

## Institutional Advancement



In conversation with Professor Abraham Olivier

B-Rated Researcher and Professor in the Philosophy Department, University of Fort Hare



Abraham Olivier is a Professor of Philosophy in the Department of Philosophy, Faculty of Social Sciences and Humanities. He is also a Visiting Professor in the Department of Philosophy, Bayreuth University.

He is Co-Founder and Co-Chair of the Centre for Phenomenology in South Africa (http://saphenomenology. wordpress.com/) and former Editor-in-Chief of the South African Journal of Philosophy.

Olivier obtained his PhD from the University of Tübingen and has held lecturing and research posts at the Universities of Tübingen, Stellenbosch, Padua and the Evangelical University for Social Work, Hamburg.

He is the author of Being in Pain (2007) and editor/co-editor of several special journal issues, including, Phenomenology and Naturalism for the International Journal of Philosophical Studies (2016), Identity and Difference for the Journal of the British Society for Phenomenology (2016), The African Other for Angelaki (2019), and Philosophy and Laughter for The Southern Journal of Philosophy (2020).

He has published numerous peer-reviewed articles and book chapters on topics relating to phenomenology, philosophy of mind and African philosophy. He has organized/coorganized 18 conferences and presented 58 conference papers, 25 at international conferences.

Prof Olivier is rated by the National Research Foundation of South Africa as a researcher with considerable international recognition (B3).

### Please share some information about your research field, including past and current projects:

My research focus is on topics relating to the fields of Phenomenology, African Philosophy, and Philosophy of Mind. This has resulted in three major projects.

- 1. The first project involves ongoing work on pain and suffering, which combines phenomenology and philosophy of mind. This has resulted in numerous accredited papers and a book publication. An extract of the book has recently been published on the official blog of the Australian Pain Society, which is the Australian Chapter of the International Association for the Study of Pain (IASP) - see https://blog.apsoc. org.au/2016/07/05/la-doulou-provencal-word-forpain/. Other recent accredited publications include: The Problem of Defining Pain; Racism, Speciesism and Suffering; and forthcoming are, Forces of Suffering and Why Meaning can Change Pain.
- 2. The second project deals with work on the philosophy of place, combining African philosophy and phenomenology of mind. My aim has been to develop a contextual phenomenology of the mind with specific focus on problems of situated consciousness, place, displacement, and personal identity. This is mainly reflected in invited publications in collaborated

edited collections together with other prominent African scholars, and papers published in accredited international journals, with titles such as On Being an African; Heidegger in the Township; Contextual Identity; Understanding Place; The Place of Philosophy in Africa; Place and Displacement and Displacement and Decolonisation.

3. The third project is on African Phenomenology. This is a novel field in philosophy. A major result of this project is a recent international colloquium, "Contributions to African Phenomenology", of which I was the main organizer, and a resultant edited collection of which I am the main editor together with Dr M. John Lamola (University of Johannesburg) and Dr Justin Sands (North-West University). This collection has drawn some of the most important scholars in the field of African and Africana philosophy, including Professors Lewis Gordon, Paulin J. Hountondji, Rozena Maart, Mabogo More, Achille Mbembe, and Tsenay Seregueberhan. In addition to the above, I have a forthcoming paper introducing the field, and am working on a book as well.

### What do you think are your most significant research accomplishments?

A milestone in my research in phenomenology is the launch of the Centre for Phenomenology in South Africa (CPSA) see: http://saphenomenology.wordpress.com/. I started working on founding this centre in 2011 and launched it as its co-founder and co-chair together with Prof Rafael Winkler (University of Johannesburg) in March 2013. Since its launch, we have co-organised eight international conferences hosting numerous internationally acclaimed keynote speakers. In addition, I organised 10 annual national Wild Coast Philosophy symposia. The CPSA conference proceedings are published in journals of high international ranking, including the International Journal of Philosophical Studies, Journal of the British Society of Phenomenology, Angelaki, and The Southern Journal of Philosophy.

