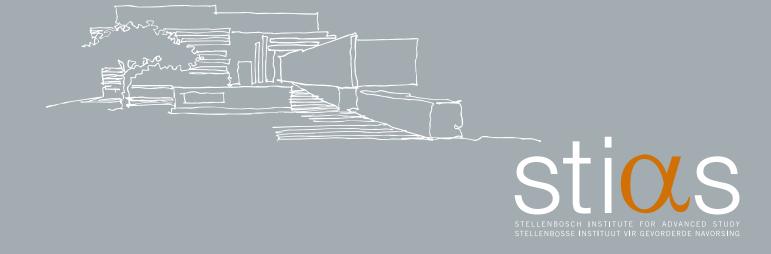
A CREATIVE SPACE FOR THE MIND | STIAS ANNUAL REPORT 2014



THE CONCENTRATED FOCUS ON NURTURING 'A CREATIVE SPACE FOR THE MIND' HAS, ALMOST AS A NATURAL PROCESS, RESULTED IN A VERY SPECIFIC ETHOS THAT CHARACTERISES THE INSTITUTE AND ITS WORK. THE ESSENCE OF THIS ETHOS IS THE UNCOMPROMISING COMMITMENT TO QUALITY, THE PROVOKING OF INNOVATIVE THINKING AND THE STIMULUS OF CREATIVE IDEAS. THE FLIPSIDE IS THE QUEST TO MINIMISE DISTRACTION AND BUREAUCRATIC RESTRICTIONS.

— Bernard Lategan – founder director, STIAS









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A number of milestones for the STIAS programme were achieved during 2014, while earlier initiatives could also be consolidated and implemented.

Of great significance for future years was the establishment of the STIAS Trust in 2014 and the conclusion of a number of agreements with Stellenbosch University (SU). This was the outcome of a decision by the Stellenbosch University Council in September 2012 which was formalised in 2014 by:

- a funding agreement whereby SU will make an annual contribution of R6,824 million to the STIAS Trust over five years. STIAS will submit an annual budget to the STIAS Trust which will cover most of the personnel costs, some of the running expenses and part of the cost of the fellowship programme.
- a 99-year lease agreement for the use of the facilities at Mostertsdrift by STIAS, currently covered from the income from the conference activities at the Wallenberg Research Centre.
- financial, administrative and IT services to be provided by SU to STIAS at an agreed tariff.

CHAIRMAN'S FOREWORD

With the establishment of the STIAS Trust by SU, attention and planning can now shift towards ensuring a long-term sustainable programme. Target figures are R150 million to support the long-term research programme and personnel costs (from dividends), and R60 million to carry fifty per cent of the research programme with short/medium term funding to be sought for the remainder of the research programme and personnel costs.

In addition to the substantial support from Stellenbosch University other donors have continued to strongly support STIAS:

- the Marianne and Marcus Wallenberg Foundation's 2014 grant to STIAS for its core programme amounted to R7 503 801. This grant is supplemented by additional support provided by Swedish experts making inputs in a number of STIAS initiatives.
- one fifth of the Knut and Alice Wallenberg Foundation's grant of 5 million Swedish Kronor per annum (in excess of R34 million over five years), paid in total and in advance in 2013, was available to further develop the seven longer-term theme projects launched at STIAS in 2013.
- STIAS also gratefully acknowledges the generous grant by the Donald Gordon Foundation, and
- significant and increased funding was received from the Swedish Riksbankens Jubileumsfond for five years.

My sincere thanks goes to all the donors who once again have so generously given to STIAS, and who have continued to believe in STIAS and its main objectives, namely to advance the cause of science and scholarship, to invest in the intellectual future of South Africa, to focus on the African continent and to provide an independent space where innovative ideas and original thinking can thrive.

Governance at STIAS was broadened and strengthened during 2014 with first steps being taken in the 'internationalisation' of the Academic Advisory Board. The two-day meeting of the Board in March 2014 was attended by Geoffrey Harpham, Director of the National Humanities Center, North Carolina and Bert van der Zwaan, current rector of Utrecht University who both subsequently accepted invitations to serve on the Board in their personal capacities.

It is gratifying to present evidence in this report on the consolidation of the various facets of the STIAS programme. The core STIAS programme of fellowships operated at full capacity in 2014, the seven longer-term theme projects (projected to run over the next four to five years) are at various stages of development, STIAS Round Table meetings have become a firm feature on the STIAS calendar and efforts to identify and host STIAS fellows from African countries continue unabated and with increasing success.

In all these activities the Wallenberg Research Centre features as a prime conference/workshop venue in the Western Cape rendering quality service. This success must be attributed to all our generous funders and supporters as well as to the wide variety of people whose dedication has made all this possible. Many Swedish experts, notably Kåre Bremer, Maud Olofsson and Göran Sandberg, and the Stellenbosch University management have my sincere gratitude. And then the entire STIAS team. Thank you for your enthusiasm and dedication. Here I must mention the STIAS fellows, central to the entire STIAS endeavour, members of the STIAS Board of Directors, Academic Advisory Board, and Fellowship and Research Programme Committee; and the STIAS staff under the very able and committed leadership of STIAS Director, Hendrik Geyer.

Desmond SmithChairman of the Board

STIAS consolidated its existing programme during 2014. Seventy-three fellows and four visiting scholars participated in the 2014 programme for a total of 146 fellowship months. Progress was made with all seven longer-term theme projects and another STIAS Wallenberg Round Table meeting was held.

The STIAS programme continued to reflect an emphasis on projects which draw on an interdisciplinary basis and which are relevant to the (South) African context, often addressing very topical issues of the day. An increasing component represented activities within the seven longer-term theme projects.

Forty-six seminars were presented in the fellows' seminar series and six public STIAS lectures were delivered on the campus of Stellenbosch University. Fellows and visiting scholars also presented and participated in numerous colloquia and lectures at academic departments of universities of the Western Cape and also lectured at the universities of Johannesburg, Pretoria and the Witwatersrand.

Thirteen books were published as a result of work carried out at STIAS (sixteen in 2013); four of these appeared in the STIAS series published by SUN PRESS. Sixty journal publications appeared with the STIAS affiliation, amongst others, in top-ranking journals such as *Nature*, *Genetics* and *Reviews of Modern Physics*.

Four STIAS fellows received significant international prizes and/or other forms of recognition for their work:

- Athol Fugard, renowned South African playwright, director and actor, was named the theatre and film laureate for the 2014 Praemium Imperiale arts prize from the Japan Art Association, presented by Japan's Prince Hitachi at a ceremony in October 2014;
- Paul Vlek, a world-renowned soil scientist from the University of Bonn, was awarded the 2014 World Agriculture Prize during ceremonies in Nanjing, Jiangsu province of China (in September);
- Michael Ruse, Director of the Program in the History and Philosophy of Science at Florida State University, received an honorary doctorate from University College London (UCL) in September 2014; and
- Abdallah Daar (University of Toronto) was invited to join the Board of the World Diabetes Foundation.

Since January 2014, 45 applications to the STIAS programme have been received via the direct application route of which 15 were found not suited for STIAS.

Most progress to date has been made in the themes *Being human today, The future* of democracy, *Sustainable agro-ecosystems* and *Health in transition* divided into *Health prevention* and *Health care.* For the remaining two themes *Crossing borders* and *Understanding complexity* the initial planning phase has been completed and first projects in these themes will commence in 2015 and 2016 respectively.

STIAS organised and hosted two major workshops/seminars related to the above themes in 2014:

• Health in transition – the second STIAS-Wallenberg Round Table Meeting on Mental health challenges in sub-Saharan Africa, 24-26 February 2014.

• The future of democracy – the second Stellenbosch Annual Seminar on Constitutionalism in Africa (17-19 September 2014). This seminar was jointly organised by STIAS and the Institute for International and Comparative Law in Africa (ICLA) at the University of Pretoria. Amongst this year's participants were Justice Zak Yacoob, a former justice of the Constitutional Court of South Africa, Sir Jeffrey Jowell QC, the Director of the Bingham Centre for the Rule of Law, and 18 representatives from various African countries.

STIAS has continued to work closely with Kåre Bremer, former rector of Stockholm University to promote and help coordinate the STIAS programme in Sweden. In 2014, 21 STIAS fellows were from Sweden (41 fellowship months).

It has remained a challenge to identify and successfully involve researchers from Africa in the STIAS programme. In this respect STIAS established invaluable contact with Berhanu Abegaz, Executive Director of the African Academy of Sciences, who was a fellow of STIAS in late 2013 and again in early 2014. Candidates suggested by him and identified independently by Christoff Pauw (coordinator of STIAS Networks) were considered as potential



DIRECTOR'S MESSAGE

fellows during 2014 and 18 individuals were subsequently invited to submit brief research proposals for STIAS fellowships. A significant number of these scholars have accepted fellowship invitations for future years.

In 2014, five African scholars from outside South Africa were resident as STIAS fellows. Two more unfortunately had to cancel at rather short notice.

The conference and workshop facilities at the Wallenberg Research Centre continued to provide a prime venue for conferences and workshops held in Stellenbosch. During 2014 (2013), 26 850 (24 050) people used the facility, translating into 2 240 (2 000) per month, or about 100 (90) per day on average. The quality of the kitchen and catering remains an integral part of the positive experience for both STIAS fellows and conferees. A quote from a STIAS fellow's exit report illustrates this point: "There is absolutely nothing I could think of that was not provided by STIAS and the staff working there. The food is especially worth mentioning as it was simply awesome, which certainly is not always the case for a vegetarian. Never underestimate the importance of good food for increasing productivity and for enabling fruitful discussions and interactions over the lunch table."

Hendrik Geyer
Director of STIAS

Mendale Gegle



World-leading experts on public mental health participate in the second STIAS-Wallenberg Round Table at the STIAS Wallenberg Research Centre on 24 and 25 February 2014. The theme is Mental health challenges in sub-Saharan Africa – moving to implementation.



STIAS organises and hosts a very successful memorial concert for the late Paul Cilliers (a former member of the STIAS Fellowship and Research Programme Committee). The plan is to develop this with the Stellenbosch University Conservatorium into an annual event to showcase modern composition.



STIAS mourns the death of Russel Botman, Rector and Vice-Chancellor of Stellenbosch University. "As Stellenbosch University representative on the STIAS Board he was particularly supportive of our efforts to expand the African footprint of STIAS, and to engage with a younger cohort of researchers", says Chairman of the STIAS Board, Desmond Smith.

2014 AT A GLANCE

Seventy-three fellows and four visiting scholars participated in the 2014 programme for a total of 146 fellowship months. Forty-five applications to the STIAS programme were received in 2014 via the direct application route. Forty-six seminars were presented in the fellows' seminar series and six public STIAS lectures were given.

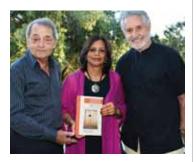
FEBRUARY

MARCH

APRIL

MAY

JUNE



The book Imagined Liberation:
Xenophobia, Citizenship
and Identity in South Africa,
Germany and Canada, by
sociologists and STIAS fellows
Heribert Adam and Kogila
Moodley is launched at the
STIAS Wallenberg Research
Centre. The writer Breyten
Breytenbach delivers the
keynote address at the launch.

Almost six years after the STIAS
Perold Vineyard was planted
in October 2008, the first
bottling of the 2012 harvest is
released. The wine is received
with much enthusiasm and
appreciation for its early quality
and promise.



Renowned sociologist and STIAS fellow Manuel Castells presents a public lecture on his forthcoming book titled Reconceptualising Development in the Global Information Age, to be published by Oxford University Press in August 2014.



Nina Jablonski, recently named Evan Pugh Professor of Anthropology in the College of the Liberal Arts at Penn State University, accepts a nomination as permanent visiting fellow of STIAS. She joins a select group who have an open invitation to work at STIAS whenever they can.



STIAS fellow Paul Vlek, a world-renowned soil scientist from the University of Bonn is awarded the 2014 World Agriculture Prize during ceremonies in Nanjing, Jiangsu province of China.



HIH Prince Hitachi, honorary patron of the Japan Art Association, presents the Praemium Imperiale Awards at a formal ceremony in Tokyo to this year's Laureates; internationally renowned artists who have shown extraordinary achievements in the fields of painting, sculpture, architecture, music, and theater/film. Renowned South African playwright, director and actor, Athol Fugard, is named the theatre and film laureate for the 2014 Praemium Imperiale arts prize, becoming the first African winner since the award's inception in 1989.



JULY AUGUST SEPTEMBER OCTOBER NOVEMBER DECEMBER

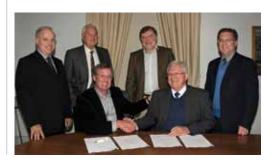
Two new volumes are added to the STIAS series

- Theory from the South by STIAS fellows Jean and John Comaroff and Climate Change Remedies edited by STIAS fellows Jaap Spier and Ulrich Magnus.

STIAS and Stellenbosch
University sign a funding
agreement on 28 August 2014
that heralds a new era in the
relationship between the two
institutions. Leopoldt van
Huyssteen, acting SU Rector
and Vice-Chancellor, and
Desmond Smith, Chairperson
of the STIAS Board, sign
the agreement.

Michael Ruse, STIAS fellow working on the project Apocalyptic themes in the global warming debate, receives an honorary Doctor of Science degree from University College London.





A team of four international agricultural specialists working at the STIAS develop a framework and work programme entitled 'Strategic directions for agricultural transformation in southern Africa' as part of the STIAS research theme on Sustainable agro-ecosystems.

Abdallah Daar is invited and agrees to join the Board of the World Diabetes Foundation.



Right: Being human today project group From left: back row – George Chaplin, Mikael Hjerm, Nina Jablonski, Gerhard Maré Front row – Crain Soudien, Njabulo Ndebele, Zimitri Erasmus

Far right: Charles Fombad, The future of democracy project





Being human today

Sub-theme: *The effects of race* (convenors Nina Jablonski, Penn State University and Gerhard Maré, University of KwaZulu-Natal)

The Effects of race (EoR) project was established within the framework of STIAS's long-term programme, Being human today, which poses the questions, "What does it mean to be human" and "What is the nature of the world in which we aspire to be human?"

The EoR project at STIAS took shape in 2013 through discussions with academics from diverse backgrounds and disciplines. The project has two major goals. The first is to fill the gaps in current knowledge about race thinking and racialism with new, integrative, transdisciplinary, and transformative scholarship through research and reflection. The second is to apply this scholarship to the design of educational and social interventions to counter the emergence of new stereotypes and racist attitudes, and to disrupt those that have become embedded.

Discussions between Nina Jablonski, Gerhard Maré and Hendrik Geyer in August 2013 led to the establishment of two complementary and interacting groups within the EoR project. The first core group is composed of STIAS fellows and visiting scholars who have records of distinguished scholarship on

some aspect of race. The second is the assemblage of project groups, which resulted from a competitive process of grant proposal submission to STIAS in early 2014. Members of the core group meet and work together at STIAS for a period of about two weeks each year, in July or August, for at least the next three years beginning in 2014. Members of the five current project groups will undertake their work independently over the same period, but will come together every year at STIAS to interact with each other and members of the core group.

The core group currently comprises eleven scholars: George Chaplin (Penn State), Norman Duncan (Pretoria), Zimitri Erasmus (Witwatersrand), Mikael Hjerm (Umeå), Nina Jablonski (Penn State, co-convener), Chabani Manganyi (Pretoria), Gerhard Maré (KwaZulu-Natal, co-convener), Njabulo Ndebele (Cape Town), Barney Pityana (College of the Transfiguration), Crain Soudien (Cape Town), and Göran Therborn (Cambridge & Linnaeus). Discussions at STIAS in August 2014 have led to the realisation of the importance of inviting creative artists, including documentary film makers, artists, and musicians, to join the EoR project and Arvan Kaganof was invited and will join the core group in 2015.

Five project groups were selected for STIAS support in 2014:

1. Vivienne Bozalek (Western Cape) and Michalinos Zembylas (Open University of Cyprus), *Participatory parity and socially just pedagogies in South African higher education*;

- Janet Condy, Lena Green, and Daniela Gachago (Cape Peninsula University of Technology), Exploring being human with final year pre-service teachers: designing a teaching intervention to engage with difference in a critical, anti-racist and reconciliatory way:
- 3. Kira Erwin (Durban University of Technology) and Kathryn Pillay (KwaZulu-Natal), *The power of dreams: young people's imaginings of non-racialism:*
- 4. Premesh Lalu, Maurits van Bever Donker, and Ross Truscott (Western Cape), *Desiring the post-apartheid*; and
- 5. Handri Walters (Stellenbosch), *Race and culture in human classification: the role of* volkekunde *and social anthropology at Stellenbosch University.*

A common thread already runs between projects that were separately conceptualised. They reach out towards the broader public space with the resonance of their concerns. This augurs well for one of the EoR's goals to impact on public policy as society responds to the challenges of change.

