







#### Editor's note

It is all systems go as the Department heads toward the completion of 100 years of excellent Economics research, learning and teaching and social engagement. Diarise 9 & 10 October 2020 – we want to welcome you in Stellenbosch for the centennial celebrations (more details to follow in future newsletters).

As the Eikestad's leaves are slowly changing colour and the morning air gets cooler, it is time to share with you the first newsletter of the year that highlights some of the activities of our alumni, staff and students who are shining across the globe as always. Journey with us through some of these ... Our team of students outshined the world's "big" universities in the global Econometrics Game. Enjoy the article reporting on the colourful Cape Town Carnival social impact initiative that is more than just fun and hard work – it has a life changing impact for some. Also read about how, due to their applied research initiatives, several staff members have been contributing to colloquiums, journals and conferences. Read about the Economics of Space event and the research spotlight of this edition that falls on Traffic. Two postgraduate students who have received prestigious scholarships (think Rhodes and Overseas Development Institute, ODI) also feature. Enjoy this edition of the newsletter!

# Cape Town Carnival: Positively Changing Communities



A Carnival may seem a strange initiative to be associated with the Economics department, with economists generally viewed as occupying themselves with rather serious matters, such as economic growth, eradicating poverty and inequality. And, yet, the founding trustees included no less than three economists, two of which, Eldridge Moses, a colleague in the

department and Craig Lemboe, from the Bureau of economic research, did the initial economic feasibility study. This initiative has over the last ten years shown how initiatives that help breaking down barriers, discovering and honing talent and building community, can

address the very serious matters that concern economists.

The 2019 Cape Town Carnival theme 'VUKA UKHANYE; Arise 'n Shine' showcased a vivid, vibrant journey of awakening. Over 2 200 performers in 54 performing groups from many areas of the broader metropole participated in the Cape Town Carnival. This is truly an example of how we break down social barriers, form lasting relationships, and enhance social cohesion.

Rachel Jafta, chairperson of the Cape Town Carnival Trust, says, "The Cape Town Carnival was envisaged as a way of bringing people together and building social cohesion, while offering an extraordinary visual and creative feast and a skills development hub for a wide array of skills."

One of the major benefits of the Cape Town Carnival are the skills development by the participants and production crews. Yolanda Mtshawu started her tenure with the Carnival as a performer in the parade. She is now a marketing assistant and leads co-ordinator responsible for the coordination and planning of some of the Carnival's most critical elements. Michael Bagapi, who started as a junior member of the costume production team is now supervisor of fabrication in the costume department. These are only two examples of the many, many people who have benefited from a wide array of skills development including make-up, costume design and fabrication, painting techniques, sculpting, choreography, set building, marketing and event logistics, float production, woodwork, welding and steel construction.

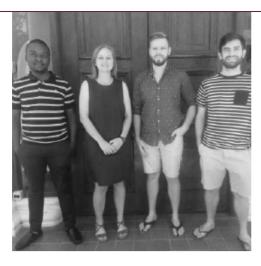
Many job opportunities are created by the event. Projects are seasonal and/or contract-based work allowing employees to go on and work in other industries, using skills developed during their time at the Carnival.

The Carnival supports entrepreneurs and small businesses. In 2018 we generated job opportunities for 1 399 people. Roughly half of those are women – enabling them to play an important role in facilitating positive change in their families and within their communities.

The Cape Town Carnival also plays an important in developing the region's youth. Seventy percent of Carnival participants are aged between 16 and 25, encouraging freedom of expression and celebration of personal and communal identities. This provides a platform for youth in the Western Cape to become empowered, building their confidence and supporting skills development to enter the job market.

Entering its tenth year, the Cape Town Carnival has an enviable record of delivering vast economic benefits for the city. The direct contribution to the city's GDP from the 2018 event was R58.85 million.

Finally, the Cape Town Carnival contributed to Cape Town winning the Global Event & Festival City Award at the 2018 World Travel Awards. Successful major events affirm the attractiveness of the city for investors and audiences alike.



