109	30	-16,7	6,8	2,92
University of Limpopo	South Africa	15	133,3		15	66,7	2,9	0,71
University of Zululand	South Africa	13	200	29	9	0	2,2	0,54
South African Astronomical Observatory	South Africa	12	50		12	50	6,3	2,85
Council for Geoscience	South Africa	11	-75		16	-25	5,5	1,14
Walter Sisulu University	South Africa	11	50	106	15	200	9,6	1,64

South African National Biodiversity Institute	South Africa	7	300	24	13	350	3,4	0,94
MINTEK	South Africa	6	0	9	8	200	1,5	0,16
Cape Peninsula University of Technology	South Africa	3	-100	3	4	-100	1	1,35
Durban University of Technology	South Africa	3	-	2	4	-	0,7	0,17
Human Sciences Research Council South Africa	South Africa	2	0	9	2	0	4,5	1,15
Sasol Technology (Pty) Ltd.	South Africa	1	-	0	1	-	0	0
Centre for the AIDS Programme of Research in South Africa (CAPRISA)	South Africa	1	0	4	1	0	4	4,73
Ewha Womans University	South Korea	20	60	43	3	100	2,2	1,98
Korea Institute of Science and Technology	South Korea	3	-	12	4	-	4	1,54
Sungkyunkwan University	South Korea	2	-100	62	10	-100	31	14,19
Korea Astronomy and Space Science Institute	South Korea	2	0	50	10	0	25	13,38
Chungbuk National University	South Korea	1	0	1	7	0	1	0,12
Hanyang University	South Korea	1	0	49	1	0	49	26,64
Inje University	South Korea	1	0	49	2	0	49	26,64
Korea Basic Science Institute	South Korea	1	-	0	1	-	0	0
Korea University	South Korea	1	0	0	1	0	0	0
Pusan National University	South Korea	1	0	49	3	0	49	26,64
Seoul National University	South Korea	1	0	49	7	0	49	26,64
Yeungnam University	South Korea	1	0	5	1	0	5	3,25
Rural Development Administration	South Korea	1	-100	13	1	-100	13	1,74
Korea Institute of Science and Technology Information (KISTI)	South Korea	1	0	49	2	0	49	26,64
CSIC	Spain	19	-60	158	50	-64,3	8,3	3,52
University of the Basque Country	Spain	8	-	5	9	-	0,6	1,15
Universidad Complutense	Spain	6	-33,3	40	7	33,3	6,7	1,56
Universidad Politecnica de Valencia	Spain	6	-	62	8	-	10,3	7,19
Universitat Autonoma de Barcelona	Spain	6	-	73	12	-	12,2	5,79
Universitat Rovira i Virgili	Spain	5	100	55	11	33,3	11	2,24
ICREA	Spain	5	0	82	5	0	16,4	7,14
University of A Coruna	Spain	4	-100	42	1	-100	10,5	2,35
University of Granada	Spain	4	-	101	6	-	25,3	10,56
IEEC - Institute of Space Studies of Catalonia	Spain	4	0	66	7	0	16,5	8,43
Universidad Autonoma de Madrid	Spain	3	0	60	2	0	20	9,32
Universidad de Oviedo	Spain	3	-	12	2	-	4	2,24
Universitat de Barcelona	Spain	3	100	56	4	0	18,7	5,06
Universitat de Valencia	Spain	3	0	56	17	0	18,7	10,58
Basque Foundation for Science	Spain	3	-	1	1	-	0,3	0,1
Universidad de Alcala	Spain	2	0	95	5	-75	47,5	10,44
Universidad de Las Palmas de Gran Canaria	Spain	2	0	14	1	0	7	1,65
Universidad de Murcia	Spain	2	0	0	1	0	0	0
Universidad de Santiago de Compostela	Spain	2	0	88	9	0	44	17,43
Universitat Politecnica de Catalunya	Spain	2	0	54	1	0	27	15,19
European Space Astronomy Centre	Spain	2	0	59	3	0	29,5	13,92
Instituto Astrofisico de Canarias	Spain	2	0	54	4	0	27	15,19
Universidad Europea de Madrid	Spain	2	0	2	1	0	1	2,23
CIEMAT	Spain	1	0	49	2	0	49	26,64
Universidad de Cordoba	Spain	1	0	0	1	0	0	0
Universidad de La Laguna	Spain	1	0	49	1	0	49	26,64

Universidad de Malaga	Spain	1	0	49	3	0	49	26,64
Universidad de Vigo	Spain	1	0	4	1	0	4	6,35
Universidad Politecnica de Madrid	Spain	1	-100	7	1	-100	7	0,77
Universidad Rey Juan Carlos	Spain	1	0	0	1	0	0	0
Universitat Pompeu Fabra	Spain	1	0	15	2	0	15	1,86
University of the Balearic Islands	Spain	1	0	49	8	0	49	26,64
Fundacion Hospital Alcorcon	Spain	1	-	17	1	-	17	6,94
Hospital Universitario San Cecilio	Spain	1	0	3	1	0	3	3,58
IRTA - Institute of Agrifood Research and Technology	Spain	1	-	18	1	-	18	6,18
Instituto Nacional de Tecnica Aeroespacial	Spain	1	0	49	1	0	49	26,64
Universitaria San Pablo CEU	Spain	1	-	4	3	-	4	1,12
IDIBAPS - August Pi i Sunyer Biomedical Research Institute	Spain	1	-	47	1	-	47	13,89