Sustainable agro-ecosystems project group From left: Janos Bogardi, Lucas Gakale, Richard Sikora and Eugene Terry



STIAS LONGER-TERM THEME PROJECTS continued

The future of democracy

Sub-theme: *The role of constitutions* (convenor Charles Fombad, University of Pretoria)

The second Stellenbosch Annual Seminar on Constitutionalism in Africa (SASCA), jointly organised by STIAS and the Institute for International and Comparative Law in Africa (ICLA) of the University of Pretoria took place from 17 to 19 September 2014. Based on the programme for the SASCA series that was drawn up during the first seminar in 2013, the theme for SASCA 2014 was, *Separation of powers and constitutionalism in Africa: comparative perspectives*.

Last year, the issue of excessive concentration of powers and the abuse of powers that go with it, was identified as one of the main challenges to consolidating Africa's fledgling strides towards establishing an ethos of constitutionalism. It was therefore considered that a critical assessment of the weaknesses and strengths of the operation of separation of powers on the continent will provide a solid platform from which to identify and examine all the other challenges to constitutionalism, rule of law and good governance on the continent.

Therefore papers were invited to address the following sub-themes:

- diverse approaches to the separation of powers in Africa;
- an overview of legislative and executive relations: country studies;

- an overview of legislative and judicial relations: country studies; and
- an overview of diverse approaches to judicial and executive relations: country studies.

During the seminar, 18 papers were presented and there were 30 participants from the following countries: Benin, Cameroon, Democratic Republic of Congo, England, Ethiopia, Germany, Ghana, Italy, Kenya, Namibia, Nigeria, Portugal, South Africa, Zambia and Zimbabwe. Other than representatives from the jurisdictions in Africa, the seminar was also attended by retired Justice Zak Yacoob, former judge of the South African Constitutional Court, Sir Jeffrey Jowell, Director of the Bingham Centre for the Rule of Law in London, Muna Ndulo, Director of the Institute for African Development, Cornell University and Bhadra Ranchod, Deputy Speaker of Parliament and former South African Ambassador to the European Union and High Commissioner to Australia and New Zealand

During the last session of the seminar, there was discussion about the publication of papers that had been presented and plans for the SASCA 2015 seminar. The participants discussed the options from four publishing houses that had offered to consider publishing the papers in a series devoted to African constitutional law (Cambridge University Press, Edward Elgar Publishers, Juta & Co and Oxford University Press). It was agreed









Sustainable agro-ecosystems project Far left: Carl Folke lecture at Nelson Mandela Metropolitan University Left: Jan Bengtsson and Regina Lindborg

STIAS LONGER-TERM THEME PROJECTS continued

that the offer from Oxford University Press should be followed up. This was mainly because ICLA and Oxford University Press were already collaborating in editing the World Constitutions Online series. Agreement was also reached on the theme for SASCA 2015, namely *The role and impact of African constitutional courts in promoting constitutionalism and democracy.*

Additional developments in this longer-term theme project involve Bo Rothstein (Göteborg), Radoslaw Markowski (Warsaw) and Hans-Dieter Klingemann (Wissenschaftszentrum Berlin für Sozialforschung) who have all accepted invitations to visit STIAS in April/May 2015 to work on various aspects of normative, performance and legitimacy changes in contemporary democracies during crisis.

Sustainable agro-ecosystems

Sub-theme: Impact of sustainable intensification of agriculture on food security, the environment and human well-being across southern Africa (convenor Richard Sikora, INRES, Bonn)

During October and November 2014 four STIAS fellows, Richard Sikora (convenor, University of Bonn), Janos Bogardi (United Nations University-ViE, Bonn) Lucas Gakale (former permanent secretary, Ministry of Agriculture, Botswana), and Eugene Terry (TransFarm Africa, Washington DC) constituted a STIAS Forum in which a number of STIAS fellows met to develop the Forum's new long-term research theme. In particular, attention was given to:

- preparing the groundwork for the Round Table meeting in February 2015 to discuss strategic directions for agricultural transformation in southern Africa;
- outlining the programme topics for the next STIAS Forum meeting in 2015 dealing with scenarios and options for sustainable production;
- considering options for the involvement of postdoctoral fellows and/or PhD students in the sub-theme;
- beginning the process of organising an international meeting on sustainable food production and food security in 2016; and
- laying the ground work for a comprehensive book dealing with food security in southern African countries written by STIAS fellows and experts from the region.

Discussions were held on a broad range of important topics related to the improvement of food security in the region. These sessions were used to develop the STIAS Forum programme and to identify expert participants from the region. In addition, scientists from a wide range of disciplines important to agricultural production, resource management, agricultural economics and environmental impact working

in the region and beyond, were invited to present informal seminars to the STIAS fellows. These seminars were designed to open discussion on specific factors impacting food security and potential strategies to improve sustainable food production. These seminars provided extremely valuable and productive insights into the problems of the region in the coming 30 years. They are also important in the development of the future STIAS project on sustainable intensification of agricultural production.

Other projects in this longer-term theme include:

- the work of Jan Bengtsson (Swedish University of Agricultural Sciences), Regina Lindborg (Stockholm) and Henrik Smith (Lund) on Multifunctionality in managed grassland systems – biodiversity and ecosystem services.
 The group will return to STIAS in 2015 and is already interacting with Sikora's group;
- the work of Luc D'Haese (Antwerp) on a book Food and nutrition security in rural communities at STIAS for the past three years; and
- the work of Carl Folke (Stockholm Resilience Centre) on Social-ecological systems and biosphere stewardship; and his interaction with a number of researchers at Stellenbosch University and the Nelson Mandela Metropolitan University.

Health in transition project From left: Lucie Laflamme; Susanne Lundin; Lillemor Lundin-Olsson







Health in transition divided into health prevention and health care

A number of follow-up initiatives resulted from the 2014 STIAS-Wallenberg Round Table meeting on *Mental health challenges in sub-Saharan Africa – moving to implementation*. These are reported on in the section on page 17.

Other work in this theme project is currently undertaken by various groups (mostly led by Swedish researchers) so far each with an own focus:

- Lucie Laflamme and Marie Hasselberg (Karolinska Institute) have for the past three years been working with South African colleagues at Stellenbosch University and the University of Cape Town on Health transition and injury care and prevention;
- Susanne Lundin (Lund) will continue her 2013 work on Future Bodies: preventing organ trafficking, in 2015, together with Elmi Muller (Cape Town);
- Tommy Olsson (Umeå) has continued work on Ethnic differences in obesity-related complications in South African women with colleagues from Stellenbosch University and the University of Cape Town and expects to return to STIAS in 2016;

- Lillemor Lundin-Olsson's (Umeå) project on Falls among older people in South African collaboration with the University of Cape Town is ongoing; and
- Ulf Gerdtham (Lund) has continued working with the group of Servaas van der Berg (Stellenbosch) on Making primary health care work for the poor: examining the quality and acceptability of public primary health care service in South Africa. He will return to STIAS in 2015.

Crossing borders

The visit to STIAS by Hans Lindahl from Tilburg University in 2014 unfortunately had to be postponed. He will now be at STIAS in early 2015 and will conduct an international workshop on the topic of *Boundaries and legal authority in a global context.* It is anticipated that a working group of STIAS fellows will be identified to continue work in this theme over the next two to three years.

Manuel Castells (Southern California) has agreed to visit STIAS in July/August 2016 to work on the project *The construction of identity in the information age*.

Understanding complexity

Roberto Poli (Trento) will be the convenor of a group of scholars working on the theme *Complexity and anticipation* in early 2016. The group will include Timothy Allen (Wisconsin-Madison), Mario Giampietro (Barcelona), John Kineman (Colorado), Aloisius Louie (Ottawa), Gerald Midgley (Hull) and Ilkka Tuomi (Espoo, Finland).

They will address the question whether complexity unfolds in degrees, or exists as a type (when a system or a model is either simple or complex). Other points of focus include which acceptation of complexity is most suitable for making anticipation possible; whether there are hierarchies of anticipations, and if so, how these may be defined; what visual phenomena are associated with anticipations, including magnification, scaling, zooming, expansion, detail, depth, and apparent size; and how anticipation relates to emergence.





STIAS FELLOWS AND PROJECTS

The STIAS programme continued to reflect an emphasis on projects which draw on an interdisciplinary basis across all disciplines, and which are relevant to the (South) African context, often addressing very topical issues of the day. An increasing component represented activities within the seven longer-term theme projects.

- From left: back row Thokozani Majozi, Loyiso Nongxa, Ben Kiregyera, Elisabeth Gerle, Dennis Töllborg, Aatto Laaksonen, Roberto Poli Front row – Fred Khumalo, Njabulo Ndebele, Anne Allison, Alejandro Bendaña, Jolly Kiregyera
- 2. Anne Allison
- 3. Axel Fleisch
- 4. Njabulo Ndebele
- 5. From left: Manuel Castells, Hendrik Geyer and Paul Cluver
- 6. Marianne Hirsch
- 7. Michael Blake
- 8. Albert Goldbeter
- From left: standing Lucas Gakale, Carl Folke, Per-Anders Edin, Willem Gispen, Marc Bossuyt, Ray Melmed, Karin van Marle, John Matisson, Athol Fugard, Lucie Laflamme
- Seated Iain McGilchrist, Michael Ruse, Michael Blake, Richard Sikora, Eugene Terry, Janos Bogardi, Marie Hasselberg











"My experience at STIAS has been intellectually and personally rewarding. In this space – of the mind – and time – for thinking, pondering, and dialoguing – I have been enriched in almost every possible way. I leave feeling refreshed and energised."

— Anne Allison, Duke University, 2014





A CREATIVE SPACE FOR THE MIND







10. lain McGilchrist

- 11. From left: Saras Reddy, Sarojini Nadar and Elisabeth Gerle
- 12. Léonce Ndikumana

"I am very enthusiastic about the three months spent in one of the most beautiful areas of the world while living in the intellectually stimulating environment of the charming university town of Stellenbosch and more in particular of this jewel of academic research, called STIAS."

— Marc Bossuyt, University of Antwerp, 2014



13 Marc Bossuyt

14. From left: standing – Siamon Gordon, Carl Folke, Lucas Gakale, Richard Sikora, Wolfgang Lutz, Ray Melmed, Marc Bossuyt, Eugene Terry, Reiner Klingholz, Athol Fugard, Hans Hertz, Janos Bogardi, John Matisson Seated: Michael Ruse, Marie Hasselberg, Berit Olofsson, Salima Ikram, Lyndall Gordon, Lucie Laflamme



Right, from left: standing – Shekhar Saxena, Stig Wall, Crick Lund, David Ndetei Seated – Marion Jacobs, Abdallah Daar, Pamela Collins. Gail Andrews. Maud Olofsson





SECOND STIAS-WALLENBERG ROUND TABLE MEETING ON MENTAL HEALTH

STIAS facilitates the dissemination of research results and insights obtained in its research programme to a wider public. This includes creating platforms for dialogue between academia, policymakers, professionals and practitioners, business and industry, and civil society structures.

Within this context the Marianne and Marcus Wallenberg Foundation supports an annual Round Table forum where representatives from South Africa, Sweden and a broader international community can engage in dialogue and debate around a central theme, typically one related to current global challenges with a focus on its local manifestation.

In 2014, the STIAS-Wallenberg Round Table focused on the broad topic of public mental health and the theme for the meeting was *Mental health challenges in sub-Saharan Africa: moving to implementation*. This initiative is linked to the current STIAS longer-term theme on *Health in transition* promoted by STIAS for five years with the support of the Knut and Alice Wallenberg Foundation.

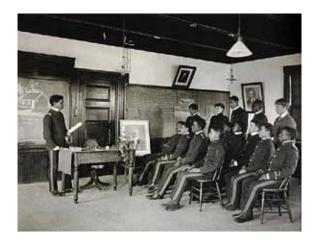
The meeting held at STIAS on 24 and 25 February was preceded by a preparatory workshop in November 2013 where recent developments in the literature and in the relevant policy domains were discussed.

The Round Table meeting was attended by a group of people with a common interest in mental health and included

representatives of groups of interest such as persons with psychosocial disabilities, academics, research funders, policymakers, NGOs, service providers, and others from across Africa, as well as colleagues from Sweden, Canada, the United States of America, Germany, and the World Health Organization.

The emerging priority theme was mental health and violence against women and children. Following on this meeting several actions were launched to keep mental health on the agenda in policymaking and public health in Africa. A tangible example was the publication of the Declaration on mental health in Africa: moving to implementation in the journal *Global Health Action* in 2014.

Progress and prospects on several other initiatives were discussed at a follow-up meeting on 17 and 18 November 2014 which included, amongst others, a meeting of the working group on violence against women and children/gender-based violence, a discussion of a mental health strategy for Africa, and the operation of an African knowledge and communication hub.





School photos in liquid time: reframing difference

SFLECTED PROJECT PROFILES

Marianne Hirsch (Columbia University) Leo Spitzer (Dartmouth College)

School photos in liquid time: reframing difference

Emerging almost concurrently with the technological development and popularisation of photography in the mid-19th century, school photos rapidly came to serve as vehicles for some of photography's unacknowledged ideological functions. Their increasing global ubiquity coincided with the rise of culturally chauvinistic ideologies of social assimilationism in different imperial centres around the world – ideologies that, for example, connected developments within the modern emancipatory history of European Jews to that of colonial subjects in Africa and Asia, and to that of indigenous and formerly enslaved peoples in the Americas. As such, school photos have been employed to testify to the successes of educational acculturation and socialisation defining national belonging and citizenship in several distinct cultural contexts over the course of almost two centuries.

The book which will emerge from this project, *School Photos in Liquid Time* – the first critical volume to analyse this vernacular photographic genre – focuses on a particular set of incongruous school photos from Nazi ghettos in Eastern Europe. Reading these surprising and little-known images

in the context of this distinct vernacular photographic genre and its history, their complex meanings from a comparative and connective perspective are illuminated. Upon arrival at STIAS, an article based on this project, 'School Photos and their Afterlives' in Feeling Photography, ed. Elspeth Brown and Thy Phu (Duke UP, 2014) had been published and a number of talks on various aspects relating to it had been delivered. Further to this significant progress was made during the STIAS residency; the shape of the entire project was formulated and detailed, and a book proposal was written that has now resulted in a publication contract from the University of Washington Press, and a promised mid-2016 manuscript delivery date. On the basis of previously written drafts, three of the book's six planned chapters were also completed. An essay, 'Vulnerable Times' also finished at STIAS by Marianne Hirsch, and drawing on photographic material from the school photo project, will be published in two books in 2016.

Frederick Murphy (University of Texas)

Marian Horzinek (Utrecht University)

Erling Norrby (The Royal Swedish Academy of Sciences, Stockholm)

Marc van Regenmortel (CNRS, University of Strasbourg)

The foundations of virology

An extended online edition (eBook) of the historic research work, *The Foundations of Virology: Discoverers and Discoveries, Inventors and Inventions, Developers and Technology* was completed at STIAS. Many of its 570 pages emphasise the early role of virologists working in Africa in dealing with important human and zoonotic pathogens – yellow fever virus, Rift Valley fever virus, Ebola virus, et al. Files on the website www.utmb.edu/virusimages/ have been linked to three major microbiology/virology websites (American Society for Virology, American Society for Microbiology, and International Committee on Taxonomy of Viruses). The original motive remains: to use the remarkable history and grand stories of discovery underpinning modern virology to stimulate further inquiry by young people and perhaps influence a few career choices.

"I have found STIAS a place where 'looking over the fence' of one's own discipline has become a scientific lifestyle. Without the customary exaggeration in such assessments I can say that it has been the most valuable and creative experience in my life history."

— Marian Horzinek, Utrecht University, 2014



Marian Horzinek (Utrecht University)

The short history of evidence-based veterinary vaccinology

The time at STIAS brought aspects of vaccinology into focus that had not been properly addressed in the past. Vaccinophobia, or rather vaccination antagonism in both the medical and the companion animal veterinary scene needs to be dealt with at different levels: the professional/general practitioner and dog/cat veterinary specialist – must be informed about the natural history of preventable infectious disease, and the citizen – lay person, patient or animal owner – needs to be convinced about the health benefits of immunisation

The professional scene: The cat is the companion animal of the 21st century, and with this in mind, the European Advisory Board on Cat Diseases (ABCD) had been founded, an independent group of 17 veterinary academics from eleven European countries, with expertise in immunology, virology, vaccinology and/or feline clinical medicine. ABCD's mission is to communicate scientific developments in feline infectious diseases and to establish a rational base for disease prevention and control. The output of a decade of concerted work consists of 43 guidelines, ten fact sheets and one brochure, which are intended to provide veterinarians with

up-to-date knowledge on infectious feline diseases, and with recommendations for their management and prevention. The material has been published in special issues of the Journal of Feline Medicine and Surgery (JFMS; 2009 and 2013). Another special issue with updates of the existing guidelines including a matrix vaccination guideline, as well as articles on disinfection, on the risk of iatrogenic complications after blood transfusion and on feline injection-site sarcoma is in press; to be published in June 2015 and presented at the next ABCD meeting in Porto (JFMS, Sage Publishers, 2015). These articles are followed by guidelines on some lesserknown infectious diseases. As some of the respective agents are emerging pathogens (for example, some streptococci) and/or carrying a zoonotic potential (for example, some lungworms), these guidelines provide practitioners with the latest knowledge and make them aware of potential threats for cats and humans. The articles were drafted during meetings in Riga (June 2014) and Dublin (December 2014) and co-authored by all ABCD members. The ABCD is the first organisation in veterinary science to include 'evidence-based medicine' qualifications to indicate the reliability of a statement or publication. This has been adopted by the Vaccination Guidelines Group of the World Small Animal Veterinary Association, another expert committee, at their meetings in Chicago (August 2014) and Venice (May 2015), upon a suggestion by Marian Horzinek.