Every year, 30 top universities around the world participate in the Econometric Games hosted by the University of Amsterdam's study association for Actuarial Science, Econometrics & Operational Research (VSAE). The participating universities send delegations of four students who are presented with a case study to solve in two days.

This year, Roan Minnie, Willem Wilken, Martin Mwale and Petro van Eck represented Stellenbosch University with the theme of the case being "Climate Econometrics".

The case was extremely challenging, expecting teams to employ the global carbon budget and data from the Global Carbon Project to forecast the growth of global atmospheric concentration until the year 2100. The calculated forecasts had to be related back to the Representative Concentration Pathways (an initiative that estimates the effects of 4 different global surface temperature scenarios) in order to ascertain the admissible paths.

Despite the technical nature of the case and the literature related to this topic, Stellenbosch University delivered a well-written and empirically thorough report at the end of the second day. So much so, that for the first time since Stellenbosch's participation, the team made it through to the finals of the Games as one of the top 10 teams.

For the finals, the top 10 teams were presented with an extension of the first case on Friday morning at 09h00 and had to hand in a full report and a prepared presentation by 18h00 that evening. The final case asked teams to disaggregate the growth in global atmospheric concentration and allow for anthropogenic emissions by different countries or groups of countries. Teams were expected to also extend the model to capture the connection between emissions and an indicator of economic activity.

We wish to extend congratulations to the top three universities: 1. Melbourne University, 2. Maastricht University and 3. Aarhus University. The team also wishes to thank the department, especially Gideon du Rand, for the financial, administrative and academic support leading up to the Games. It is a result of the department's willingness and dedication that students have the honour to be the only university representing the African continent at the Games.

# The economics of space on the rise

On the 28<sup>th</sup> of January 2019, Prof Dieter von Fintel and Eldridge Moses hosted the first *Applied Spatial* 



Economics and Econometrics workshop at Stellenbosch University. The event brought together researchers from various South African universities. It was aimed at stimulating discussions around the usefulness of regional data in applied research, and is a step

step towards establishing the study of regional economics more firmly in economics departments across the country. Various other partnerships and events have contributed to this pursuit.



WAKERS2 Workshop at STIAS in Stellenbosch, March 2019



Tawanda Chingozha presenting PhD research at the World Bank Conference on Land and Poverty

Emerging partnerships between development economists at ReSEP, astronomers at the Office of Astronomy for Development and remote-sensing specialists has opened up innovative avenues for spatial economic research. In many countries survey data are unavailable, of poor quality or tightly guarded. This "statistical tragedy" means that we have less understanding of the development of societies that also tend to face the greatest challenges. In the face of these measurement obstacles, spatial data - often observed from space - present an alternative way to follow development trajectories, and to assess how policies affect welfare outcomes. Most famously, economists have used night lights luminosity to track the growth of regions over time, and especially in response to various economic shocks and interventions. Our own research has used this and daytime satellite data, machine learning and microeconometric techniques to understand: land policies in Southern Rhodesia, post-independence Zimbabwe and Malawi; effects of minimum wages on South African agricultural producers; patterns of food security in Malawi, Nigeria and Zimbabwe; and internal migration in South Africa. Importantly for South Africa, these data also enrich our understanding of spatial inequality. The Office of Astronomy for Development is actively building links within the development community, and has supported spatial analysis within the Department of Economics. By turning coding and machine learnings skills (used to analyse the night sky) into tools to analyse the earth's surface, economists and astronomers have found common ground to contribute towards understanding development processes. Tawanda Chingozha, a PhD student in Economics, has been appointed as a research associate at the OAD, and Gareth Defty is embarking on a Masters degree supervised by both organisations. In March 2019, Dieter von Fintel

attended the WAKERS workshop at STIAS in Stellenbosch. This is a consortium of computer scientists, remote-sensing specialists and economists who intend synergising their skills in training PhD students for the benefit of spatial analysis. Prof Christian Leßmann, a part of the WAKERS team from the Braunschweig Technische Universität presented his work in our department, and plans for future collaborations were put in place. Dr Thomas Ferreira from ReSEP is planning a co-operation visit to strengthen the ties to Braunschweig.