IISPV - Pere Virgili Health Research Institute	Spain	1	-100	48	3	-100	48	6,99
IFAE - Institute for High Energy Physics	Spain	1	0	49	2	0	49	26,64
BC3 Basque Centre for Climate Change	Spain	1	0	0	1	0	0	0
Sabaragamuwa University of Sri Lanka	Sri Lanka	1	0	0	1	0	0	0
University of Khartoum	Sudan	27	28,6	157	12	66,7	5,8	1,67
University of Swaziland	Swaziland	1	-	5	1	-	5	2
Stockholm University	Sweden	39	-58,3	426	43	-52,6	10,9	2,67
Royal Institute of Technology	Sweden	24	-57,1	229	11	-12,5	9,5	2,71
Linnaeus University	Sweden	22	-90,9	251	4	100	11,4	1,43
Lund University	Sweden	6	-100	25	12	-100	4,2	1,16
Linkoping University	Sweden	5	-	18	6	-	3,6	1,17
Karolinska Institutet	Sweden	4	-	72	5	-	18	5,73
Swedish University of Agricultural Sciences	Sweden	4	200	5	5	400	1,3	0,38
Jonkoping University	Sweden	4	0	1	4	0	0,3	0,04
University of Gothenburg	Sweden	3	-100	24	3	-100	8	1,28
Umea University	Sweden	3	-100	46	3	-100	15,3	2,39
Uppsala University	Sweden	3	0	71	7	0	23,7	10,66
Swedish Museum of Natural History	Sweden	2	-100	16	3	-100	8	2,09
NORDITA	Sweden	2	0	55	1	0	27,5	15,57
Chalmers University of Technology	Sweden	1	0	49	1	0	49	26,64
AstraZeneca Sweden	Sweden	1	-100	0	1	-100	0	0
University of Skovde	Sweden	1	0	0	2	0	0	0
European Centre for Disease Prevention and Control	Sweden	1	-	1	1	-	1	0,17
University of Zurich	Switzerland	12	-25	161	25	-20	13,4	5,39
ETH Zurich	Switzerland	7	-	114	4	-	16,3	12,55
University of Basel	Switzerland	6	-	17	6	-	2,8	0,53
Universitat St. Gallen	Switzerland	4	0	2	3	0	0,5	0,3
University of Lausanne	Switzerland	3	0	13	3	0	4,3	0,91
World Health Organization Ecole Polytechnique Federale de Lausanne (EPFL)	Switzerland Switzerland	3	-100	46	3	-100	15,3	2,39
	Switzerland	2		16	2	0	30.5	7,42
University of Geneva	Switzerland	2	0	59	11	0	29,5	13,92
University of Bern	Switzerland	1	- 0	01	1	- 0	/	1,29
Swiss Tropical Institute International Union for Conservation of Nature and Natural Resources	Switzerland	1	0	91	8	0	91	22,95
National Taiwan University	Taiwan	8	0	63	4	U		3,82
National Talwan Oniversity	IdiWali	8	-	63	4	-	7,9	1,83

National Taiwan University of Science and Technology	Taiwan	3	0	9	1	0	3	0,55
Academia Sinica Taiwan	Taiwan	2	-	44	2	-	22	3,37
Institute of Atomic and Molecular Sciences Academia Sinica Taiwan	Taiwan	2		44	2		22	3,37
Chang Gung University	Taiwan	1	0	0	1	0	0	0
National Central University	Taiwan	1	0	49	3	0	49	26,64
National Tsing Hua University	Taiwan	1	0	49	4	0	49	26,64
University of Dar Es Salaam	Tanzania	3	0	58	3	100	19,3	3,25
Muhimbili University of Health and Allied Sciences	Tanzania	2	0	58	5	100	29	4,87
Sokoine University of Agriculture	Tanzania	2	0	8	2	0	4	0,85
National Institute for Medical Research Tanga	Tanzania	1	-100	40	2	-100	40	5,23
Ifakara Health Institute	Tanzania	1	0	91	1	0	91	22,95
Mahidol University	Thailand	5	0	18	9	100	3,6	2,09
Mae Fah Luang University	Thailand	4	-100	71	13	-100	17,8	7,39
Chulalongkorn University	Thailand	3	-	50	4	-	16,7	5,82
National Science and Technology Development Agency Thailand	Thailand	3	-100	20	4	-100	6,7	6,62
Naresuan University	Thailand	1	0	0	1	0	0	0
Ubon Rachathani University	Thailand	1	-100	7	1	-100	7	0,86
University of Lome	Togo	1	0	0	1	0	0	0
Institut Pasteur de Tunis	Tunisia	2	0	58	5	400	29	4,87
Firat University	Turkey	12	600	46	7	200	3,8	1,35
Mehmet Akif Ersoy University	Turkey	12	_	97	1	-	8,1	8,96
Hacettepe University	Turkey	4	-100	86	1	-100	21,5	3,2
Istanbul University	Turkey	4	100	70	4	100	17,5	7,42
Yildiz Technical University	Turkey	4	-100	12	3	-100	3	5,06
Anadolu University	Turkey	3	-	0	3	_	0	0
Middle East Technical University (METU)	Turkey	3	-	0	1	-	0	0
Cankaya University	Turkey	3	-	117	1	-	39	8,34
Bingol University	Turkey	3	-	1	1	-	0,3	0,1
Bilkent University	Turkey	2	-100	19	1	-100	9,5	1,65
Celal Bayar University	Turkey	2	-100	7	1	-100	3,5	3,16