The lay scene: Militant campaigning against vaccination has resulted in reduced herd immunity with re-emergence of previously controlled infectious disease, like measles. The Anti-Vaccination Movement is composed of a variety of individuals ranging from (former) physicians and veterinarians who should know better, to celebrities who have no medical training, to conspiracy theorists who distrust anything that the government says. The objective to reverse this trend has profited from various discussions with STIAS fellows competent in sociology. ethics and other disciplines in the humanities. The ABCD has recently decided to educate the pet owner scene by publishing topical articles in popular cat fanciers' journals, in different languages, and to address vaccination antagonism in questions and answers columns. In parallel, a new web site has been designed, where owner education will play a central role; it will go public in June 2015 (www.abcdcatsvets.org).

The February 2014 seminar series of virologist fellows Marian Horzinek, Fred Murphy, Erling Norrby and Marc van Regenmortel about the emergence of viruses in the biosphere (has led to several presentations entitled 'Viruses at the threshold of life'; these were given at national meetings, centenary celebrations and other occasions as keynote or introductory talks. The STIAS contribution has been acknowledged in 13 keynote presentations.







Carl Folke; Social-ecological systems and biosphere stewardship

SELECTED PROJECT PROFILES continued

Carl Folke (Beijer Institute and Resilience Centre, Stockholm)

Social-ecological systems and biosphere stewardship

Humanity interacts with the dynamics of the biosphere in new ways. We have expanded from a small world on a large planet, to a large human world on a small planet. Environmental issues have become issues about prosperous development of human societies, recognising that humans are part of and fundamentally dependent on the capacity of the biosphere to sustain development and well-being. This project focused on regional-scale analyses and collaboration with researchers of the South African Programme of Ecosystem Change and Society (SAPECS), writing articles on social-ecological systems and resilience, and working on a book entitled *Biosphere Stewardship*.

Lectures were given by Carl Folke at the University of Cape Town, Rhodes University and the Nelson Mandela Metropolitan University. He was also able to be in the field of SAPECS-related research areas and interacted with research and stakeholders in the Eastern Cape and in the areas around George. In particular, it was most exciting to interact with SAPECS which engages a network of many excellent researchers and research teams of seven universities in South Africa as well as leading scientists at the CSIR and South African National Parks, spanning theoretical to on-the-ground

research. SAPECS is part of PECS (Programme on Ecosystem Change and Society, www.pecs-science.org) and Future Earth. Future Earth is a major emerging area of research for global sustainability internationally (www.futureearth.org).

Some of the work performed at STIAS is now appearing, including articles in *Science*, Proceedings of the National Academy of Sciences, USA (PNAS) and in more specialised ecology and economics journals.

John Matisonn (Journalist, analyst and writer)

Was the rainbow nation just a myth?

South Africa faces the future more uncertain and divided than at any time in its 21 years of democracy. Violent reaction against foreign nationals has led to 350 deaths since 2008, and 40 miners were shot dead by police in 2012. Added to widespread demonstrations over socio-economic deprivation, student protests have taken on a racial dimension leading to a response that includes the revival of the South African flag of the apartheid era.

This tearing at the country's confidence and cohesion raises the question: what happened to the founding dream of a 'Rainbow Nation'? Was it ever a reality, or was it simply part of the nation's founding mythology? Can it be revived?

In South Africa, ideas matter. In the apartheid years Christian nationalism justified it and the Afrikaner Broederbond provided its organisational cohesion. English-speaking South Africa shed its British colonial ties from the middle of the last century, to be replaced by mining interests as well as a small but important bloc of dissenters.

To the African National Congress' early colonial, missionary, pan-Africanist, trade unionist and embryonic middle class influences was later added Marxist analysis, buttressed by Soviet military support.

What was it in this unlikely hothouse of conflicting interests and influences that enabled a constructive and peaceful outcome? This work offers some answers based on a reexamination of their impact.

The result, the book *God, Spies and Lies: Finding South Africa's Future Through its Past*, examines these questions through an exploration of the relationships between politicians/ entrepreneurs and journalists, as they worked together or against each other up to the present day, beginning with the first newspaper, owned by a slave-trading firm granted a licence by a British governor in 1800. The book is to be published in 2015.

"STIAS has been an amazing place to be; it is an academic's dream come true: we are housed, fed magnificently, given beautiful offices with inspiring views, have every help that one could ask for, have the stimulus of other intellectually stimulating scholars from all different disciplines, and most precious, are given the gift of time. The mixture of amazing people and the beautiful and tranquil environment all conspire to make one the best scholar that one can be."



— Salima Ikram, The American University in Cairo, 2014

Salima Ikram (The American University in Cairo)

Animal, mineral or vegetable?

This was a collaborative project with Stellenbosch University faculty members in both the humanities and the sciences to examine ancient Egyptian mummies, particularly those belonging to animals. In addition to this, work on Egyptian rock art was conducted, identifying the different motifs (animal, mineral or vegetable) that appear therein, and to contextualise them within the larger framework of African rock art.

A first draft for a book about the North Kharga oasis survey was completed while at STIAS and should be published at the end of 2015. In addition, images could be isolated, which take a huge amount of time and effort. Work has also started on a new book which focuses on a separate part of the Kharga oasis and which has a great deal of rock art in it.

Considerable progress has been made with colleagues on the work on mummies kept in South African collections. One article was completed and is currently under review, and work started on a second article. This second article is of particular significance as it marries different aspects of very hard-core science (physics and biology) with the humanities, to create an interesting and engaging story that will bring us closer to our mutual pasts.

Raphael Melmed (Hebrew University Hadassah Medical School, Jerusalem)

Evolution's vice is history's driver: an analysis of human behaviour through the prism of evolution

Raphael Melmed has worked as a physician for many years in an academic environment with a major interest as a medical educator in integrating fundamental neurophysiology and biology with psychosocial concepts. About eight years ago he began an exploration of the evolutionary basis of human behaviour, leading to the present book project.

Complexity, one of the primary topics addressed in the book, is considered at the outset and a strategy for dealing with it in the context of human behaviour is presented. The role of fundamental evolutionary concepts such as how adaptation and identity influence human thinking is described. Evaluating human beliefs and behaviour over the last two to three millennia, as exemplified by the well-documented troubled relationship between Christianity and Judaism, provide valuable insights into the pathophysiological basis of prejudice. Significantly, the excesses of human behaviour that led to persecution and killing of other humans can be shown clearly to be independent of any particular belief.

The basic elements of emotionality and the manner in which these influence cognitions and behaviour related to deeply felt belief systems, whether religious or political, emerge clearly from historical analysis as a principal driver of behaviour. The extent to which the mechanism driving these responses is carried over into our contemporary social and political thinking and practices is similarly evaluated and presented. The analysis shows that the popular notions that history is driven by forgetfulness (Santayana) or that specifically religious belief 'turns good people into bad' (Steven Weinberg) are misleading and misrepresent the real mechanism. Above all, what emerges is that in trying to evaluate universal human responses and behaviour without a consideration of the broader biosocial basis is likely to be, at best, incomplete.

Léonce Ndikumana (University of Massachusetts at Amherst)

Implications of monetary policy for credit and investment in African countries

In the early post-independence years, monetary policy in African countries was seen as a 'servant of national development'. Activist expansionary monetary policy was characterised by a predominant role of the government both as a banker (through government-owned financial institutions) and a borrower. This approach proved ineffective over time, as it led to inflationary government borrowing while suffocating the development of private financial institutions. Over time, African countries adopted various monetary regimes corresponding to shifts in economic doctrine and political orientation. Today, African countries have declared price stability as the ultimate objective of monetary policy, with South Africa and Ghana adopting a fully-fledged inflation targeting regime, while Mauritius and Uganda operate a transition regime of inflation targeting 'lite'.

of monetary policy on private sector lending through the interest rate. This analysis provides a full picture of the implications of monetary policy for domestic investment. The paper was submitted in 2014 to the *International Review of Applied Economics* and is currently under revision. It is the first in a series of studies that will explore the effects of monetary policy on economic activity and its transmission mechanisms in African economies.

Erling Norrby (The Royal Swedish Academy of Sciences, Stockholm)

Discovery and ethical dimensions of the natural sciences

The main involvement at STIAS has been to initiate the writing of a third book on Nobel Prizes with the working title *Nobel Prizes and Notable Discoveries*. For this purpose the unique Nobel archives at the Karolinska Institute, the School of Medicine in Stockholm, and at the Center for the History of Sciences,

SELECTED PROJECT PROFILES continued

The main issue pursued in the paper developed during the 2014 STIAS fellowship deals with the implications of the focus on monetary policy on inflation control under rather rigid frameworks that involve depressing domestic credit. The paper argues that this policy orientation has adverse effects on the economy, especially by constraining private investment. While bank credit plays an essential role in financing investment in all economies, it is of vital importance in sub-Saharan African countries in particular. Because of pervasive information asymmetries, poorly developed or inexistent equity markets and other non-bank credit instruments, firms in African countries rely on bank credit as the primary source of external financing capital accumulation. Consequently, credit contraction is likely to cause relatively higher contraction in private sector activity in African countries than in more advanced economies. Specifically, this study emphasises the effects of monetary policy on domestic investment through the interest rate or cost of capital and through credit contraction to document real-side effects of monetary policy.

The paper undertakes an empirical analysis based on a sample of 37 sub-Saharan countries over the period 1980-2012 to investigate three empirical questions: (1) the effects of contractionary monetary policy on capital accumulation through bank credit; (2) the effects of monetary policy on investment through the interest rate or the cost of capital; and (3) the impact

Royal Swedish Academy of Sciences were used. This material can be made available for scholarly use after application and this kind of material has been used in the two previous books – *Nobel Prizes and Life Sciences* published in 2010 and *Nobel Prizes and Nature's Surprises* published in October 2013. There is a 50-year secrecy on the archive materials and thus the latest book described events until 1962, the year that advances in crystallographic analysis of proteins were recognised by a prize to Max Perutz and John Kendrew and the discovery of the structure of DNA was recognised by the prize to Francis Crick, James Watson and Maurice Wilkins. The sequel to these two books will cover the prizes in physiology or medicine in 1963 to 1965. The writing of this new book is a three-year project.

The Nobel Prize in 1963 to John Eccles, Alan Hodgkin and Andrew Huxley was awarded "for their discoveries concerning the ionic mechanisms involved in excitation and inhibition in the peripheral and central portions of the nerve cell membrane". This prize will be presented in the first three chapters of the book and these chapters are now available in an advanced draft form and carry the titles *Neurophysiology, a Discipline Developing Consciousness; Testing of Nobel Prize Patience and a Near Prize Recipient;* and *Two British Neurophysiologists and the Potential for Action.* During 2014, work on the following three chapters leading to an evaluation

of the 1964 prize which recognised Konrad Bloch and Feodor Lynen "for their discoveries concerning the mechanism and regulation of the cholesterol and fatty acid metabolism" was also initiated. What will become the mid-third of the book is now available in a draft form covering three chapters entitled Advances in organic chemistry can be recognized by different Nobel prizes (mostly a story about Hugo Theorell and Vincent de Vigneaud); A tale of two gentle scientists that changed the world (Arne Tiselius and Fred Sanger); and 1964 – an important year in the world and for Nobel Prizes. The last chapter will provide the background to the discoveries made by Bloch and Lynen and also looks into the future. The final part of the book will focus on the three French intellectuals André Lwoff, Jacques Monod and François Jacob who received the 1965 prize "for their discoveries concerning genetic control of enzyme and virus synthesis". The complete manuscript for the book will be delivered in April 2016.

Marc van Regenmortel (CNRS, University of Strasbourg)

The scientific method in the biological sciences, biomedicine and vaccinology

Work on the book *The Scientific Method in Biology and Biomedicine* was continued at STIAS.

The door to a career in science nearly always requires completing a Doctorate of Philosophy (PhD) degree and it is somewhat paradoxical that very few science students accept that knowing about the philosophy of science could help them to become better scientists. This negative view is shared by most professional scientists as well as by science educators since very few universities in the world include even a single semester course introducing the scientific method in degree curricula in science that extend over seven or more years. In order to make such graduate courses more appealing, a small number of universities resort to proposing graduate courses which they would call: "The nature and practice of science" or "Concepts and methods in scientific research", because a course mentioning the words 'philosophy of science' is likely to be poorly attended.

The present book takes the view that there are general principles of scientific method that apply specifically to the biological and biomedical sciences and that these are likely to be of considerable interest to both professional scientists and students in biological disciplines. Since this book is written with them in mind, it departs significantly from the usual pattern followed in most introductory books in the philosophy

of science which analyse its historical development using mainly examples from the physical and chemical sciences. Instead, the book stresses aspects of scientific method and analysis such as multicausality, complexity and Darwinian evolution that have little relevance in the physico-chemical sciences. Entities such as genes or species, and processes such as emergence or evolution, cannot be adequately described in terms of simple physical principles and phenomena. There are no scientific laws in biology but only generalisations that are merely useful heuristic devices for predicting and controlling biological phenomena.

Topics covered in the book are scientific facts, theories and laws; causality, explanation and understanding in biology; the scientific method in biology and the role of paradigms in scientific research; biological specificity, reductionism and emergence; structure - function relationships; teleology, design and evolution; biological classification; complexity and systems biology; rational design versus empirical hypothesis testing in HIV vaccine research; scientific discoveries by serendipity; science, pseudoscience and anti-science; HIV/Aids denialism in South Africa; and public distrust of vaccines and genetically modified foods.

So far, six scientific papers have been published on some of the topics above and these will be included as chapters in the book.

Dennis Töllborg (University of Gothenburg)

Abuse of power

This project focused on a widespread myth, namely that Sweden is a country mainly without corruption and involved internationally in corruption only because of the demands from corrupt governments and people in the rest of the world. As always, science needs not only theory, real science is evidence-based, hence needs concretisation. In this work the focus is on the South African-Swedish connection in the so-called JAS project (in Swedish JAS stands for Jakt, Attack, Spaning, the name of the air fighter South Africa bought from Sweden).

A book in Swedish and English (*Our Era's Fear of Quality*) incorporating this STIAS project will be published in 2015.

Anne Allison (Duke University)

Lonely death: an ecology of living and dying in post-miracle Japan

Stories of 'lonely death' (kodokushi) are commonplace in what is considered an era of increasing isolation and social disconnectedness in post-bubble Japan. At a time when one third of all Japanese live alone and the rates of both lifelong employment and marriage are declining, a sense of socioeconomic insecurity is on the rise. 'Lonely death' has become shorthand for this wider sociological condition of changing living patterns – away from the durable relationality of long-term familial, work and neighbourhood bonds, and towards a more singlified, detached sociality. This is the subject of the research project embarked upon during the four-month stay at STIAS, January to May 2014.

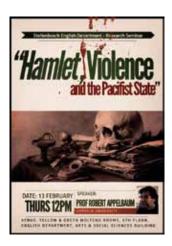
Following the latest book on post-bubble, post-nuclear precarity in 21st century Japan (Precarious Japan, 2013), this project examined the increased trend of Japanese to live and die alone considering various implications: the emergence of new attitudes and practices regarding burial, funerals, and intimacy with non-human others, as well as the correlation of singular existence with solitariness, loneliness, and alienation. During the time at STIAS one academic article (*Discounted* Life: Social Time in Relationless Japan 2015 in boundary 2), and responses to a book forum on the above book (Book Forum on Precarious Japan to be published 2015 in *Dialogues* in Human Geography) were written. Also preparations on starting to conduct fieldwork in the new project were undertaken which led to some very successful work during the 2014 summer and a paper Greeting the Dead: Managing Solitary Existence in Japan currently under review at the online journal HAU.