Also in March 2019, Dieter von Fintel and Tawanda Chingozha attended the World Bank's annual Land and Poverty Conference in Washington DC. They observed the cutting edge in geo-spatial science for regional impact evaluation, and built valuable new contacts for future research.



Individuals and organisations interested in partnering with the team - be it for research, data sharing, capacity developing or joint proposals - should please contact Dieter von Fintel at dieter2@sun.ac.za

## Priorities for education reform in South Africa



On the 19th of January 2019, RESEP researcher Dr Nic Spaull was invited by Finance Minister Mboweni to present at the Second Economy Colloquium at the South African Reserve Bank. Nic presented on the state of South African education and the need to prioritise early grade reading and mathematics and avoid costly technology proposals like one-tablet-per-child

that have almost no chance of succeeding in the vast majority of schools. Nic was asked to prepare a background document that was circulated to the 25+ economists present. That document is available here, and we include a short excerpt below: "South Africa today is the most unequal country in the world. The richest 10% of South Africans lay claim to 65% of national income and 90% of national wealth; the largest 90-10 gap in the world (Alvaredo et al, 2018, p.150; Orthofer, 2016). Given the strong and deeply historical links between education and the labour market these inequities are mirrored in the education system. Two decades after apartheid it is still the case that the life chances of the average South African child are determined not by their ability or the result of hard-work and determination, but instead by the colour of their skin, the province of their birth, and the wealth of their parents. These realities are so deterministic that before a child's seventh birthday one can predict with some precision whether they will inherit a life of chronic poverty and sustained unemployment or a dignified life and meaningful work. The sheer magnitude of these inequities is incredible. The top 200 high schools in the country have more students achieving distinctions in Mathematics or Physical Science (80%+) than the remaining 6,476 high schools combined. Put differently, 3% of South African high schools create more Mathematics or Physical Science distinctions than the remaining 97% put together."

### Research spotlight: Traffic project



Dr Krige Siebrits, Nadia Matulich, Prof Sophia du Plessis, Prof Ada Jansen, Tim Mashitisho, Dr Jason Bantjes, Euné Coetzee, Lunga Swelindawo, Absent: Prof Christo Boshoff

It is well known that road accidents impose very high costs on the South African economy and society. In fact, a study commissioned by the Road Traffic Management Corporation estimated that the cost of road traffic crashes in 2015 amounted to 3.4 per cent of South Africa's GDP. Three lecturers in the Department of Economics — Profs Sophia du Plessis and Ada Jansen and Dr Krige Siebrits — embarked on a study of this problem in 2017. The first phase of the project consisted of extensive study of relevant theoretical ideas from various branches of Economics, as well as discussions with officials from the City of Cape Town that yielded valuable perspectives and data.

The project received a major boost in December 2018, when Prof Du Plessis was awarded a three-year grant from the National Research Foundation's Human and Social Dynamics in Development Programme. The research team will use the funds to study traffic law enforcement in South Africa, focusing on problems in the payment of fines for offences. The work will draw on theoretical ideas from Institutional Economics and Behavioural Economics. In additional, the team will undertake a survey and computer-based experiments to obtain new insights into the causes of such problems and to test policies that may help to address them.

Two colleagues from other departments, Prof Christo Boshoff (Department of Business Management and Vice-Dean: Research of the Faculty of Economics and Management Sciences) and Dr Jason Bantjes (Department of Psychology) have joined the team to collaborate on the project. The funding has also made it possible to provide study bursaries to two honours and two masters students in every year from 2019 to 2021. These students will write their research assignments on aspects of the projects and participate in its various activities. The four students that are involved in the project in 2019 are Euné Coetzee, Timothy Mashitisho, Nadia Matulich and Lunga Swelindawo.