Gazi University	Turkey	2	-	21	2	-	10,5	5,21
Ankara University	Turkey	1	-	1	1	-	1	0,17
Cumhuriyet University	Turkey	1	-	1	1	-	1	0,17
Ataturk Training and Research Hospital	Turkey	1	-	1	1	-	1	0,17
Istanbul Ticaret University	Turkey	1	-	0	1	-	0	0
Munzur Universitesi	Turkey	1	-	18	1	-	18	5,62
Abdullah Gul University	Turkey	1	-	0	3	-	0	0
Yildirim Beyazit Universitesi	Turkey	1	-	1	1	-	1	0,17
Makerere University	Uganda	5	100	44	10	-50	8,8	1,4
Uganda Virus Research Institute	Uganda	3	0	61	3	-66,7	20,3	4,44
Uganda Ministry of Health	Uganda	2	0	87	2	0	43,5	9,56
Mbarara University of Science and Technology	Uganda Ukraine		0	10	1	0	10	2,3
Ivan Franko National University of L'viv	Ukraine	3	-	0	1	-	0,3	0,07
V.I. Vernadsky Crimean Federal University	Ukraine	2	0	0	2	0	0	0
Chernovtsy National University Main Astronomical Observatory Nasu	Ukraine	1	0	10	2	0	10	
United Arab Emirates University	United Arab Emirates	1	0	17	1	U	17	1,2
OTHICU ATAD ETHILATES OTHERSTLY	Officer Wigh Citiliates	1	-	17		-	1/	6,94

University of Sharjah	United Arab Emirates	1	0	0	1	0	0	0
Heriot-Watt University Dubai Campus	United Arab Emirates	1	_	0	1	-	0	0
University of Leicester	United Kingdom	45	-57,1	424	47	0	9,4	2,05
University of Durham	United Kingdom	30	-76,9	220	17	-50	7,3	1,19
University College London	United Kingdom	14	250	186	25	450	13,3	5,58
University of Oxford	United Kingdom	12	50	159	23	100	13,3	5,46
University of Southampton	United Kingdom	12	50	106	17	50	8,8	4,35
University of Edinburgh	United Kingdom	8	-	81	22	-	10,1	6,06
University of Sheffield	United Kingdom	8	-66,7	137	15	-83,3	17,1	5,64
Cardiff University	United Kingdom	7	-50	77	30	-33,3	11	5,32
Imperial College London	United Kingdom	7	200	37	7	300	5,3	0,96
University of Leeds	United Kingdom	7	-	84	5	-	12	5,25
University of Liverpool	United Kingdom	7	-50	88	17	100	12,6	5,86
University of Manchester	United Kingdom	7	-100	96	12	-100	13,7	5,35
Cranfield University	United Kingdom	6	-	90	2	-	15	5,69
University of Cambridge	United Kingdom	6	-100	121	16	-100	20,2	8,51
University of East Anglia	United Kingdom	6	-	25	6	-	4,2	0,74
University of Warwick	United Kingdom	6	0	90	16	300	15	8,35
King's College London	United Kingdom	5	0	95	8	0	19	8,45
London School of Hygiene and Tropical Medicine	United Kingdom	5	0	100	5	-33,3	20	5,15
Northumbria University	United Kingdom	5	0	37	17	-25	7,4	1,3
University of Glasgow	United Kingdom	5	-100	102	59	-100	20,4	8,35
University of St Andrews	United Kingdom	5	-	64	6	-	12,8	9,06
University Hospitals of Leicester NHS Trust	United Kingdom	5	-	32	8	-	6,4	1,43
Medical Research Council	United Kingdom	4	200	101	6	400	25,3	9,41
Queen's University Belfast	United Kingdom	4	0	74	18	0	18,5	11,51
University of Birmingham	United Kingdom	4	-100	66	33	-100	16,5	7,99
University of Nottingham	United Kingdom	4	-100	51	5	-100	12,8	6,8
University of Surrey	United Kingdom	4	0	63	3	0	15,8	7,48
Glenfield Hospital	United Kingdom	4	-	19	10	-	4,8	1,12
Liverpool John Moores University	United Kingdom	3	0	68	8	0	22,7	13,8
University of Aberdeen	United Kingdom	3	-	15	4	-	5	1,84
University of Bristol	United Kingdom	3	-	8	4	-	2,7	1,85
University of Exeter	United Kingdom	3	0	14	3	0	4,7	1,1
University of Sussex	United Kingdom	3	0	54	3	0	18	10,04
University of York	United Kingdom	3	-	8	3	-	2,7	1,85
Royal Botanic Gardens, Kew	United Kingdom	3	-100	38	4	-100	12,7	2,33
Norfolk and Norwich University Hospital NHS Trust	United Kingdom	3	-	18	1	-	6	1
Leicester General Hospital	United Kingdom	3	0	17	2	0	5,7	1,68
Kettering General Hospital	United Kingdom	3	-	18	1	-	6	1
Southampton University Hospitals NHS Trust	United Kingdom	3	-	18	2	-	6	1
Lancaster University	United Kingdom	2	0	67	1	0	33,5	20,64
London School of Economics	United Kingdom	2	0	14	1	0	7	1,65
Middlesex University	United Kingdom	2	0	0	2	0	0	0