Siamon Gordon (University of Oxford)

From Metchnikoff to macrophages

Work on a book on the founder of immunology, Elie Metchnikoff, a Russian-born immunologist (1845-1916), who spent the second half of his research career at the Pasteur Institute in Paris under the direction of Louis Pasteur, was continued at STIAS where the outline of the book was drafted and subsequently updated. Extensive notes, including a rich personal correspondence with a Ukrainian pathologist, Ludmila Telepnova, were organised, and selected parts will be retained for publication in the book in due course. Arrangements are being made to publish parts of this in a different format sooner since it provides a valuable resource and insights into Metchnikoff's life and work which would be excessive to be included in the book. Formal arrangements for the publication of the book have not yet been made but there has been preliminary interest from academic scientific publishers. It is hoped that the book will be accessible to lay readers.

May 2015 is the 170th anniversary of Metchnikoff's birth and his achievements are receiving considerable international recognition. Since 2016 is the centenary of his death, time at STIAS was also used to explore and organise possible conferences to commemorate the latter occasion. This will include a meeting due to take place in Sicily in September 2016, and a student workshop in Naples the following October. Considerable new material will be accumulating in Russia/Ukraine and the West during this period which will enrich the above book project.





Robert Appelbaum; The aesthetics of violence: art. fiction. drama and film

SELECTED PROJECT PROFILES continued

Robert Appelbaum (Uppsala University)

The aesthetics of violence: art, fiction, drama and film

This project explored the role of violence in creative works of art. Why is violence so central to art? (In the West, it has almost always been that way.) What do artists and their viewers, readers, and audiences get out of violence? There are many social psychologists who still make the claim that violence in art causes violence in the real world, but this study not only debunks the claim, but also develops the opposite point of view: namely, that real world violence is the cause of violence in art. Art should be seen as a space where violence in the real world can be confronted from a zone of safety. That does not make art neutral: nor does it mean that we should not be concerned with how art portrays violence. But it does mean that as art has something to tell us about violence (what it means for us, what we hope and fear from it), so violence has something to tell us about art (what does it mean to be 'safe' from violence, or able to 'play' with it, for a start).

The first and second chapters of the book *The Aesthetics of Violence* have been completed. In the first chapter the notions of 'play', 'distance', 'aggression', 'aesthetics' and 'aestheticisation' are developed, drawing on philosophy and anthropology as well as the histories of literature and other art forms. The second chapter takes up the issue of the

distribution of violence in artworks, focusing on fairy tales and horror films and taking up the issue of materialist and gender-based accounts of violence in the arts. More work is now in progress, and it is expected that the manuscript will be completed for publication in the spring 2016.

Part of the time at STIAS in 2014 was also devoted to completing a manuscript focusing on literary representations of political violence in the early modern period. That manuscript is now scheduled for publication in December 2015: *Terrorism before the letter: mythography and political violence in England, Scotland and France* 1559–1642 (Oxford University Press). In this book about thirty major incidents of terrorism and of as many major and many more minor texts are analysed, both fiction and non-fiction, which respond to terrorism in this period before terrorism had a name.

Also to be mentioned is a text which was worked on while at STIAS and which was used to present in lectures at the University of Cape Town and the University of Pretoria, 'Hamlet, Violence and the Sovereign State', an essay complimentary to a text presented and published in China. It is expected that this lecture will be developed into a paper for publication before long.

The convergence of art and violence is still something of a mystery. But it seems clear that one cannot understand the one without understanding the other.

Hans Hertz (KTH Royal Institute of Technology)

High-resolution laboratory x-ray bio-imaging

Imaging technologies are essential for life-science, from basic research to clinical diagnostics. Methods are investigated to obtain higher spatial resolution and improved contrast when imaging thick biological samples – a classical and generic bio-imaging problem. Ideally, one wants to 'see' the smallest possible detail in the context of the full and unperturbed system. Methods used were enabled by recent progress in x-ray science, especially unique high-brightness laboratory x-ray sources, x-ray optics, and computational algorithms. Hertz et al recently demonstrated the principles for phase-contrast x-ray angiography with <10 micrometre resolution in both healthy and tumorous tissue for small-animal imaging. Other early examples include tumour demarcation and nanoparticle x-ray fluorescence with potential for high-spatial-resolution molecular imaging.

The application of these novel imaging modalities to relevant biomedical problems requires several advances, both physical and biomedical. Detectors are an integrated and essential part of phase-contrast x-ray imaging systems and presently the constraining component in several respects. While at STIAS theoretical understanding for quantitative detector characterisation was improved as well as experimental

".... the time certainly was productive although it has yet to be determined what will eventually be produced. Clearly a few scientific seeds in different stages of maturity have emerged. Some of these seeds were the unexpected result of the broad interdisciplinary nature that characterises the STIAS environment and some are due to the opportunity offered by STIAS to think things through without interruptions."



— Hans Hertz, KTH Royal Institute of Technology, 2014

characterisation methods refined. A publication is in preparation. The STIAS project also included a literature review and a feasibility study of novel application areas. These will help guide future work when implementing the novel x-ray imaging methods.

Marc Bossuyt (University of Antwerp)

The indirect responsibility of states parties to human rights treaties

Research done at STIAS paid special attention to situations in which the European Court of Human Rights hold states parties indirectly responsible for actions which could be performed by public agents of other states if a person under the jurisdiction of a state party is extradited or expelled. The research was concentrated around two very recent judgments of the European Court of Human Rights: Trabelsi v. Belgium, 4 September 2014, concerning a person condemned on charges of terrorism and extradited to the United States on other charges of that kind, and Tarakhel v. Switzerland, GC, 4 November 2014, concerning an Afghan couple with six children which the Swiss authorities may not return to Italy, despite the Dublin Regulation, before having obtained individual guarantees from the Italian authorities that they would be taken charge of in a manner adapted to the age of the children

A short comment has been published on the Tarakhel judgment in Dutch in *De Juristenkrant* and will be published in 2015 in French in the *Revue Suisse de droit international et européen*. More important is the comment on the Trabelsi judgment published in 2014 in English in the Human Rights Law Journal. In that judgment, the European Court found a violation of Article 3 (prohibition of torture) of the European Convention because in the United States "none of the procedures provided for amounts to a review mechanism requiring the national authorities to ascertain, on the basis of objective, pre-established criteria of which the prisoner had precise cognisance at the time of imposition of the life sentence, whether, while serving his sentence, the prisoner has changed and progressed to such an extent that continued detention can no longer be justified on legitimate penological grounds" (§ 137).

Commenting on that judgment, the following question has been asked: "Is it not 'grossly disproportionate' that, if a mechanism did exist in the United States providing for a review of Trabelsi's sentence (let's say in 2038), the Court would not object to his extradition to that country even though he would run the risk of spending at least 25 years in prison, after having already spent nearly 13 years in prison in Belgium, but that, in the absence of such a mechanism and as he could not be sent back to his country of origin (Tunisia), he should be allowed to stay as a free man in Belgium?".

The comment concludes as follows: "The Court might wonder whether the mechanical combination of continually lowering the threshold of Article 3 of the Convention and/or enlarging its scope of application with the imposition of extraterritorial effects of such interpretations and applications on non-states parties will not lead to results that sooner or later reach the borderlines of what can be considered reasonable. The Court could have avoided the unfortunate consequences of the extra-territorial effects of enlarging the scope of Article 3, by mitigating the indirect responsibility of a state party when such effects amount to imposing the Court's interpretation of Convention standards on states non-parties to the Convention".

Other research related to the abolition of the death penalty in Paramaribo (Suriname) in February 2015. It will lead to a publication in English in a book in honour of William Schabas and in Dutch in the *Tijdschrift voor Strafrecht*. In the latter, the text on the UN Second Optional Protocol is completed with elements drawn from the issue of irreducible life sentences at stake in the Trabelsi case. In addition, a short article, written at the occasion of the 20th anniversary of the *Revue belge de droit constitutionnel* and in favour of keeping the obligation to vote in Belgium, has been accepted for publication by that Revue. Moreover, a more elaborate article has also been completed for publication in a book.





Lars Pettersson; Challenges and opportunities for the transport sector

SELECTED PROJECT PROFILES continued

Lars Pettersson (KTH Royal Institute of Technology)

Challenges and opportunities for the transport sector

The issue of sustainable energy supply is a global problem for pursuing future endeavours in the energy area. In countries such as China and India there is a tremendous growth at the moment, which is envisaged by an increased migration to big city areas and an ever-growing demand for heavy-duty vehicles in order to feed the urban metabolism. Hence, one of the grand challenges of society is to meet the demands for sustainable and environmentally-friendly technologies in the transport sector. One way to tackle the problem of growing concentrations of carbon dioxide, which is believed to contribute to global warming, is the use of biofuels. In the first part of this fellowship at STIAS the specific challenges related to the production and use of biofuels in heavy-duty trucks and how they influence the emission after-treatment system in the truck were identified. During this stage, work concentrated on the establishment of a network in preparation for a further visit to STIAS in 2015 when research will focus on catalytic aftertreatment systems for trucks fuelled by biofuels. The work so far has resulted in two papers published in highly ranked scientific journals.

Elisabeth Gerle (University of Uppsala) Sarojini Nadar (University of KwaZulu-Natal)

Exploring interpretations of the constitution and the Bible as 'sacred texts' in constructing (un)equal gendered environments

Culture, religion, gender, ethnicity, race and history influence processes of identity formation and social relationships. In this research project on gender-based violence and attitudes toward the female body, legal judgements on sexual violence from two different contexts were analysed using a critical feminist lens: one from a pluralist, liberal and highly secularised state such as Sweden, one from South Africa which is described as very religious and with arguably the most liberal constitution on the African continent. The objectives of the study were to:

- analyse interpretations of the Bible contributing to constructions of (un)equal gendered identities; and
- analyse examples of legal verdicts and religious/social practices revealing discrepancies and tensions between constitutional emphasis of equal rights for all citizens and praxis.

Much of the work done in the initial weeks while at STIAS, required reconceptualising the envisaged research project from an empirically-based study to a more textual and theoretical study. This required an adjournment of the first objective to a time when an empirical study would be more feasible. This did not detract from the central aim of the project which was to reflect on the ways in which gender is constructed within religion and the law. The concept of 'sacred texts' still remained a central research focus, exploring the limitations of the appellation of 'sacredness' both to humanrights based constitutions as well as to religion, within the context of gender.

An article *Mediating the sacredness of religion, culture and law in contexts of sexual violence* is in the final stages of preparation and will be submitted to the journal *Feminist Legal Studies* in 2015. Some time at STIAS was also used to continue with other ongoing projects. One article was published in 2014 and a book and several other articles are due for publication in 2015.

"To me, the STIAS seminars have been extraordinary. Listening to well-renowned scholars talk on their specialities has been very rewarding. This was true even when the topics were distant from my own research interest. There were also several occasions when the seminar discussions gave me new insights and ideas related to my own work. In combination with the lunch discussion, the seminars have contributed to making this visit 'a creative space for the mind'."



— Per-Anders Edin (Uppsala University) 2014

Berit Olofsson (Stockholm University)

Hypervalent iodine compounds as green reagents in organic synthesis

The need for environmentally benign methodology to perform reactions in organic chemistry is continuously increasing, in order to minimise health and climate effects caused by the chemical industry. The use of heavy metal-mediated reactions is troublesome, but alternative methodology is often lacking.

Research at STIAS focused on the continued investigation of hypervalent iodine-mediated reactions in synthetic organic chemistry. Hypervalent iodine reagents are non-toxic and have potential to become the reagents of choice in a wide variety of transformations both for environmental reasons and efficiency of the reactions. Still, several key aspects of these reagents need to be addressed to allow large scale applications, for example, in the pharmaceutical industry, including the development of reactions catalytic in hypervalent iodine reagent, and other means to minimise the amount of waste produced.

The time at STIAS was mainly devoted to finding ways to continue research in hypervalent iodine chemistry to reach the long-term goal of contributing to more sustainable chemical processes in the future. Interactions with chemists at the University of Cape Town and Stellenbosch University have resulted in the planning of collaboration, including student exchanges.

The outcome of the research has been communicated in one accepted paper, and two manuscripts are being prepared. The work on a book chapter in *Current Developments in Hypervalent Iodine Chemistry* also commenced during the fellowship.

Per-Anders Edin (Uppsala University)

Education, skills and inequality in the labour market

The race between education and technology is a key factor in determining earnings inequality. The aim of this project, which consists of several parts, is to contribute to our understanding on how the formation of skills generates inequality in the labour market. In a first project, previously unused micro data from the 1930 Swedish census were combined with published aggregate data for later years as well as data on the micro level from 1960 and onwards. These data were used to analyse the long run development of earnings differentials by education over time. During the visit at STIAS work was done on finalising the coding of the data. A first draft of a descriptive paper entitled *Education and Income in the Early 20th Century: Evidence from the 1930 Swedish Census* was also completed.





Far left: Aatto Laaksonen; Multiscale modelling in tribology Left: Berhanu Abegaz; Some thoughts and

Left: Berhanu Abegaz; Some thoughts and reflections about chemistry in Africa

SELECTED PROJECT PROFILES continued

Aatto Laaksonen (Stockholm University)

Multiscale modelling in tribology

Roughly 30% of global energy consumption today is friction a colossal loss. Tribology is an inter-disciplinary research field to understand, minimise and, in the end, eliminate friction and wear in rubbing of surfaces. Current lubrication technology is designed for steel surfaces, not optimal for modern wearresistant coatings and lightweight materials. Ionic liquids (IL), with a wide variety of applications have been found as attractive alternatives. The behaviour of ILs under high shear rates and pressures in confined films is not currently known as experiments are very difficult, often impossible. Once understood, it would be possible to tune the temperature. pressure and shear response of ILs to provide lubricants with desired properties. Multiscale computer modelling of IL properties and tribological behaviour will be very useful in designing a new generation of efficient and environmentally friendly lubricants.

This project was chosen as a STIAS project as it is highly interdisciplinary, being at the border areas of physics, chemistry, mathematics, computer science and mechanics. It is a part of a project financed by the Knut and Alice Wallenberg Foundation for the ensuing five years.

The multiscale modelling part is a very important cornerstone in the whole project where the other principal investigators are experimentalist synthesising and characterising the novel materials and testing them in laboratories with a variety of advanced tribometers. In total five groups are involved in this project with group leaders at the forefront of their research fields. The project is now in its second year and the team is starting to understand mechanisms and chemistry on a molecular level. More than one million core hours are used per month on the fastest supercomputers in Europe to compute viscosities, heat and electric conductivities from molecular simulations to characterise the properties and fine tune the molecules for desired functions. It has been established that even small amounts of water (which are almost impossible to avoid in real life conditions as the ionic liquids are highly hygroscopic) may change the whole picture, often even in the direction wanted

Berhanu Abegaz (African Academy of Sciences, Nairobi)

Some thoughts and reflections about chemistry in Africa

There is little one can read about the history and the pioneers of chemistry in Africa and even that is mostly written by non-Africans. The idea to document and recognise the pioneers of chemistry began when preparing a chapter on achievements of pharmacognosy in Africa during the 50-year period 1959-2009 for a book published by the American Society of Pharmacognosy.

More information for the book about chemistry in Africa was collected during the International Year of Chemistry in 2011. While at STIAS, considerable advances were made on the book manuscript, but the work is far from complete. The countries which were focused on were South Africa, Nigeria and Ghana, and to a lesser extent, Ethiopia, Kenya, Cameroon and Malawi. The South African part is more complex and will require further work.

In addition to the work on the above book a commentary to appear in *Nature – Chemistry* was re-submitted to one of the senior editors of *Nature* after revision.

"My most remarkable experience at STIAS has been to meet people from diverse backgrounds, brought together by a common goal and with equal ambitions. I have found interactions with other fellows very intellectually enriching. The seminars, in particular, stand out in this regard. The STIAS ambience is certainly conducive to freedom of thought and excitement of the mind. If I have made significant progress in my project in the last month, it is mainly because of this combination. I can, therefore, affirm that STIAS is indeed the creative space for the mind."



— Thokozani Majozi, University of the Witwatersrand, 2014

Thokozani Majozi (University of the Witwatersrand)

Synthesis, design and resource optimisation in batch chemical plants

The project at STIAS involved writing a research book aimed at closing a glaring scientific gap in the area of batch chemical processes. The book presents state-of-the-art techniques for synthesis, design and resource optimisation in batch chemical plants. In all the aspects addressed in the book, emphasis is placed on the rigour and essence of a chosen scheduling framework. The manner in which time is captured is of utmost importance and forms the foundation for synthesis, design and optimisation in batch chemical plants. However, there are still serious challenges with handling time in batch plants, as evinced in published literature. Most techniques tend to assume either a fixed time dimension or adopt time average models in order to tame the time dimension, thereby simplifying the resultant mathematical models. A direct consequence of this simplification is a sub-optimal process.

The material presented in this book aims to close this scientific gap. The book is arranged into three parts according to focus of content. The first part of focuses on scheduling techniques, whilst the second part covers synthesis and design where the objective is mainly to design a chemical facility, which satisfies all the targets with minimum capital cost investment. Lastly, the book deals with resource conservation aspects in batch plants, where water and energy take the centre stage.