#### 1) Overseas Development (ODI) Institute Fellowship - Martina Mchenga (PhD candidate)

The ODI's fellowship scheme gives postgraduate economists and statisticians the chance to work in the public sectors of developing countries as local civil servants on two-year contracts and much sought after internationally. Over the years ODI has sent more than a thousand economists and statisticians to countries across Africa, Asia, the Caribbean and the Pacific. Many of them have embarked on successful careers in government, multilateral institutions, academia and the private sector.

The first time I heard about the ODI fellowship was when someone I knew from Malawi got it, that was a few years back before I even earned my Master's degree. So it was something that was always at the back of my mind and I knew that someday I would apply. I actually saw the call on Facebook when one of my friends had posted the link last year calling for 2019-2021 applicants and I decided to apply. At that point, I was not sure that I would make it given how competitive the fellowship is. It was until I got an email for the interview, that I felt confident that I could actually make it

I have always wanted to be a position where am able to use research to inform policy and create targeted and effective interventions. Since the fellowship make placements in government ministries, you are placed at the heart of policy-making, it's an opportunity to experience first-hand challenges and frustrations in policy-making. And that's very valuable learning opportunity for any economist who is passionate about development.

2) Rhodes Scholarship – Willem Wilken (MCom Student) I have an offer to read for the MPhil in Economics at University College. At Oxford, I intend to focus on labour and development economics. My dream is to contribute to the development of South Africa and the African continent. I intend to do this by becoming a researcher and lecturer in development and labour economics, and by providing data-driven analyses to inform and evaluate policymaking. Seven years ago, I read Amartya Sen's Development as Freedom and realised that economics should be about expanding the freedoms, capacity and dignity of the people. Ever since, it has been my dream to be involved with this project.

Econometric expert offers dynamic panel data training



Prof Jan Kiviet, a world leader in Dynamic Panel Data modelling from the Amsterdam School of Economics, visited Stellenbosch University for two weeks in March. He presented an intensive course on the topic to faculty members, as well as PhD and Masters students. This training initiative

improved both theoretical and applied econometric capacity within

the department. He also presented his latest research on **Testing the Impossible**; **Identifying Exclusion Restrictions**. We hope to welcome Jan back to the department for future opportunities to share knowledge, and for new research interactions.

## Staff Focus

Ronelle Burger has been invited to serve on the editorial board of the Journal of Development Studies. This international journal has a good reputation and is widely read and cited by development scholars, with a 2017 impact factor of 1.6. This appointment recognises our department's reputation for high-quality policy-relevant research and will further promote our reputation amongst international development and policy researchers.

Ronelle Burger has recently been appointed by the Minister of Health to serve on the ministerial task team on Human Resources planning. The previous human resource plan has lapsed so there is an urgent need to develop a new plan. Due to short time lines, pending NHI reforms and fiscal constraints, this will be challenging but important work.



Calumet Links joined the department formerly at the beginning of the year as a lecturer.

Kholekile Malindi graduated on 4 April with a PhD, supervised by Rulof Burger.

### Student Focus

**2018 Top performing Economics students recognized** Top prizes for honours degree students went to **Grace Bridgman** for first place, while the second place prize was shared by

four students, **Euné Coetzee**, **Tiaan Meiring**, **Alex O'Riordan** and **Natalie Luyt**. For Master's degree students, the first prize and Cloete medal for best student in postgraduate went to **Reid Falconer** and second prize to **Felix Stips**. The *Sampie Terreblanche prize for the best essay about inequality* was also awarded to **Grace Bridgman**.

In the undergraduate category, prizes were awarded for best students in first year to Lauren Tsafandakis and Bradley Moorcroft, for best students in second year to Emma Dachs and Elizza Frey, and for best students and and Cloete medal for best student in undergraduate in third year to Joshua Peebles and Olivia Bernstein.



#### **Useful links**

Bureau for Economic Research Research on Socio-Economic Policy Laboratory for the Economics of Africa's Past Center for Competition Law and Economics Working papers