Queen Mary University of London	United Kingdom	2	0	1 -	2	0	0,5	0,06
Robert Gordon University	United Kingdom	2	-	2	1	-	1	0,21
Sheffield Hallam University	United Kingdom	2	0	0	2	0	0	0

University of Bath	United Kingdom	2	_	52	5	-	26	13,88
University of Central Lancashire	United Kingdom	2	0	14	1	0	7	1,65
University of Hertfordshire	United Kingdom	2	-100	3	2	-100	1,5	1,43
Newcastle University	United Kingdom	2	-100	58	2	-100	29	3,9
University of Portsmouth	United Kingdom	2	0	67	4	0	33,5	20,64
University of Reading	United Kingdom	2	-	5	4	-	2,5	0,86
University of Stirling	United Kingdom	2	-	3	3	-	1,5	0,55
University of Sunderland	United Kingdom	2	-100	6	1	-100	3	0,58
Aberystwyth University	United Kingdom	2	-100	13	2	-100	6,5	0,87
Royal Observatory	United Kingdom	2	0	67	2	0	33,5	20,64
South London and Maudsley NHS Trust	United Kingdom	2	-	10	1	-	5	3,92
University of Worcester	United Kingdom	2	0	14	1	0	7	1,71
John Radcliffe Hospital	United Kingdom	2	0	26	8	0	13	1,46
University of Bedfordshire	United Kingdom	2	0	14	1	0	7	1,65
Buckinghamshire New University	United Kingdom	2	0	31	1	0	15,5	2,31
Coventry University	United Kingdom	1	-	4	1	-	4	1,86
Health Protection Agency	United Kingdom	1	0	12	4	0	12	1,86
John Innes Centre	United Kingdom	1	-100	1	1	-100	1	0,13
Kingston University	United Kingdom	1	0	2	1	0	2	0,36
Manchester Metropolitan University	United Kingdom	1	0	0	2	0	0	0
National Physical Laboratory	United Kingdom	1	0	0	1	0	0	0
Nottingham Trent University	United Kingdom	1	0	0	1	0	0	0
Open University Milton Keynes	United Kingdom	1	-	5	1	-	5	1,72
Oxford Brookes University	United Kingdom	1	-	11	1	-	11	3,78
St. George's University of London	United Kingdom	1	0	12	4	0	12	1,86
The Natural History Museum, London	United Kingdom	1	-100	8	1	-100	8	1,07
University of Brighton	United Kingdom	1	-	6	1	-	6	2,55
University of Essex	United Kingdom	1	0	11	3	0	11	2,71
University of Kent	United Kingdom	1	0		1	0	0	0
University of Strathclyde	United Kingdom	1	0	49	5	0	49	26,64
Bangor University	United Kingdom	1	0	5	1	0	5	5,76
Forest Research	United Kingdom	1	0		1	0	0	0
Royal Hospital for Sick Children	United Kingdom	1	0	· ·	1	0	4	3,48
University of Chester	United Kingdom	1	0		2	0	3	2,44
University of Lincoln	United Kingdom	1	-	8	1	-	8	1,48
University of Northampton	United Kingdom	1	0		1	0	0	0
University of the West of Scotland	United Kingdom	1	0		5	0	49	26,64
Cardiff Metropolitan University	United Kingdom	1	0		1	0	5	5,76
Queen's Medical Centre	United Kingdom	1	-100	2	1	-100	2	0,55
Guy's and St Thomas' NHS Foundation Trust	United Kingdom	1	0	4	5	0	4	3,48
St George's Hospital London	United Kingdom	1	0	-	1	0	12	1,86
Birmingham Women's Hospital	United Kingdom	1	0			0	4	3,48
Writtle College Changl Allerton Hospital	United Kingdom	1	0		1	0	11	2,71
Chapel Allerton Hospital National Health Service	United Kingdom	1	0	· ·	1	0	4	3,48
	United Kingdom	1	0	-	4	0	17	2,54
Liverpool School of Tropical Medicine Wollcome Trust Sanger Institute	United Kingdom	1	100	3	1	100	3	2,75
Wellcome Trust Sanger Institute	United Kingdom	I	-100	40	1	-100	40	5,23

Wellcome Trust	United Kingdom	1	-100	40	6	-100	40	5,23
Brighton and Sussex Medical School	United Kingdom	1	-100	6	1	-100	6	0,8
Harvard University	United States	27	-80	355	17	-16,7	13,1	3,54
University of California at Santa Cruz	United States	19	-100	216	16	-100	11,4	2,67
Johns Hopkins University	United States	13	300	179	10	300	13,8	7,04
U.S. Department of Agriculture	United States	13	-40	93	26	-58,3	7,2	2
University of California at Los Angeles	United States	13	0	55	12	50	4,2	1,06
University of Minnesota	United States	13	-50	196	22	-20	15,1	4,26
Stanford University	United States	9	0	115	60	300	12,8	6,27
University of Colorado Boulder	United States	9	100	84	17	50	9,3	4,81
University of Houston	United States	9	-50	30	13	50	3,3	0,67