The aim of the project was to write a book that is mainly targeted at research and practising chemical engineers. The most outstanding contribution in the book is the exact treatment of time, which is fundamental in batch processes. The book gives a clear distinction between two methods that have dominated literature in the last decade on handling time in batch chemical plants, that is, discrete time representation and continuous time representation. The application of these methods in problems that are of contemporary relevance is also significant in the book.

Michael Ruse (Florida State University)

Apocalyptic themes in the global warming debate

There is major controversy in America today over global warming. Virtually every knowledgeable scientist agrees that human-caused global warming is well under way, yet there is significant opposition by many people and their leaders. It would be easy to put this down to unenlightened self-interest – coal-producing states lead the naysayers – but there is more than this. As always in America, religion enters in, and this project uncovers and discusses these factors. Apocalyptic thinking goes back to the Puritans and there is strong suspicion that it is surfacing again here. This theme has already been explored successfully, over the evolution-creation debate and is now extended to the global warming debate.

A book on the topic is in preparation and it is anticipated that this will be published in 2016.

Walter Mignolo (Duke University)

Decolonial thoughts

"What did I do during six weeks working on a project titled 'Decolonial thoughts? And what are 'decolonial thoughts' anyway? The answer to the first part of the first question is simple: I was writing a manuscript with the title of my research. The manuscript was based on four lectures I delivered at the Hong Kong Advanced Institute for Cross Disciplinary Studies. City University, between January and June of 2012; and four lectures I delivered in August of 2013 at CISA, Wits University, Johannesburg. What I did in these lectures was to provide the audience with the basic concepts and historical narratives of a scholarly as well as intellectual project known as modernity/ coloniality/decoloniality. The project was organised around a foundational article, entitled Coloniality and Modernity/ Rationality published by Peruvian sociologist Anibal Quijano in 1990. It was the historical foundation of a particular conception (theory if you wish) of decolonial thinking: processes whose outcome are 'decolonial thoughts'.

entanglement. There is a history from 1500 to 2000 in which the colonial matrix of power was built, transformed and controlled by Western imperial (and Atlantic) states. No longer.

"Western imperial states are no longer controlling the colonial matrix of power (a fact that is expressed in different vocabulary by political figures such as Henry Kissinger and Nobel Laureate economist Joseph Stieglitz) because, among others, China and Russia along with BRICS countries are disputing it. The world is run by a global capitalist economy, but the decisions on politics and economy are no longer taken by the US with the support of the European Union. This is what prompts the multipolar world many scholars and journalist are talking about. Political and economic multipolarity brings about the need to think pluriversality in the sphere of philosophy, epistemology and cultures. We are witnessing the emergence of pluriversality in many spheres: the struggles against racism and sexism, the re-emergence of religions that for a long time have been undermined by Christianity, the increasing tensions between Western

and in South Africa allows me to 'sense' the global in specific sites and to 'sense' how modernity is being perceived and how coloniality works underground. This is something that cannot be done in archives, libraries or watching documentaries. One needs to 'experience the people living in a place, a city and/or country or region. There are three specific instances I am focusing on in the manuscript that relate to South Africa.

- In the larger picture, South Africa is one of the particular locales and that you can understand starting from *The Bible* and Colonialism (1994), a book by Michael Prior, in which he takes three moments: the Americas in the sixteenth century, South Africa in the nineteenth and the formation of the State of Israel in the twentieth. You can see here the meaning of local histories trapped by global designs;
- More specifically, I am interested in the crisis of democracy and the emergence in different sites of ideas and arguments that contest the democratic values preached by imperial defenders of democracy. Three of these concepts are: Ubuntu, Sumak Kawsay in the South American Andes but now extended to all South America, and Confucian Constitutionalism in China; and
- South Africa is one of the five BRICS countries and Africa is
 one of the places in which you can see what I mean when
 saying that the present world is being shaped, to a large
 extent, because Western civilisation can no longer control
 the colonial matrix of power that it created, transformed
 and managed.

"And still more specific and to the point: the question of racism, so critical in Western civilisation and its consequences in the rest of the world. Needless to say, South Africa has been a paramount case in the process of ending apartheid and the legacies that apartheid has left for the present and future of the state. Racism in particular nation-states cannot today be understood and confronted without seeing it as a specific manifestations, in specific local histories, of long lasting imperial global designs and its global consequences."

SELECTED PROJECT PROFILES continued

"What then is decolonial thinking? If you are a sociologist. you think in the frame of sociology. If you are a physicist you think in the frame of physics. If you are an art historian or an economist, you think within the frame of art history and economy, and so forth. If you are a decolonial thinker, you think in the frame of modernity/coloniality. Modernity/ coloniality is a decolonial concept upon which decolonial thinking was founded. As such, decolonial thinking is at the border of disciplinary formations (it follows disciplinary rules but not one in particular) and political formation (it follows the historical experience of decolonisation in Africa and Asia and the lead of decolonial thinkers like Mahatma Gandhi, Frantz Fanon and Steve Biko). Decolonial thinking is conceived in relation to the basic concept of modernity/coloniality assuming that there is no modernity without coloniality and that coloniality is constitutive of modernity.

"My own project started around 1985, when I began to study colonialism but I did not yet know the concept of coloniality. Coloniality is the underlying logic of all Western colonialism since the Iberian in the sixteenth century, to the Dutch, French, British and coloniality without colonies, as is the case in the US. Coloniality is the shorthand of a colonial matrix of power, a structure of management and control upon which not only colonialism was enacted and justified, but also the very formation of Western civilisation depended on its colonial

Christians and Liberals and several manifestations of Islamism; and we are witnessing it in the sphere of art: art is becoming more and more a tool for liberating the senses from the stranglehold of Western principles from Aristotle's poetics to Kant's aesthetics. Decolonial thinking is re-thinking the formation, transformation, management as well as the dispute of the colonial matrix of power in all its spheres. We all in the planet are moving towards a no one's world in inter-state politics and economy. We are all in the planet moving towards a no one's world in the sphere of knowledge. The idea of universality of knowledge is out as there are the normative and imperial ideas of art and aesthetics, religion and spirituality, ethnicity and sexuality. The chaos we are witnessing and experiencing is due to the crumbling of an imperial order and the emergence of multiple actors building both multipolarity and pluriversality. South Africa has been experiencing these positive turmoil since the end of apartheid.

"During my six-week stay at STIAS, I wrote the first draft of a manuscript planned to be no more than 60 000 words, which will summarise and update the ground work I did between 1980 and 2010, and that was published in a trilogy: The Darker Side of the Renaissance (1995), Local Histories/ Global Designs (2000) and The Darker Side of Western Modernity (2011). Why do this in Stellenbosch and not at Duke University? Because the kind of work I do while in Hong Kong

Bo Stråth (University of Helsinki) Andreas Eckert (Humboldt University, Berlin) Axel Fleisch (University of Helsinki)

Concept Africa

The point of departure of this project was the experienced need for a new world history. The argument was that such a new world history must be something else than just an updated version of the conventional Western narrative with a starting point and a goal, where everything is measured in terms of backwardness and progress. The argument was from the beginning that a new world history must integrate perspectives from non-Western cultures. The goal was not to write a new world history, a huge and overwhelming task, but restricted to a contribution to the development of a new methodological approach to the writing of world histories in plural rather than singular.

The project was designed at the University of Helsinki as an inter- or transdisciplinary approach mainly between conceptual history, historical linguistics, sociology, anthropology and political science in a joint venture between Bo Stråth, professor of Nordic, European and world history, and Axel Fleisch, professor of African languages and studies.

The methodological approach was conceptual history with a focus on the semantics around the social and the economic and around key concepts like state, market, work, freedom and solidarity. The semantic field around such concepts consists usually of a Western terminology developed in languages like English, French, Latin and Greek. In order to compensate for this bias, the focus was on the etymology of the native translations to African languages. A key question was on what native etymological resources and historical experiences the translations built. A case in point is ujamaa in Swahili which is an old concept with Arabic origin employed by Julius Nyerere when he tried to translate European socialism to African realities. The example illustrates that there is no one-to-one translation but always a gap between the two or more languages in operation. This gap is the fruitful field where history takes place. The task of the historian is to reflect on the juxtapositions between the languages and what these juxtapositions tell us about historical experiences.

The horizon that the project established was not one where the African conceptualisations are played off against the European, but one where European and African semantics are entangled in historical processes. A frequent argument in the postcolonial critique deals with a continuous Eurocentric agenda and that therefore full autonomy must be based on interruption of communication under development of indigenous discourse. The project wanted to challenge this argument and search for possibilities of a non-Eurocentric transcultural dialogue. In doing so the project linked to recent approaches in postcolonial studies emphasising entanglement rather than rupture. The project wanted to connect to and contribute to this debate between arguments for rupture and arguments for entanglement.

The project brought together a research group from Europe, Africa and the USA. Four meetings had been organised before the STIAS fellowships of Stråth and Fleisch in 2013/2014; the first of these preparatory meetings also at STIAS in 2010. During these preparatory meetings a core of authors for a collected volume was identified and the methodology was fine-tuned. During 2013 and 2014, Andreas Eckert also was a fellow for a shorter period and assisted Stråth and Fleisch in seminars where the authors presented versions of their contributions to the volume for a final discussion. Three such meetings with four of five authors each financed by the Swedish Riksbankens Jubileumsfond were organised at STIAS.

The outcome of the time at STIAS was a volume edited by Axel Fleisch and Rhiannon Stephens (Columbia University, New York), *Doing Conceptual History in Africa*, which is currently being published by Berghahn Books (New York and Oxford).

The conclusion of the project is clear: the horizon of a new kind of encompassing non-Western world history means world histories in plural, written from the perspective of cross-cultural comparison of the conceptualisation of social life in key areas of political, economic and cultural activities. The question of communication and translation of experiences and expectations across cultural and civilisational borders is at the centre of such an enterprise.

More about the project and a full project outline can be found at www.helsinki.fi/conceptafrica.

Abdallah Daar (University of Toronto)

Garment of Destiny

Work on a new single-author book with a working title of *Garment of Destiny* commenced in 2013. The title is derived from Martin Luther King: "It really boils down to this: that all life is interrelated. We are all caught in an inescapable network of mutuality, tied into a single garment of destiny. Whatever affects one directly, affects all indirectly".

The book is based largely on encounters with many remarkable people; experiences and observations in many countries; interviews; and original research related to one of the major underlying themes of the book: that understanding 'other' cultures, traditions, persuasions and religions will enrich our lives and make us better global citizens. It documents important and largely unknown connections and intersections among traditions and philosophies and reflects on Athol Fugard's comment that "The only safe place is inside a story". It will argue that we can have no empathy, no full human life if we don't learn to listen to other people's stories, and let them touch us. It will also try to illustrate one of Herodotus' major findings: "The past does not exist. There are only infinite renderings of it".

A first seminar based on *Garment of Destiny* was given at STIAS during 2014, and the full first completed draft is expected before the end of 2015.

Iain McGilchrist (Psychiatrist and writer)

The Porcupine is a Monkey

STIAS provided an ideal opportunity to take further the work on the book *The Porcupine is a Monkey*, a book that will be published by Penguin Press worldwide. The book is an examination of the way in which the bipartite brain shapes the phenomenology of our world, and the thesis is that it is increasingly shaped by a theory-driven, limited way of looking at the world that can be illuminated by looking at its neurological basis in the left hemisphere of the brain. The work involves a lot of cross-disciplinary collaboration and the time spent at STIAS was a crucial opportunity to meet and talk to people in the fields particularly of law, economics and politics.





Far left: Gordon Fox Left: Jessica Gurevitch and Gordon Fox; The theory of landscape demography

SELECTED PROJECT PROFILES continued

Jessica Gurevitch (Stony Brook University) Gordon Fox (University of South Florida)

The theory of landscape demography

The demography of natural populations of plants and animals (the quantification of survival and reproduction, and the study of the consequent population dynamics) is central to many ecological processes and phenomena, including the decline of endangered populations and the expansion of invasive organisms, and it is an essential aspect of evolution. In particular, variation among populations in survival and reproduction is of key interest. While most studies of the demography of natural populations are carried out on single populations at local scales, this work extends the perspective to considering the dynamics of multiple populations at landscape and regional scales. The stay at STIAS focused on developing a conceptual framework for studying demography across many populations at landscape scales, and on building mathematical models for predicting the potential for explosive population growth (in the case of biological invasions), stability in population size, or crashes to extinction. It could apply, for instance, to the invasion of non-native acacias and pines in the highly diverse fynbos of the Cape Floral Region

of South Africa. One approach to creating these models has relied upon on an extension and modification of the economic theories of Harry Markowitz. Markowitz developed a modelling approach for optimum portfolio investments that maximises growth for a particular risk, where the investor allocates money into a collection of different investments. His model defines the potential 'space' that can be occupied by the investment portfolio, where the boundary conditions indicate optimal investment strategies given particular risk profiles. The work done at STIAS subsequently examines the use of this approach for modelling the potential for population growth and extinction risk, where different 'investments' in numbers of organisms are spread among different populations in a landscape, and the behaviour of the collection of populations is evaluated. This work has resulted in two manuscripts which will be submitted for publication, in an invited talk at the Instituto Ecología A.C. in Xalapa, Mexico in May 2015, and in presentations at the annual joint meeting of the Society for the Study of Evolution, the American Society of Naturalists and the Society of Systematic Biologists) in Guaruja, Brazil in June 2015, and the annual meeting of the Ecological Society of America in Baltimore, Maryland in August 2015.

Albert Goldbeter (Université Libre de Bruxelles)

Revised edition of the book *Biochemical Oscillations* and Cellular Rhythms

The project involved the preparation of the second edition of the book Biochemical Oscillations and Cellular Rhythms -The molecular bases of periodic and chaotic behaviour, published by Cambridge University Press in 1996 and in paperback edition in 1997. The book is devoted to the study of the molecular bases of cellular rhythms by means of computational models closely related to experimental observations. Much work has been done in this field during the last two decades, owing to rapid developments in systems biology. Besides revising the various chapters to take into account work done since the publication of the first edition, substantial extensions were made to the chapters devoted to circadian oscillations and to the cell cycle, which represent two major examples of cellular rhythms. Models for the mammalian circadian clock are used in the revised version to address the dynamical bases of jet lag and physiological disorders of the sleep-wake cycle in humans. A chapter devoted to synthetic oscillators and to cellular rhythms discovered during the last 15 years has been included.

"Thankfully, I had brought with me all my research material and all I had to do was just concentrate on the act itself. I did make use of the library on some occasions to read further on historical events remotely related to my project. Otherwise I spent the bulk of my time writing. What a pleasure."



— Fred Khumalo, Journalist and writer, 2014

How periodic oscillations transform into chaos and other modes of complex oscillatory behaviour is illustrated by several examples, which are now collected in two chapters at the end of the book, rather than being scattered through the various chapters as in the original version. Some additional work is needed to complete this revised version, which is due for publication by Cambridge University Press in 2016.

The fellowship at STIAS also made it possible to finalise an article on the transition between cell cycle arrest and cell proliferation, and its control by the extracellular matrix and cell contact inhibition and another on tristability (that is, the coexistence between three stable steady states) in the cellular regulatory network controlling cell fate in the early stages of embryogenesis. Some of the material completed at STIAS for the book project was used to write the opening chapter of a book entitled *Engineering Chemical Complexity*.

Fred Khumalo (Journalist and novelist)

The Death Drill: a historical novel

During the stay at STIAS, research and writing on the historical novel *The Death Drill*, inspired by and based on the sinking of the SS Mendi, a battleship carrying members of the South African Native Labour Corps, was taken to a new and higher level. The ship sank in the early hours of 21 February 1917 after colliding with the SS Darro off the Isle of Wight. Six hundred and sixteen South African men (607 of them black troops) plus 30 British crew members perished. The black men were on their way to assist the British army repulse the Germans in France after the war that would later be called World War I had reached a stalemate

Peopling the book with both historical figures (e.g. General Jan Smuts, Sol Plaatje) and purely fictional characters, the sinking will be used as a springboard from which an inquiry into complex issues bedevilling South Africa at the time will be launched: the land question, blacks being denied the vote, and the state of race relations seven years after the formation of the Union of South Africa and five years after the formation of the South African Native National Congress, later the ANC. The time at STIAS was productively spent writing.

Also during the stay at STIAS, Fred Khumalo was invited to do a presentation in the Department of English at Stellenbosch University, which gave him an opportunity to test his ideas on real life people in the literary fraternity. Their feedback/comments were taken into consideration in the completion of the project.

Subsequent to the stay at STIAS, the project was presented at a number of forums. One of these forums was the Inaugural Mbulelo Mzamane Memorial Lecture at the University of South Africa in Pretoria, in July 2014. Khumalo has also been invited to speak about this project and other previous publications at the Riyadh International Book Fair in Saudi Arabia in March 2015. *The Death Drill* is currently being assessed for publication.

John Dugard (International Court of Justice, The Hague)

Law in troubled times

Today comparisons are increasingly drawn between South Africa's system of apartheid and Israel's occupation of Palestine. This study examines the history and law of apartheid in South Africa and Namibia and the recent history of Palestine, in the context of the experiences of a South African human rights lawyer who from 2001 to 2008 served as UN Special Rapporteur on human rights in the occupied Palestinian territory and in 2009 conducted a fact-finding mission into Israel's assault on Gaza in 2008/9. The study compares the histories of South West Africa/Namibia and Palestine under the mandates system of the League of Nations and considers the question whether the 'sacred trust of civilisation' that inspired the mandates system and ultimately resulted in the independence of Namibia demands the establishment of an independent Palestinian state.

Roberto Poli (University of Trento)

Anticipation – how individuals and communities use the future

The future is incorporated into all phenomena, conscious or unconscious, physical or ideational, as anticipation, from those forms of anticipation that are observed, for instance, in a tree that loses its leaves in the autumn to human planning that colonises the future inspired by imaginary futures. Looked at as 'ways-of-knowing' the discipline of anticipation (DoA) consists of the codification of the myriad of systems of anticipation, both conscious and non-conscious. The DoA develops, sorts, and diffuses descriptions of the processes/ systems of anticipation or how the later-than-now enters into reality.

A fully-fledged classification of the various forms and types of anticipation has still to be developed. Furthermore, an adequate recognition of the ways in which anticipation

SELECTED PROJECT PROFILES continued

The question whether Israel's transfer of some 700 000 Jewish settlers into the occupied Palestinian territory has resulted in the oppression of one racial group (Palestinians) by another racial group (Jews) in a system resembling apartheid is a central feature of the study. Other discriminatory and repressive practices inherent in the occupation are also considered. The blockade of Gaza and Israel's attacks on Gaza are examined in the context of the rules of international humanitarian law. The study concludes with a consideration of whether Israel is likely to be subjected to the same pressures for change that were exerted on South Africa.

The study, which benefitted from two spells at STIAS, is nearing completion and will soon be submitted to potential publishers. In 2014, a section of the study titled *A Tale of Two Sacred Trusts: Namibia and Palestine* was published in the book *Law, Politics and Rights: Essays in Memory of Kader Asmal.*

is understood by different sciences and disciplines (biology, anthropology, sociology, cognitive science, etc.) is still waited on. A better and more complete understanding of anticipation will help not only the DoA, but also biology, sociology, and economy, on the one side, and medicine and architecture on the other.

Work on a book on the theory and applications of anticipation progressed well at STIAS where about half of the book was completed. It is scheduled to be published in 2016 by Springer. Two further papers were published in 2014, namely 'Anticipation: A new thread for the human and social sciences?', *Cadmus* 2(3), and 'Anticipation: What about turning the human and social sciences upside down?', *Futures* 64, calling attention to the growing interest for anticipation within the human and social sciences.

Ben Kiregyera (African Development Bank)

Emerging statistical renaissance in Africa

The project was about completing the writing of a book with the title *Emerging Data Revolution in Africa: Strengthening the Statistics, Policy and Decision-making Chain.* While at STIAS draft texts written for the book were assembled into a coherent and unified text, gaps in the text were identified and filled, duplications removed, areas that needed restructuring addressed and a complete and fairly clean draft of the book containing six chapters and about 500 pages (A4 size) produced.

The manuscript of the book was reviewed by Trevor Manuel, former Minister for Finance and Minister for Planning in the Presidency of South Africa who also wrote the foreword. It was published by the Sun Press, Stellenbosch in South Africa. The book has since been launched in various cities in Africa including Kampala (Uganda), at the 10th African Symposium on Statistical Development; Windhoek (Namibia); Johannesburg at a media event and Pretoria (South Africa) at the Thabo Mbeki African Leadership Institute (University of South Africa); Yamoussoukro (Cote d'Ivoire) at the Conference of Ministers responsible for Civil Registration; Addis Ababa (Ethiopia) at headquarters of the UN Economic Commission for Africa; Abidjan (Cote d'Ivoire) at the headquarters of the African Development Bank; and Dar es Salaam (Tanzania).

The book fills a large gap that has existed in the literature, knowledge and practices on statistical development in Africa. It is therefore expected that the book will be essential text on 'official statistics' for statistical training centres and universities in Africa, and important reference material for practising statisticians across national statistical systems on different aspects of statistical organisation, management and development in Africa.

Stephen Polasky (University of Minnesota) Heather Tallis (The Nature Conservancy, Arlington)

The provision of ecosystem services and poverty alleviation

Time at STIAS was devoted to working on two main projects related to ecosystem services. Ecosystem services are the goods and services provided by nature that benefit people, such as filtering of nutrients to provide clean drinking water and provision of habitat for large game that provides for ecotourism.

The first project was devoted to studying the need for establishing standards for use of ecosystem service information in a variety of policy and management applications. This work resulted in a paper entitled Setting the Bar: Standards for Ecosystem Services which will be published in a special issue on ecosystem services in the Proceedings of the National Academy of Sciences in 2015. Rapid progress in the research community has been made in assessing both the provision of ecosystem services and in demonstrating the impact that ecosystem services have on human well-being. There is also a ready audience for information about ecosystem services among important constituent groups. However, there has been much less progress incorporating ecosystem services into decisionmaking processes. One significant impediment to the incorporation of ecosystem services into public and private sector decision-making stems from the proliferation of conceptual frameworks, definitions, approaches, datasets and models. Having a widely agreed upon set of standards that describes the type and format of ecosystem service information for particular use contexts, would enable more rapid adoption. Ways forward in setting standards for ecosystem services in various use contexts are suggested. Parallel developments in others fields are documented including the development of national income and wealth accounting and life-cycle assessment and how these fields progressed after standard setting bodies were established and standards for best practice were agreed upon.

The second project was to research how best to incorporate the value of ecosystem services and natural capital into the national accounting of income and wealth. The System of National Accounts (SNA) includes information on market transactions but excludes the value of ecosystem services and natural capital that is not traded in a market. For example, provision of clean water that promotes health in rural populations is not recorded in the SNA. To address gaps in the SNA, the UN Statistical Division has been developing a System of Environmental and Economic Accounts (SEEA), but at present it still only incorporates the value of ecosystem services that has market value. Building from the literature in natural sciences and economics on the value of ecosystem services and natural capital, recommendations on the best approaches for incorporating ecosystem services and natural capital into national income and wealth accounts are provided.

Lillemor Lundin-Olsson (Umeå University)

Falls among older people in South Africa

Older populations are expanding all over the world. In Western countries falls present the most common cause of injury in old age and, consequently, pose a serious threat to public health. Falls, especially recurrent falls, are avoidable. Research on fall prevention in South Africa has just recently been recognised and is thus still very sparse. During the stay at STIAS, a collaborative initiative was embarked upon with one of the few researchers in South Africa in this field, Sebastiana Kalula at the University of Cape Town. She has studied the prevalence of falls in old age in three different sub-groups in Cape Town. Older people fall in all three groups, but analyses show interesting differences between the groups and in comparison to Western countries.

Based on these differences, new research questions arose about perceptions of falls and safety actions taken in the three sub-groups. The planning of a new study is continuing, and is focused on awareness of the risks of falls, including interviews with older people in the three sub-groups. The interviews will be analysed by qualitative methods. This methodology has been used in the research group at Umeå University but it has not previously been used in fall-related research in South Africa. The results should form the base for adaption of evidence-based interventions developed in other countries.

Tommy Olsson (Umeå University)

Ethnic differences in obesity-related complications in South African women

Obesity is closely linked to the development of type 2 diabetes (T2D), a leading cause of death worldwide. Within low-to-middle income countries, the projected increase in T2D from 2010 to 2030 is estimated to be as high as 69% compared to 20% in high income countries. T2D is more prevalent in populations of African origin than white populations, irrespective of the Global Human Development Index of the country. Black patients with T2D also have higher rates of associated morbidities, and are two to three times more likely to die from these diseases than their white counterparts. Within South Africa, there is a high prevalence of T2D, particularly in black African urban-dwelling populations, which has increased significantly over the past 20 years. Higher prevalence rates are found in women compared to men.

During the stay at STIAS collaboration between the research group at Umeå University and researchers at the South African Medical Research Council and the University of Cape Town (mainly Julia Goedecke) was further developed. These studies have already resulted in nine joint publications in international peer-reviewed journals and several papers have been submitted. Data from studies have also been presented at several meetings, both in South Africa and other parts of the world and new studies have commenced, including intervention studies in order to find ways to reduce obesity-related diseases. These studies are partly financed from the Swedish Medical Research Council, enabling further contacts and work in South Africa.





Willem Hendrik Gispen; Kingfishers of two worlds: African and European bird mythology and lore

SELECTED PROJECT PROFILES continued

Willem Hendrik Gispen (Utrecht University)

Kingfishers of two worlds: African and European bird mythology and lore

In 2013, Willem Hendrik Gispen published a book on the Greek myth of the metamorphosis of Queen Alcyone into the kingfisher Halcyon and the origin of the 'Halcyon days' saying. In this book, the fate of the myth until the second half of the seventeenth century was described when the allegoric world of the kingfisher gave way to the ornithological world as it is known today. In Western literature, song lyrics, music and dance the Halcyon myth is still very much alive.

The African continent is rich in cultures and is home to many different kingfisher species. The question whether kingfishers would also feature in traditional stories in Africa, gave rise to the current project. At STIAS the literature documenting an African perspective was therefore reviewed. The notion of birds as messengers or indicators of the invisible world is an important feature of how birds are perceived and their behaviour and songs/calls are interpreted in many sub-Sahara African ethnic communities.

Meetings were held with local birders, artists, anthropologists, academics from other disciplines of the humanities and notably, people in general who shared kingfisher tales and

knowledge of their own ethnic community. After working on notes made during previous visits to The Gambia, Uganda, Tanzania, Botswana and Namibia the first chapters of a book on the African kingfisher stories gathered in the last three years were written. Kingfisher species that have prominent roles in indigenous cultures are the pied, woodland and malachite kingfishers. Examples are the (malachite) kingfisher feather initiation ritual in the Bamoun Kingdom of Cameroon, the role of the woodland kingfisher in the myth on the 'beginning of African times' as told in a Gwere community in Uganda, and the legend of the one-eyed pied kingfisher told in a Shona community in Zimbabwe. Unfortunately it would appear that much of the traditional bird lore has been lost in modern South Africa.

In a concluding chapter, there is a reflection on the significance of birds in our day-to-day life and the unity of nature, animals, birds and men, culture and wisdom, science and arts. What the West seemed to have lost is still prominently present in many African cultures: deep knowledge of and respect for nature.

The Dutch version of the book on African kingfisher lore is in press.

Alejandro Bendaña (Centro de Estudios Internacionales, Managua)

Post-apartheid state engagement with customary structures

This project contributed to a greater comparative understanding of state-customary knowledge and its challenges in Africa by way of a study of the experience of the post-apartheid state in this regard. The approach was less anthropological or legal than political and governance oriented.

Research, consultations and drafting was conducted relating to engagement of ANC and state structures with traditional leaders and institutions. Findings were presented to the United Nations Development Group Bureau of Development Policy and Bureau for Crisis Prevention and Recovery, to assist with the articulation of policies of international actors engaged in state building and gender equality promotion working with traditional societies.

The outcome will be a monograph that can be slotted into the global discussion on rule of law and legal pluralism, focusing on the vexing issue of how to advance the rights of women in a context of sensitivity and respect for distinct cultures.

"The conversations at STIAS enlarged the scope of my work, often in ways that were unexpected, and I am grateful to the Institute for providing such an idyllic setting for pursuing my project."





Charles Piot (Duke University)

Migration stories: the US visa lottery and global citizenship

During time at STIAS, two chapters for a book about Togolese who apply for the US diversity visa lottery were completed. More Togolese per capita apply for the green card lottery than those from any other African country, with winners attempting to game the system by adding 'spouses' and dependents to their dossiers. The US consulate in Lomé knows this gaming is going on and constructs ever-moreelaborate tests to attempt to decipher the authenticity of winners' marriages and job profiles - and their moral worth as citizens – tests that immediately circulate to those on the street. The cat-and-mouse game between street and embassy is explored, situating it within the post-Cold War conjuncture - of ongoing crisis, of a sprawling transnational diaspora and the desires and longings it creates, of informationalism and its new technologies, of surveillance regimes and their travails. It is suggested that the diversity visa lottery constitutes a generative fantasy about exile and citizenship and global membership today.

Carol Gilligan (New York University)

Listening

During the time at STIAS a book called *Listening* was started in which a method of psychological inquiry that has been integral to Gilligan's research is presented. The method, known as 'The Listening Guide', facilitates psychological discovery by starting with questions about voice – who is speaking and to whom, in what body or physical space, telling what stories about which relationships, in what societal and cultural frameworks – and then specifying a process of listening keyed to hearing the multiplicity of voices within an individual and exploring the interplay between our inner and outer worlds. The challenge of the project lay in taking a method that has proved fruitful to researchers in a variety of fields and making it available to anyone interested in hearing the conversation under the conversation, or attending to voices that may speak at the margin or are under political or psychological constraint.

While work on the book has continued since leaving STIAS, the impact of the fellowship also contributed to the master class which was taught for psychologists in Belgium, an undergraduate course to students from a range of countries attending New York University in Abu Dhabi, and the introduction written as editor of the special section on the method in the journal *Qualitative Psychology* (C Gilligan. The Listening Guide Method of Psychological Inquiry. *Qualitative Psychology*, to be published in 2015).

STIAS fellows

Abegaz, Berhanu

African Academy of Sciences, Nairobi Some thoughts and reflections about chemistry in Africa

Allison, Anne

Duke University Lonely death: an ecology of living and dying in postmiracle Japan

Appelbaum, Robert

Uppsala University The aesthetics of violence: art, fiction and film

Bogardi, Janos

United Nations University-ViE, UN Campus Bonn Impact of sustainable intensification of agriculture on food security, the environment and human well-being across southern Africa (Sustainable agroecosystems theme project)

Bossuyt, Marc

University of Antwerp The indirect responsibility of states parties to human rights treaties

Dugard, John

Leiden University The role and impact of international law on apartheid South Africa, South West Africa (Namibia) and Palestine/Israel (with a particular focus on the legal debate in Israel/Palestine and the search for a iust solution)

Edin. Per-Anders

Uppsala University Education, skills and inequality in the labour market

Fugard, Athol

(Permanent visiting fellow) Playwright, novelist, actor, and director - Artist-in-residence Dry remains - the forensic examination of the moral content of a life

Gakale, Lucas

Ministry of Agriculture, Botswana Impact of sustainable intensification of agriculture on food security, the environment and human well-being across southern Africa (Sustainable agroecosystems theme project)

Gerle, Elisabeth

Uppsala University Exploring interpretations of the Constitution and the Bible as 'sacred texts' in constructing (un)equal gendered identities (with Sarojini Nadar)

Gilligan, Carol

New York University Listening

Gispen, Willem Hendrik

Utrecht University Kingfisher tales

Goldbeter, Albert

Biochemical oscillations and cellular rhythms: The molecular bases of periodic and chaotic behaviour

University of Oxford Elie Metchnikoff: a passionate scientist

Gurevitch, Jessica

Stony Brook University, SUNY Developing a theory of landscape demography (with Gordon Fox)

Hertz, Hans

KTH Royal Institute of Technology, Stockholm Tumor angiogenesis and the biology and toxicology of nanoparticles

Hirsch, Marianne

Columbia University School photographs in liquid time – assimilation. exclusion, resistance (with Leo Spitzer)

Hierm. Mikael

Umeå University The effects of race (Being human today theme project)

Horzinek, Marian

Utrecht University The short history of evidence-based vaccinology

Huber, Wolfgang

Humboldt University, Berlin Basic questions of ethics

Ikram, Salima

The American University in Cairo Animal, mineral or vegetable?