Centers for Disease Control and Prevention	United States	8	100	93	10	66,7	11,6	5,09
Princeton University	United States	8	100	76	14	366,7	9,5	1,91
Tulane University	United States	8	-100	41	11	-100	5,1	1,01
University of Michigan	United States	8	50	135	22	-42,9	16,9	5,62
University of Wisconsin-Milwaukee	United States	8	-66,7	64	38	-66,7	8	3,83
Boston University	United States	7	200	35	5	300	5	1,86
Lawrence Berkeley National Laboratory	United States	7	0	104	19	0	14,9	5,44
University of Louisville	United States	7	-	13	15	-	1,9	0,56
Columbia University	United States	6	-100	90	15	-100	15	5,34
Emory University	United States	6	0	86	4	100	14,3	5,85
Naval Research Laboratory	United States	6	-	71	14	-	11,8	5,72
New Mexico Institute of Mining and Technology	United States	6	50	76	3	0	12,7	2,54
University of Illinois at Urbana-Champaign	United States	6	-50	131	31	150	21,8	6,63
University of Maryland-Baltimore	United States	6	0	143	10	-80	23,8	9,01
University of Missouri	United States	6	-	22	4	-	3,7	1,22
Yale University	United States	6	_	68	4	-	11,3	5,2
California Institute of Technology	United States	5	-100	92	155	-100	18,4	10,1
Duke University	United States	5	0	67	5	0	13,4	2,71
Indiana University Bloomington	United States	5	0	82	8	-50	16,4	6,25
Massachusetts Institute of Technology	United States	5	0	102	50	-85,7	20,4	6,81
Montana State University	United States	5	-	72	5	-	14,4	6,27
Smithsonian Institution	United States	5	200	61	6	100	12,2	2,39
Texas A and M University	United States	5	-100	51	10	-100	10,2	5,4
U.S. Environmental Protection Agency	United States	5	-	52	2	-	10,4	11,81
University of Arizona	United States	5	100	71	6	100	14,2	6,75
University of Pittsburgh	United States	5	0	156	4	0	31,2	12,43
University of Wisconsin	United States	5	0	82	55	0	16,4	6,23
Washington University St. Louis	United States	5	-	36	14	-	7,2	2,35
West Virginia University	United States	5	0	56	11	0	11,2	6,35
Clemson University	United States	4	0	57	4	0	14,3	8,16
Michigan State University	United States	4	-100	78	14	-100	19,5	7,86
NASA Goddard Space Flight Center	United States	4	-100	75	36	-100	18,8	8,84
National Institutes of Health	United States	4	-100	78	27	-100	19,5	3,12
New York University	United States	4	0	65	8	400	16,3	7,62
Northern Arizona University	United States	4	-	19	3	-	4,8	1,25
Northwestern University	United States	4	0	79	18	0	19,8	11,32

Purdue University	United States	4	0	75	3	0	18,8	8,54
University of California at Berkeley	United States	4	-	67	22		16,8	7,83
University of California at Davis	United States	4	0	63	8	0	15,8	7,03
University of California at San Diego	United States	4	-100	31	5	-100	7,8	1,71
University of Florida	United States	4	-100	68	26	-100	17	9,32
University of Georgia	United States	4	-100	15	6	-100	3,8	1,18
University of Mississippi	United States	4	-100	71	7	-100	17,8	7,48
University of Nebraska	United States	4	-100	75	5	0	18,8	8,38
University of Utah	United States	4	-50	93	7	-50	23,3	7,96
University of Washington	United States	4	-100	105	10	-100	26,3	8,41
Field Museum of Natural History	United States	4	0	21	5	-66,7	5,3	0,8
Space Telescope Science Institute	United States	4	0	73	6	-00,7	18,3	11,29
Carnegie Institution of Washington	United States	3	-	57	9		19	9,5
East Carolina University	United States	3	-100	18	2	-100	6	1,23
Kansas State University	United States	3	-100	35	7	0	11,7	2,39
The Ohio State University	United States	3	-	57	12		19	9,93
Oklahoma State University	United States	3	-100	18	3	-100	6	0,75
Oregon State University	United States	3	0	33	2	0	11	8,05
University of Delaware	United States	3	-	70	11		23,3	10,44
University of Hawaii at Manoa	United States	3	0	68	15	0	22,7	13,8
University of Maryland	United States	3	0	57	38	0	19	10,88
University of Notre Dame	United States	3	-	52	3		17,3	9,23
University of Oregon	United States	3	-100	75	12	-100	25	10,2