Jablonski, Nina

(Permanent visiting fellow) Penn State University The effects of race (Being human today theme project - co-convenor)

Khumalo, Fred

Journalist and writer The Death Drill (a novel)

Kiregyera, Ben

African Development Bank. Kampala Statistical renaissance in Africa

Klingholz, Reiner

Berlin-Institut für Bevölkerung und Entwicklung, Berlin It's the education, stupid! -Martin Luther's unfinished business (with Wolfgang Lutz)

Laaksonen, Aatto

Stockholm University Multiscale modelling in tribology for a new generation of lubrication technology

Laflamme, Lucie

Karolinska Institutet, Stockholm Mobile telephony and injury care (Health in transition theme project)

Lindborg, Regina

Stockholm University Biodiversity and ecosystem services in grassland systems (Sustainable agroecosystems theme project) (with Jan Bengtsson)

Lundin, Susanne

Lund University Future bodies (Health in transition theme project)

Lundin-Olsson, Lillemor

Umeå University Falls and related consequences in old age (Health in transition theme project)

Bendaña, Alejandro

Centro de Estudios Internacionales, Managua Theory and practice in postapartheid policy towards traditional cultural and legal structures

Bengtsson, Jan

Swedish University of Agricultural Sciences Biodiversity and ecosystem services in grassland systems (Sustainable agroecosystems theme project) (with Regina Lindborg)

Blake, Michael

Composer – Artist-in-residence Voices

Castells, Manuel

University of Southern California Rethinking development in the global information age implications for Africa

STIAS FELLOWS AND PROJECTS LIST

Daar, Abdallah

University of Toronto Garment of Destiny

D'Haese, Luc

University of Antwerp Towards designing and managing food security in South Africa: a critical analysis of a complex situation (Sustainable agroecosystems theme project)

Fleisch, Axel

University of Helsinki Concept Africa (project leader: Bo Stråth)

Folke, Carl

Beijer Institute and Resilience Centre, Stockholm Social-ecological systems and biosphere stewardship (Sustainable agroecosystems theme project)

Fombad, Charles

University of Pretoria Constitutionalism in Africa (The future of democracy theme project)

Fox, Gordon

University of South Florida Developing a theory of landscape demography (with Jessica Gurevitch)

Université Libre de Bruxelles

Gordon, Siamon

Lutz, Wolfgang

Vienna Institute of Demography It's the education, stupid! – Martin Luther's unfinished business (with Reiner Klingholz)

Maiozi, Thokozani

University of the Witwatersrand State-of-the-art techniques for synthesis, design and resource optimisation in batch chemical plants

Manganyi, Chabani

University of Pretoria

The effects of race (Being human today theme project)

Maré, Gerhard

University of KwaZulu-Natal *The effects of race* (Being human today theme project – co-convenor)

Matisonn, John

Journalist, analyst and writer Was the rainbow nation just a myth?

McGilchrist, lain

Psychiatrist and writer, London & Isle of Skye The porcupine is a monkey

Melmed, Ray

Hebrew University Hadassah Medical School, Jerusalem Human behaviour through the evolutionary prism: the illusion of rationality

Mignolo, Walter

Duke University

Decolonial thoughts

Murphy, Frederick

University of Texas
The foundations of medical
and veterinary virology:
discoveries and discoveries,
inventors and inventions,
developers and technology

Nadar, Sarojini

University of KwaZulu-Natal Exploring interpretations of the Constitution and the Bible as 'sacred texts' in constructing (un)equal gendered identities (with Elisabeth Gerle)

Ndebele, Niabulo

(Permanent visiting fellow) University of Cape Town The boxing economy of the Eastern Cape; and The effects of race (Being human today theme project)

Ndikumana, Léonce

University of Massachusetts Monetary policy in African countries: theory, practice and impact

Nongxa, Loviso

University of the Witwatersrand The state of mathematical sciences research and research training at South African universities

Norrby, Erling

The Royal Swedish Academy of Sciences, Stockholm Discovery and ethical dimensions of the natural sciences

Nugent, Paul

University of Edinburgh Wine, temperance and South African connectivity c.1900 to the present

Olofsson, Berit

Stockholm University Hypervalent iodine reagents as green reagents in organic synthesis

Olsson, Tommy

Umeå University Ethnic differences in obesity-related complications in South African women (Health in transition theme project)

Pahl-Wostl, Claudia

University of Osnabrück Water governance – building the foundations for sustainable management of water resources in times of global change

Pettersson, Lars

KTH Royal Institute of Technology Challenges and opportunities for the transport sector

Piot, Charles

Duke University
Migration stories: the US visa
lottery and global citizenship

Polasky, Stephen

University of Minnesota Research in sustainable development: Linking land use and natural resource management to provision of ecosystem services and poverty alleviation (with Heather Tallis)

Poli. Roberto

University of Trento Anticipation – how individuals and communities use the future

Ruse, Michael

Florida State University Apocalyptic themes in the global warming debate

Sikora, Richard

University of Bonn Impact of sustainable intensification of agriculture on food security, the environment and human well-being across southern Africa (Sustainable agroecosystems theme project – convenor)

Soudien, Crain

University of Cape Town *The effects of race* (Being human today theme project)

Spitzer, Leo

Dartmouth College School photographs in liquid time – assimilation, exclusion, resistance (with Marianne Hirsch)

Stråth, Bo

University of Helsinki Concept Africa (project leader)

Tallis, Heather

The Nature Conservancy, Arlington Research in sustainable development: linking land use and natural resource management to provision of ecosystem services and poverty alleviation (with Stephen Polasky)

Terry, Eugene

TransFarm Africa
Impact of sustainable
intensification of agriculture
on food security, the
environment and human
well-being across southern
Africa (Sustainable agroecosystems theme project)

Therborn, Göran

University of Cambridge *The effects of race* (Being human today theme project)

Töllborg, Dennis

University of Gothenburg *Abuse of power*

Van Marle, Karin

University of Pretoria
The becoming of postapartheid jurisprudence:
towards a minor
jurisprudence of generosity

Van Regenmortel, Marc

Centre National de la Recherche Scientifique, University of Strasbourg The scientific method in biology and biomedicine

Visiting scholars

Chaplin, George

Penn State University

The effects of race (Being human today theme project)

Erasmus, Zimitri

University of the Witwatersrand The effects of race (Being human today theme project)

Hasselberg, Marie

Karolinska Institutet, Stockholm Mobile telephony and injury care (Health in transition theme project)

Gordon, Lyndall

St Hilda's College, Oxford Outsiders: six extraordinary women













Opposite: Christof Heyns From left: Wolfgang Huber; Carol Gilligan; Roberto Poli; Michael Ruse; Salima Ikram

STIAS LECTURE SERIES

17 February

Wolfgang Huber (Humboldt University, Berlin) Human rights and globalisation: are human rights a 'Western' concept or universalistic principles?

10 March

Carol Gilligan (New York University)

Moral injury and the ethic of care: reframing the conversation about differences

10 April

Roberto Poli (University of Trento)

Anticipation: using the future for understanding the present

15 September

Christof Heyns (University of Pretoria)

Autonomous weapons systems: coming to a theatre near you?

13 October

Michael Ruse (Florida State University)
The Gaia hypothesis: science on a pagan planet

12 November

Salima Ikram (American University in Cairo)

May they live forever: ancient Egyptian mummies

28 January

Susanne Lundin Organ economy – an ethnographic perspective on transplant travel

30 January

Berhanu Abegaz Introducing the African Academy of Sciences

3 February

Frederick Murphy (at SACEMA workshop) The foundations of viral vaccinology

20 February

Albert Goldbeter Oscillatory life: mechanism, function and social impact of biological rhythms

27 February

Erling Norrby (with Marc van Regenmortel, Marian Horzinek and Fred Murphy) Viruses at the origin of life

6 March

John Dugard
Human rights and legal
norms: Namibia, South Africa
and Palestine

STIAS SEMINARS

3 February

Marc van Regenmortel (at SACEMA workshop) Specific and heterospecific antibody responses to viruses

6 February

Marian Horzinek The beauty of viruses, viral conditions and virology

13 February

Erling Norrby DNA and the Nobel Prize

18 February

Lillemor Lundin-Olsson Falls in old age – an increasing public health problem

18 February

Tommy Olsson Ethnic differences in obesityrelated complications in South African women

20 March

Abdallah Daar Garment of Destiny: exploring liminality and memory as tools for coexistence

27 March

Claudia Pahl-Wostl Water governance in the Anthropocene

1 April

Charles Piot
Migration stories: the US visa
lottery and global citizenship

3 April

Robert Appelbaum Observations toward an aesthetics of violence

8 April

Dennis Töllborg Social constructions, empirical data and law

16 April

Paul Nugent Regulation and its malcontents: innovation and involution in the South African wine industry, c.1960-1994

22 April

Ben Kiregyera Statistical renaissance in Africa

24 April

Stephen Polasky and Heather Tallis Making nature count: incorporating ecosystem services into societal decision-making

30 April

Aatto Laaksonen We all are molecules (multiscale modelling in tribology for a new generation of lubrication technology)

6 May

Anne Allison Lonely death: an ecology of living and dying in postmiracle Japan

8 May

Alejandro Bendaña Lessons from the postapartheid engagement with traditional authorities

13 May

Elisabeth Gerle and Sarojini Nadar "Don't touch me on my religion!": reflections on sacred texts and gender equity within religion and the law

15 May

Fred Khumalo
The Death Drill: a creative
re-imagining of the sinking
of SS Mendi and its place in
our history

22 May

Njabulo Ndebele Beyond sweaty windows: an essay on boxing in the Eastern Cape

29 May

Marianne Hirsch and Leo Spitzer School photos in liquid time – reframing difference

24 July

Nina Jablonski, Gerhard Maré and members of the Effects of Race sub-theme An introduction to the effects of race project

31 July

Jessica Gurevitch and Gordon Fox Toward a theory of landscape demography

7 August

Léonce Ndikumana Monetary policy in African countries: theory, practice and impact

14 August

Walter Mignolo
On de/coloniality

21 August

Göran Therborn Cities and power

28 August

Michael Ruse The evolution of an evolutionist (apocalyptic themes in the global warming debate)

4 September

Charles Fombad
The Pan-African parliament
and law-making: the prospects
for legal harmonisation using
model laws

11 September

Lars Pettersson Fuels for future trucks – sustainable transport solutions for tomorrow's society

18 September

lain McGilchrist Lateralisation in the brain: dated nonsense or the single most exciting topic in neuroscience?

25 September

Willem Hendrik Gispen Halcyon haze – European and African kingfishers in their allegoric world

2 October

John Matisonn Scottish lord, student Nazi, and Mandela's secret friend

9 October

Marc Bossuyt Judicial activism at the European court of human rights in Strasbourg

16 October

Per-Anders Edin Education, skills and inequality in the labour market

23 October

Carl Folke Social-ecological systems, resilience thinking and sustainability

30 October

Athol Fugard Celebrating South African outsider artists: Helen Martins and Nukain Mabusa

6 November

Richard Sikora, Janos Bogardi, Lucas Gakale and Eugene Terry Sustainable intensification of agricultural production systems in semi-arid/subhumid regions of SADC

11 November

Lucie Laflamme and Marie Hasselberg Mobile phone tele-consultation for the acute care of burns in resource-poor settings

13 November

Hans Hertz High-resolution laboratory x-ray bio-imaging

20 November

Siamon Gordon

Guardians of the body: from

Metchnikoff to macrophages

and dendritic cells

27 November

Salima Ikram From Cairo to Cape Town: animals in three- and two-dimensions

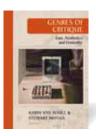
4 December

Ray Melmed
Understanding human
behaviour through the
prism of evolution:
deconstructing prejudice











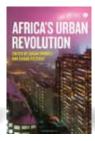
STIAS PUBLICATIONS











Books

STIAS Series

Comaroff J and Comaroff J

Theory from the South – How Euro-America is evolving toward Africa SUN PRESS, Stellenbosch (2014)

Dupper O and Sankaran K (eds)

Affirmative Action – A View from the Global South SUN PRESS, Stellenbosch (2014)

Spier J and Magnus U (eds)

Climate Change Remedies – Injunctive Relief and Criminal Law Responses SUN PRESS, Stellenbosch (2014)

Van Marle K and Motha S (eds)

Genres of Critique: Law, Aesthetics and Liminality SUN PRESS, Stellenbosch (2014)

Other books

Glenn HP

Legal Traditions of the World: Sustainable Diversity in Law (5th edition) Oxford University Press, Oxford (2014)

Hacking I

Why is there Philosophy of Mathematics at all? Cambridge University Press, Cambridge (2014)

James D

Money from Nothing: Indebtedness and Aspiration in South Africa Stanford University Press, Palo Alto and Wits Press, Johannesburg (2014)

Klingholz R

Sklaven des Wachstums Campus Verlag, Frankfurt am Main (2014)

Maré G

Declassified
Jacana Media, Auckland Park
(2014)

Murphy FA

The Foundations of Virology. Discoveries and Discoveries, Inventors and Inventions, Developers and Technologies (extended online edition) Infinity Publishing, West Conshohocken (2014-2015)

Parnell S and Pieterse E (eds)

Africa's Urban Revolution Zed Books, London & New York (2014)

Ross R

The Borders of Race in Colonial South Africa Cambridge University Press, Cambridge (2014)

Swanepoel F, Ofir Z and Stroebel A (eds)

Towards Impact and Resilience: Transformative Change in and through Agricultural Education and Training in Sub-Saharan Africa Cambridge Scholars Publishing, Newcastle-upon-Tyne (2014)

Chapters in books

Dugard J

A Tale of Two Sacred Trusts: Namibia and Palestine. In T Maluwa (ed) in *Law, Politics and Rights: Essays in Memory of Kader Asmal* 287-305. Martinus Nijhoff, Leiden (2014)

Journal articles

Bardi M, Burbank A, Choi W, Chow L, Jang W, Roccamatisi D, Sanghera M, Timberley-Berg T, Zhang M and Macnab AJ

Activities for engaging schools in health promotion. *Health Education* (2014) **114**(4) 271-280

Barnum H, Müller MP and Ududec C

Higher-order interference and single-system postulates characterizing quantum theory. *New Journal of Physics* (2014) **16**(12) 123029 1-44

Bessonnard S, De Mot L, Gonze D, Barriol M, Dennis C, Goldbeter A, Dupont G and Chazaud C

Gata6, Nanog and Erk signaling control cell fate in the inner cell mass through a tristable regulatory network. Development (2014) **141**(19) 3637-3648

Bossuyt M

The European Court of Human Rights and irreducible life sentences, the Trabelsi v. Belgium judgment of 4 September 2014. Human Rights Law Journal (2014) 269-276

Brandon PR, Smith NL, Ofir Z and Noordeloos M

Monitoring and evaluation of African women in agricultural research and development (AWARD): an exemplar of managing for impact in development evaluation.

American Journal of Evaluation (2014) **35**(1) 128-143

Brown D

Reimagining South African literature. Journal of Southern African Studies (2014) **40**(5) 1109-1123

Chaplin G, Jablonski NG, Sussman RW and Kelley EA

The role of piloerection in primate thermoregulation. *Folia Primatologica* (2014) **85**(1) 1-17

Daar AS, Jacobs M, Wall S, Groenewald J, Eaton J, Patel V, dos Santos P, Kagee A, Gevers A, Sunkel C, Andrews G, Daniels I and Ndetei D

Declaration on mental health in Africa: moving to implementation. *Global Health Action* (2014) **7**: 24589, 4pp

Davy U

How human rights shape social citizenship: on citizenship and the understanding of economic and social rights. Washington University Global Studies Law Review (2014) **13**(2)

201-263

De Beule J

Sketch for a theory of evolution based on coding. *Biosemiotics* (2014) **7**(2) 181-201

De Beule J and Stadler K

An evolutionary cybernetics perspective on language and coordination.

New Ideas in Psychology (2014) 32 118-130

De Wet E

The case of Government of the Republic of Zimbabwe v Louis Karel Fick and others: a first step towards developing a doctrine on the status of international judgments within the domestic legal order. *Potchefstroom Electronic Law Journal* (2014) **17**(1) 554-565

Gaertner M, Biggs R, Te Beest M et al

Invasive plants as drivers of regime shifts: identifying highpriority invaders that alter feedback relationships. *Diversity and Distributions* (2014) **20**(7) 733-744

Gärdenfors P

The evolution of sentenial structure. *Humana.Mente Journal of Philosophical Studies* (2014) **27** 79-97

Gerard C and Goldbeter A

The balance between cell cycle arrest and cell proliferation: control by the extracellular matrix and by contact inhibition. *Interface Focus* (2014) **4**(3) 20130075 1-14

Ghadakpour M, Bester E, Liss SN, Gardam M, Droppo I, Hota S and Wolfaard GM

Integration and proliferation of $\it Pseudomonas\ aeruginosa\ PA01$ in multispecies biofilms.

Microbial Ecology (2014) **68**(1) 121-131

STIAS PUBLICATIONS continued

Dharamsi S, Woollard R, Kendal P, Okullo I and Macnab AJ

Health promoting schools as learning sites for physicians in-training.

Health Education (2014) 114(3) 186-196

Dube S

"Conoces tu historia?" Estudios de Asia y África (2014) **49**(1) 193-217

Edling C, Rydgren J and Bohman L

Faith or social foci? Happiness, religion, and social networks in Sweden.

European Sociological Review (2014) 30(5) 615-626

Fossépré M, Leherte L, Laaksonen A and Vercauteren DP

On the modularity of the intrinsic flexibility of the μ opioid receptor: a computational study.

PLoS ONE (2014) 9(12) e115856

Fuchs CA, Mermin ND and Schack R

An introduction to QBism with an application to the locality of quantum mechanics.

American Journal of Physics (2014) 82(8) 749-754

Ghavami S, Wolkenhauer O, Lahouti F, Ullah M and Linnebacher M

Accounting for randomness in measurement and sampling in studying cancer cell population dynamics. *IET Systems Biology* (2014) **8**(5) 230-41

Grufman H, Gonçalves I, Edsfeldt A, Nitulescu M, Persson A, Nilsson M and Nilsson J

Plasma levels of high-sensitive C-reactive protein do not correlate with inflammatory activity in carotid atherosclerotic plaques.

Journal of Internal Medicine (2014) 275(2) 127-33

Hasselberg M, Beer N, Blom L, Wallis LA and Laflamme L

Image-based medical expert teleconsultation in acute care of injuries. A systematic review of effects on information accuracy, diagnostic validity, clinical outcome, and user satisfaction.

PLoS ONE (2014) 9(6) e98539

Högberg A

Chronology, stratigraphy and spatial distribution of artefacts at hollow rock shelter, Cape Province, South Africa. South African Archaeological Bulletin (2014) **69**(200) 142-151

Huber W

Human rights and globalisation – are human rights a 'Western' concept or a universalistic principle?

Dutch Reformed Theological Journal (NGTT) (2014) 55(1-2)
117-137

Hunt AJ, Anderson CWN, Bruce N, Muñoz Garcia A, Graedel TE et al

Phytoextraction as a tool for green chemistry. *Green Processing and Synthesis* (2014) **3**(1) 3-22

Inganäs O and Admassie S

25th anniversary article: organic photovoltaic modules and biopolymer supercapacitors for supply of renewable electricity: a perspective from Africa (review).

Advanced Materials 2014 26(6) 830-848

James D

"Deeper into a hole?" Borrowing and lending in South Africa. *Current Anthropology* (2014) **55** (S9) S17-S29

Jansen N

The idea of legal responsibility. Oxford Journal of Legal Studies (2014) **34** 221-252

Khan FM, Schmitz U, Nikolov S, Putzer D, Puetzer BM, Wolkenhauer O and Vera J

Hybrid modeling of the crosstalk between signaling and transcriptional networks using ordinary differential equations and multi-valued logic.

Biochimica et Biophysica Acta – Proteins and Proteomics (2014) **1844**(1) 289-298

Kizito A, Caitlin M, Wang Y, Kasangaki A and Macnab AJ

Oral health promotion in schools: rationale and evaluation. *Health Education* (2014) **114**(4) 293-303

Lechini G

América Latina y África. Entre la solidaridad Sur-Sur y los propios intereses. (Latin America and Africa. Between South-South solidarity and self-interests).

Estudios Internacionales (2014) 46(179) 61-88

Macnab AJ

The evolution of near infrared spectroscopy in urology. *Biomedical Spectroscopy and Imaging* (2014) **3** 311-344

Macnab AJ, Gagnon FA and Stewart D

Health promoting schools: consensus, strategies, and potential. *Health Education* (2014) **114**(3) 170-185

Macnab AJ, Stewart D and Gagnon FA

Health promoting schools: initiatives in Africa. *Health Education* (2014) **114**(4) 246-259

Mermin ND

Physics: QBism puts the scientist back into science. *Nature* (2014) **507** 421-423

Meyerson D

The moral justification for the right to make full answer and defence. Oxford Journal of Legal Studies (2014) doi: 10.1093/ojls/gqu024

Millat T, Voigt C, Janssen H et al

Coenzyme A-transferase-independent butyrate re-assimilation in *Clostridium acetobutylicum* – evidence from a mathematical model.

Applied Microbiology and Biotechnology (2014) **98**(21) 9059-9072

Müller S, Kaiser H, Krüger B, Fitzner B, Lange F, Bock CN, Nizze H, Ibrahim SM, Fuellen G, Wolkenhauer O and Jaster R

Age-dependent effects of UCP2 deficiency on experimental acute pancreatitis in mice.

PLOS ONE (2014) 9(4) e94494

Naome A, Laaksonen A and Vercauteren DP

A solvent-mediated coarse-grained model of DNA derived with the systematic Newton inversion method.

Journal of Chemical Theory and Computation (2014) **10**(8) 3541-3549

Nadar S, Reddy S, van der Walt C, Siwila L, Gerle E

'Flourishing guinea pigs': exploring intersectionality and interdisciplinarity in a master's programme on gender, religion and health at two South African universities.

Journal of Gender and Religion in Africa (2014) 20(2) Special

Journal of Gender and Religion in Africa (2014) **20**(2) Special Issue 203-230

Nikolov S. Wolkenhauer O and Vera J

Tumors as chaotic attractors.

Molecular BioSystems (2014) 10(2) 172-179

Pavlich G

Criminal justice and Cape law's persons. *Social and Legal Studies* (2014) **23**(1) 55-72

Pavlich G

Occupied Cape judges and colonial knowledge of crime, criminals, and punishment.

Sage Open (2014) 4 1-11

Sarman S and Laaksonen A

Director alignment relative to the temperature gradient in nematic liquid crystals studied by molecular dynamics simulation. *Physical Chemistry Chemical Physics* (2014) **16**(28) 14741-14749

Schmitz U, Xin Lai U, Winter F, Wolkenhauer O et al

Cooperative gene regulation by microRNA pairs and their identification using a computational workflow. *Nucleic Acids Research* (2014) **42**(12) 7539-7552

Sun T, Han G, Lindgren M, Shen Z and Laaksonen A

Adhesion of lactoferrin and bone morphogenetic protein-2 to a rutile surface: dependence on the surface hydrophobicity. *Biomaterials Science* (2014) **2**(8) 1090-1099

Todde G, Hovmöller S, Laaksonen A and Mocci F

Glucose oxidase from *Penicillium amagasakiense*: characterization of the transition state of its denaturation from molecular dynamics simulations.

Proteins: Structure, Function, and Bioinformatics (2014) **82**(10) 2353–2363

Todde G, Whitman C, Hovmöller S and Laaksonen A

Induced ice melting by the snow flea antifreeze protein from molecular dynamics simulations.

Journal of Physical Chemistry B (2014) 118(47) 13527–13534

Van Regenmortel MHV

Specificity, polyspecificity, and heterospecificity of antibody-antigen recognition.

Journal of Molecular Recognition (2014) 27(11) 627-639

Wang YL and Laaksonen A

Interfacial structure and orientation of confined ionic liquids on charged quartz surfaces.

Physical Chemistry Chemical Physics (2014) **16**(42) 23329-23339

Wang YL, Lu ZY and Laaksonen A

Heterogeneous dynamics of ionic liquids in confined films with varied film thickness.

Physical Chemistry Chemical Physics (2014) **16**(38) 20731-20740

Wang YL, Shah FU, Glavatskih S, Antzutkin ON and Laaksonen A

Atomistic insight into orthoborate-based ionic liquids: force field development and evaluation.

Journal of Physical Chemistry B (2014) 118 (29) 8711-8723

Wilkins AS, Wrangham and Fitch WT

The 'domestication syndrome' in mammals: a unified explanation based on neural crest cell behavior and genetics. *Genetics* (2014) **197**(3) 795-808

Wolf H

Inhibitory motoneurons in arthropod motor control: organisation, function, evolution.

Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology (2014) 200(8) 693-710

Wolkenhauer O

Why model? Frontiers in Physiology (2014) **5**(21) 1-14

Wolkenhauer O, Auffray C, Brass O, et al

Enabling multiscale modeling in systems medicine. *Genome Medicine* (2014) **6**(3) Article 21, pp 1-3 doi: 10.1186/gm538

Wolkenhauer O

Pushing limits by embracing complexity. *IET Systems Biology* (2014) **8**(6) 244-250

Wollbold J, Jaster R, Müller S, Rateitschak K and Wolkenhauer O

Anti-inflammatory effects of reactive oxygen species – a multivalued logical model validated by formal concept analysis. BMC Systems Biology (2014) **8**:101, 19 pp doi:10.1186/s12918-014-0101-7

Reports

F Ambagtsheer, M Gunnarson, L van Balen , N Ivanovski, S Lundin, I Bystrom and W Weimar

Organ recipients who paid for kidney transplantations abroad. 2nd HOTT project report

F Ambagtsheer, M Gunnarson, J de Jong, S Lundin, L van Balen, Z Orr, I Bystrom and W Weimar

Trafficking in human beings for the purpose of organ removal. 3rd HOTT project report

Funding and Governance

STIAS, a Section 21 company since May 2007, is governed by a Board of Directors. The STIAS Board of Directors meets biannually (in 2014 it met on 14 April and 7 November).

The Director of STIAS is responsible for the development of the STIAS research programme. He is assisted in this task by an Academic Advisory Board and by an international panel of experts which includes former STIAS fellows. Since 2014, the Academic Advisory Board meets once a year (in the year under review the meeting took place on 13 and 14 March). The STIAS Fellowship and Research Programme Committee meets weekly during STIAS semesters and its members assist the Director in giving structure to the STIAS research programme.

STIAS company members

James Gates (representative of STIAS Society of Fellows)
Hendrik Geyer (Director of STIAS)

Fritz Hahne (former Director of the African Institute for Mathematical Sciences)

Jan-Hendrik Hofmeyr (Centre for Studies in Complexity, Stellenbosch University)

Bernard Lategan (STIAS founding Director) **Joachim Nettelbeck** (Wissenschaftskolleg, Berlin)

Desmond Smith (Director of Companies)

Laetitia van Dyk (Stellenbosch University Business School) André van der Walt (SA Research Chair in Property Law, Stellenbosch University)

Fellowship and Research Programme Committee

Hendrik Geyer Chair (Director of STIAS)

Jan-Hendrik Hofmeyr (Centre for Studies in Complexity,
Stellenbosch University)

Bernard Lategan (STIAS founding Director) **Louise Viljoen** (Department of Afrikaans and Dutch,
Stellenbosch University)

FUNDING AND GOVERNANCE

Board of Directors

Desmond Smith Chair (Director of Companies)

Russel Botman (Rector and Vice-Chancellor, Stellenbosch University) until his death in June 2014

Leopoldt van Huyssteen (Acting Rector and Vice-Chancellor, Stellenbosch University) from July onwards

Dan Brändström (former Director, Bank of Sweden Tercentenary Foundation)

Cheryl de la Rey (Vice-Chancellor and Principal, University of Pretoria)

Hendrik Geyer (Director of STIAS)

Christof Heyns (University of Pretoria and United Nations special rapporteur on extrajudicial, summary or arbitrary executions)

Bernard Lategan (STIAS founding Director)

Göran Sandberg (Executive Director: Knut and Alice Wallenberg Foundation)

Raenette Taljaard (University of Cape Town and former Member of Parliament)

Academic Advisory Board

Peter Vale Chair (Department of Political Science, University of Johannesburg)

Ahmed Bawa (Vice-Chancellor and Principal, Durban University of Technology)

Morné du Plessis (CEO, WWF South Africa)

Hendrik Gever (Director of STIAS)

Geoffrey Harpham (President and Director, National Humanities Center)

Jan-Hendrik Hofmeyr (Centre for Studies in Complexity, Stellenbosch University)

Bernard Lategan (STIAS founding Director)

Daya Reddy (SA Research Chair in Computational Mechanics, University of Cape Town)

Servaas van der Berg (SA Research Chair in the Economics of Social Policy, Stellenbosch University)

André van der Walt (SA Research Chair in Property Law, Stellenbosch University)

Bert van der Zwaan (Rector Magnificus Utrecht University) **Charles van Onselen** (Unit for Advanced Studies, University of Pretoria)

Louise Viljoen (Department of Afrikaans and Dutch, Stellenbosch University)

Society of Fellows

A STIAS Society of Fellows was established in 2010. Peter Weingart, former director of the Zentrum für interdisziplinäre Forschung (ZiF), Bielefeld, serves as its President. The Society is kept informed about STIAS matters and it also serves as a source for STIAS proposals.

FINANCIAL REPORT: STELLENBOSCH INSTITUTE FOR ADVANCED STUDY (STIAS)

(REG NR 2007/014516/08)

Statement of income and expenditure

for the year ended 31 December 2014

Notes	31 December 2014 R	31 December 2013 R
Income: conference facilities	8 192 214	6 672 315
Other income	27 686 005	25 732 262
Donations		
 Daimler Fund 	_	130 035
 Donald Gordon Foundation 	850 000	750 000
 Riksbankens Jubileumsfonds 	2 989 963	1 452 611
 Stellenbosch University: Contribution to operating of 	cost 2 500 000	2 500 000
 Transfer from STIAS Trust 	6 824 075	_
 Marianne & Marcus Wallenberg Foundation 	7 503 801	10 050 032
 Knut & Alice Wallenberg Foundation 	6 824 075	6 824 075
 Trellis Charitable Trust 	_	2 000 000
National Research Foundation	_	1 910 490
Rental income	173 630	112 360
Foreign exchange gain	20 460	2 660
Expenses	24 249 345	20 157 654
Advertising	18 138	63 734
Audit fees: for audit	30 806	29 062
Books	18 039	33 944
Bursaries: Postgraduate	1 191 000	
Bursaries: Undergraduate	75 000	_
Catering: conference facilities	4 766 826	4 968 060
Consultation	79 940	110 400
Consumables	249 393	219 274
Courses	1 200	
Depreciation	106 501	130 975
Entertainment	93 924	104 151
Foreign exchange loss	5 007	9 611
General office expenses	13 942	29 046
Insurance	10 3 12	23 844
Internet	24 410	11 368
Maintenance of equipment	58 072	100 333
Municipal services	-	2 000
Postage	40 042	25 780
Rental of equipment	3 900	
Security services	214 346	182 003
Services 3	3 291 335	2 693 708
Smaller assets	84 533	51 298
Staff remuneration and stipends for fellows	6 731 861	6 184 734
Stationery and printing	379 111	227 050
Telephone	173 650	179 987
Travel and accomodation	6 427 354	4 777 292
Workshops	171 016	1777 232
Operating surplus	11 628 874	12 246 923
Finance income	3 081 645	1 742 029
Tax expense	(1 162 054)	(508 652)
Surplus for the year after tax	13 548 464	13 480 300

Notes to the financial statement of STIAS

for the year ended 31 December 2014

- 1. The 2013 income of R10 050 031,80 includes an amount of R2 987 500 which was received from the Marianne & Marcus Wallenberg Foundation during 2012, but was not reflected in the 2012 figures.
- 2. An amount of R34 120 376,69 was received from the Knut & Alice Wallenberg Foundation during 2013. This amount was donated for utilisation over a five-year period. As a result, the income will be recognised over a period of five years, with the unspent amount recorded as income received in advance under creditors.
- 3. Services include rent paid to Stellenbosch University, electricity, water, property tax etc.



Ms F Majie

Director of Financial Services, Stellenbosch University



DIRECTOR AND STAFF

Hendrik Geyer Director

Maria Mouton 2
Coordinator of general logistics and personal assistant to the STIAS Director

Karin Brown 3 Support staff **Leonard Katsokore** 4 Factotum

Nel-Mari Loock (absent) Fellows' IT support and office arrangement

Yanga Nkathazo 5 Gardener

Makwande Nkathazo Garden assistant

Maggie Pietersen 1 Building caretaker

Gwen Slingers 8 Support staff

Goldie van Heerden

Owner patron of
Catering Unlimited

Elize du Plessis (part-time)
Financial officer

Michelle Galloway (part-time)
Media officer

Johann Groenewald (part-time)
Coordinator:
strategic initiatives

Bernard Lategan (part-time)
Programme coordinator:
African projects

Christoff Pauw (part-time)
Network coordinator and African liaison

Gudrun Schirge 15 (part-time) Programme manager

FACILITIES

STIAS is situated on a part of the historic Mostertsdrift, one of the first wine farms in the Stellenbosch area dating back to 1691. The property was bought by Stellenbosch University in 1996 and made available to STIAS by the University in 2001. The old Cape Victorian manor house, wine cellar and outbuildings are situated on 2,6 hectares of parkland. The manor house was restored and rebuilt in 2002 to serve as the STIAS headquarters. Its library is used by researchers and academics for small seminars and workshops. In 2003, the outside of the wine cellar was restored, but the inside was redesigned and refitted to be used as a modern research facility. SACEMA, the South African Centre for Epidemiological Modelling and Analysis, a Centre of Excellence supported by the Department of Science and Technology, is the present occupant of the cellar. In August 2014, Stellenbosch University and STIAS signed a 99-year lease agreement for the use of the facilities at Mostersdrift by STIAS.

With the opening of the Wallenberg Research Centre in 2007, STIAS acquired one of the most modern facilities specially designed for advanced research. The centre houses up to 20 researchers at a time in spacious and well-equipped surroundings in a private wing of the building, with adequate seminar facilities and state-of-the-art equipment. It also provides a home to the National Institute for Theoretical Physics (NITheP) in its south wing. The conference and workshop facilities at the Wallenberg Research Centre, associated with quality service, provide a premier venue for conferences and workshops in the Western Cape.



CONTACT DETAILS

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