Virginia Polytechnic Institute and State University	United States	3	-	50	9	-	16,7	9,01
Wake Forest University	United States	3	0	27	4	0	9	1,86
Wayne State University	United States	3	_	6	5		2	0,47
Yeshiva University	United States	3	100	18	3	0	6	1,33
American Museum of Natural History	United States	3	0	75	3	0	25	9,88
Bill and Melinda Gates Foundation	United States	3	-	12	2		4	6,29
Arizona State University	United States	2	_	54	3		27	16,01
Brown University	United States	2	0	7	1	0	3,5	4,15
Case Western Reserve University	United States	2	-100	89	6	-100	44,5	15,93
College of William and Mary	United States	2	0	51	3	0	25,5	13,48
Colorado State University	United States	2	0	50	3	0	25	14,47
Cornell University	United States	2	_	5	4		2,5	1,18
Florida Institute of Technology	United States	2	_	5	2	_	2,5	0,86
George Mason University	United States	2	0	55	2	0	27,5	15,57
Georgia Institute of Technology	United States	2	0	50	16	0	25	14,47
lowa State University	United States	2	-100	15	2	-100	7,5	1,34
Jackson Laboratory	United States	2	0	17	3	0	8,5	1,8
Jet Propulsion Laboratory, California Institute of Technology	United States	2	-100	67	3	-100	33,5	14,69
Louisiana State University	United States	2	-100	69	16	-100	34,5	14,29
Oak Ridge National Laboratory	United States	2	-100	67	2	-100	33,5	14,69
Oregon Health and Science University	United States	2	-100	22	3	-100	11	1,68
Rutgers - The State University of New Jersey, New Brunswick	United States	2	-100	53	2	-100	26,5	3,49
Texas State University	United States	2	-	5	1	-	2,5	3,41
Texas Tech University	United States	2	0	49	8	0	24,5	13,32
Table Team of the Control of the Con	Jinica States		0	.,	o		2 1,3	15,52

U.S. Geological Survey	United States	2	0	0	2	0	0	0
University of Alabama	United States	2	-100	62	8	-100	31	14,19
University of Arkansas	United States	2	_	6	3	-	3	1,88
University of California Office of the President	United States	2	_	28	3	-	14	3,69
University of Chicago	United States	2	-100	-	17	-100	25,5	13,46
University of Colorado Denver	United States	2	-100	11	2	-100	5,5	0,65
University of Kansas	United States	2	0	49	3	0	24,5	13,32
University of Miami	United States	2	-100	13	6	-100	6,5	0,79
University of Missouri at Kansas City	United States	2	-	9	2	-	4,5	1,87
University of New Mexico	United States	2	-100	57	6	-100	28,5	14,54
University of Oklahoma	United States	2	-	3	1	-	1,5	1,94
University of Pennsylvania	United States	2	-100	89	6	-100	44,5	15,93
University of Rochester	United States	2	-100	96	5	-100	48	16,37
University of Southern California	United States	2	-100	8	2	-100	4	1,22
University of Tennessee, Knoxville	United States	2	-100	16	2	-100	8	3,03
University of Texas at Arlington	United States	2	-	52	2	-	26	13,74
University of Texas at Austin	United States	2	-100	41	2	-100	20,5	3,76
Washington State University Pullman	United States	2	0	57	5	0	28,5	17,47
Central Washington University	United States	2	-	10	1	-	5	1,83
Department of Veterans Affairs	United States	2	-	4	1	-	2	0,71
DuPont	United States	2	-	0	2	-	0	0
National Radio Astronomy Observatory Socorro	United States	2	0	54	3	0	27	15,19
Public Health Research Institute - New York	United States	2	-	3	1	-	1,5	0,43
Space Science Institute	United States	2	0	67	2	0	33,5	20,64
University of California Merced	United States	2	-100	67	4	-100	33,5	14,69
West Chester University	United States	2	-	3	1	-	1,5	2,11
Western Illinois University	United States	2	0	9	2	0	4,5	1,9
Rutgers - The State University of New Jersey, Newark	United States	2	-	3	1	-	1,5	0,43
J. Craig Venter Institute	United States	2	-100		2	-100	25,5	3,46
New York Institute of Technology	United States	2	0	30	1	0	15	2,64
IBM Research	United States	1	-	47	1	-	47	13,89
American University Washington DC	United States	1	0		3	0	49	26,64
Appalachian State University	United States	1	0		3	0	1	0,44
Argonne National Laboratory	United States	1	0	17	1	0	49	26,64
Baylor College of Medicine	United States	1	-100		5	-100	40	5,23
Brandeis University Brookhaven National Laboratory	United States United States	1	0	.,,	1	0	49	26,64
California State University Fullerton	United States	1	0		7	0	49 49	26,64
California State University Los Angeles	United States	1	0		8	0	49	26,64
City University of New York	United States	1	0	49	3	0	49	26,64
Cleveland Clinic Foundation	United States	1	U	7	2	0	7	3,02
Colorado School of Mines	United States	1	- 0	49	5	- 0	49	26,64
Dartmouth College	United States	1	-100	-	1	-100	49	5,23
Drexel University	United States	1	-100		4	-100	49	26,64
Eastern Virginia Medical School	United States	1	-100	-	1	-100	17	1,72
Fermi National Accelerator Laboratory	United States	1	0	49	29	0	49	26,64
Florida State University	United States	1	-	0	1		0	0
Tionad State Offiversity	Officed States	1					0	3

George Washington University	United States	1	0	49	4	0	49	26,64
Howard Hughes Medical Institute	United States	1	-100	40	1	-100	40	5,23
Idaho State University	United States	1	0	3	1	0	3	0,68
Lehigh University	United States	1	0	10	1	0	10	1,2
Long Island University	United States	1	0	49	8	0	49	26,64
Los Alamos National Laboratory	United States	1	0	49	14	0	49	26,64
LSU Health Sciences Center - New Orleans	United States	1	-	10	1	-	10	3,34
Loyola University Chicago	United States	1	-100	40	2	-100	40	5,23
Marquette University	United States	1	0	49	1	0	49	26,64
Medical University of South Carolina	United States	1	-100	40	4	-100	40	5,23
Michigan Technological University	United States	1	0	49	9	0	49	26,64
Montclair State University	United States	1	0	49	2	0	49	26,64
NASA Johnson Space Center	United States	1	-100	18	1	-100	18	2,74
NASA Marshall Space Flight Center	United States	1	0	49	7	0	49	26,64
National Institute of Standards and Technology	United States	1	0	0	1	0	0	0
National Science Foundation	United States	1	0	49	39	0	49	26,64
North Carolina State University	United States	1	-	3	1	-	3	1,37
Northeastern University	United States	1	0	49	1	0	49	26,64
Nova Southeastern University	United States	1	-	5	1	-	5	1,25
Ohio University	United States	1	0	49	1	0	49	26,64
Old Dominion University	United States	1	-100	1	1	-100	1	0,23
Pennsylvania State University	United States	1	0	49	38	0	49	26,64
Portland State University	United States	1	0	0	2	0	0	0
Rice University	United States	1	0	2	1	0	2	2,68
Rochester Institute of Technology	United States	1	0	49	10	0	49	26,64
San Diego State University	United States	1	0	49	1	0	49	26,64
San Francisco State University	United States	1	0	1	1	0	1	0,12
Scripps Research Institute	United States	1	-100	40	2	-100	40	5,23
Southern Illinois University	United States	1	0	13	1	0	13	2,19
Southern Methodist University	United States	1	0	0	1	0	0	0
SUNY Stony Brook	United States	1	0	49	4	0	49	26,64
Syracuse University	United States	1	0	49	19	0	49	26,64
Thomas Jefferson University	United States	1	-100	8	1	-100	8	2,44
U.S. Air Force Academy	United States	1	0	49	2	0	49	26,64
U.S. Army Medical Research Institute of Infectious Diseases	United States	1	-	1	1	-	1	0,17
U.S. Department of Energy	United States	1	0	7	2	0	7	0,9
Uniformed Services University of the Health Sciences	United States	1	-100	40	1	-100	40	5,23
University of Alabama at Birmingham	United States	1	0	3	1	0	3	3,58
University of Alabama in Huntsville	United States	1	0	49	8	0	49	26,64
University of California at Irvine	United States	1	100	49	3	0	49	26,64
University of California at San Francisco	United States	1	-100	10	1	-100	10	0,08
University of California at Santa Barbara	United States	1	0	49	6	0	49	26,64
University of Cincinnati	United States United States	1	-100	9	1	-100	9	1,56
University of Dayton	United States United States	1	-100	0	1	-100	0	0
University of lowa	United States United States	1	0	0	1	0	0	
University of Maine	United States United States	1	-	3	1	-	5	1,72
University of North Carolina	United States	1	0	49	3	0	49	26,64

University of North Carolina at Charlotte	United States	1	0	1	1	0	1	0.3
University of North Carolina at Greensboro	United States	1	-100	12	1	-100	12	0,3
,	United States	1	_	13	1		13	1,74
University of North Florida	United States United States	1	0	6	1	0	6	4,5
University of Texas at San Antonio	United States	1	0	0	1	0	6	0,87
University of Texas Health Science Center at Houston		1	0	1	1	0	I	1,66
University of Texas Medical Branch at Galveston	United States United States	1	0	1	1	0	1	1,66
Vanderbilt University		1	0	4	2	0	4	3,48
Alfred I. duPont Hospital for Children	United States	1	0	4	2	0	4	3,48
Bowdoin College	United States	1	-100	2	1	-100	2	0,46
Broad Institute	United States	1	-100	40	6	-100	40	5,23
California Academy of Sciences	United States	1	-100	5	4	-100	5	1,24
Carleton College	United States	1	0	49	5	0	49	26,64
Children's Hospital Columbus	United States	1	0	2	2	0	2	1,74
Children's Hospital Oakland Research Institute	United States	1	-100	40	1	-100	40	5,23
Clark Atlanta University	United States	1	0	49	1	0	49	26,64
Donald Danforth Plant Science Center	United States	1	0	1	1	0	1	0,25
Dow Chemical	United States	1	0	7	1	0	7	0,9
Embry Riddle Aeronautical University	United States	1	0	49	11	0	49	26,64
Gemini Observatory	United States	1	0	49	1	0	49	26,64
Kaiser Permanente	United States	1	-	47	1	-	47	13,89
Lehman College	United States	1	0	49	3	0	49	26,64
Marine Biological Laboratory	United States	1	-100	15	1	-100	15	1,52
National Optical Astronomy Observatory	United States	1	0	49	6	0	49	26,64
North Carolina Central University	United States	1	-100	10	1	-100	10	1,08
Simmons College	United States	1	0	1	1	0	1	0,38
Sonoma State University	United States	1	0	49	2	0	49	26,64
South Dakota School of Mines & Technology	United States	1	0	49	2	0	49	26,64
Southern University and A&M College	United States	1	0	49	4	0	49	26,64
Trinity University	United States	1	0	49	1	0	49	26,64
Universities Space Research Association	United States	1	0	49	14	0	49	26,64
University of Alaska Anchorage	United States	1	0	49	1	0	49	26,64
University of Texas at Brownsville	United States	1	0	49	6	0	49	26,64
Whitehead Institute for Biomedical Research	United States	1	0	15	1	0	15	1,86
World Bank	United States	1	0	0	1	0	0	0
University of Arkansas for Medical Sciences	United States	1	0	91	1	0	91	22,95
University of Tennessee Health Science Center	United States	1	-	5	1	_	5	0,92
University of Texas Health Science Center at San Antonio	United States	1	-	7	2	_	7	4,2
University of Texas M. D. Anderson Cancer Center	United States	1	0	0	2	0	0	0
Roosevelt University Chicago	United States	1	-	1	1	_	1	0,17
Washington State University Vancouver	United States	1	0	2	1	0	2	2,99
California Department of Fish and Game	United States	1	-100	48	1	-100	48	6,99
Bigelow Laboratory for Ocean Sciences	United States	1	0	13	3	0	13	1,99
NASA Goddard Institute for Space Studies	United States	1	0	8	1	0	8	8,3
National Aeronautics and Space Administration	United States	1	0	2	4	0	2	1,5
Illumina	United States	1	0	15	1	0	15	1,86
Universidad de la Republica	Uruguay	3	-	1	2	-	0,3	0,13
Uzbekistan Academy of Sciences	Uzbekistan	1	0	49	28	0	49	26,64

Universidad Simon Bolivar	Venezuela	1	0	3	1	0	3	0,44
University of the Virgin Islands	Virgin Islands (U.S.)	1	0	49	5	0	49	26,64
University of Zambia	Zambia	2	-100	42	3	-100	21	2,85
University of Zimbabwe	Zimbabwe	13	200	12	17	0	0,9	0,2
International Maize and Wheat Improvement Center, Harare	Zimbabwe	8	0	22	10	-50	2,8	2,99
Bindura University of Science Education	Zimbabwe	5	0	7	5	0	1,4	0,54
Midlands State University Zimbabwe	Zimbabwe	1	-	0	1	-	0	0

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