My current project on African Phenomenology is definitely also a milestone in my research, and opens a number of future venues involving the collaboration of top experts in this field as mentioned before.

### How do you ensure your research is well communicated, digested and acted on?

Mainly through peer-review publications, organising conferences, symposia, colloquia and postgraduate projects.

### What has been the greatest impact of your work?

1. Through organising public conferences, symposia and colloguia, I succeeded in drawing together a number of scholars, resulting in widespread networking and

collaborated publications. For instance, as already mentioned, I organised 10 local symposia and coorganised eight international conferences, with proceedings published in renowned international journals.

- 2. My research focus on African philosophy has drawn a number of black African postgraduates and generated scholarships for such students. In collaboration with Dr John Lamola from the University of Johannesburg, I have offered external funding for four MA scholars in African Philosophy.
- 3. Lastly, my focus on African philosophy and phenomenology has generated international student exchanges between the University of Fort Hare and the University of Bayreuth (Germany) for the past six years.

The University of Bayreuth hosts one of the largest centres for African studies in Europe. This exchange resulted in an MoU between the two institutions, and offering three Fort Hare MA students an opportunity to study for a semester in the Departments of Philosophy and African Studies at the University of Bayreuth. As part of this exchange we had nine Bayreuth exchange students visiting our department. Two others will visit soon.

### What advice would you give to Young **Researchers out there?**

Perhaps the following practical tips might help some postgraduate students and other young researchers.

- Identify a clear problem and project that you personally find important and can be passionate about, something that drives you and gives you energy.
- Believe in what you do and that you can do it. Some philosophers say: "You are your possibilities". Think of your project as a way to realise your possibilities.
- Maintain a daily routine of focused hard work. Take regular breaks, take no vacation!
- Make critique your best friend. Share your work with your peers and mentors regularly and ask for their critical input.
- Keep an open mind for any research opportunities, even if they might not appear directly relevant to you, and go for them! Go to conferences, look out for possibilities to take part in collaborative projects such as edited collections. Try to visit other institutions, nationally and internationally. If possible, go for a degree in another country - but come back again!

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## UFH COVID-19 READINESS Update: Week 13-17 July 2020

### **RESUMPTION OF CAMPUS ACTIVITIES**

- The first 33% cohort of staff who meet Covid-19 health criteria returned to their work stations on 8 July.
- The SRC has been on campus since the beginning of July.
- The first group of students returned to the Alice campus yesterday, 13 July.
- At the time of compiling this report, none of the identified students had returned to their allocated rooms on the EL campus.

### STAGGERED RETURN OF STUDENTs:

The following groups have been issued with permits and are expected to return to campus this week (13 – 17 July):

- Students with disabilities
- Science and Agriculture PhD, Masters and Honours students
- BCurr 4<sup>th</sup> year students

### **CERTIFICATES AND ACADEMIC TRANSCRIPTS**

• Staff are back at work. Certificates for the May 2020 graduates are being processed and are expected to be ready next week, 22 July. An announcement with details of how students can receive their certificates and transcripts will be issued later this week.

### **COVID-19 INFECTIONS AND RECOVERIES**

• As at 14 July, UFH has recorded 23 staff infections with 15 active cases. An announcement in this regard will be issued later today.

 A possible case of a local transmissions in one of the university's leased residences in East London (Sixth on Station) has been reported. A group comprising 7 security and cleaning personnel has been affected, however, none of the staff are UFH employees.

### **PROPERTIES AND SERVICES:**

- PPEs for Staff: Everything is on track. Distribution of masks and sanitisers to returning staff across all campuses took place on 8 July
- Daily Screening: Everyday staff go through a very strict, multi-layered health and safety protocol. This is administered by security personnel at every building across all campuses.

### **STUDENT AFFAIRS:**

- **Residence Officials:** Staff are back on campus to receive and process students
- **Returning Students:** The first group arrived in Alice yesterday, 13 July. More will arrive everyday until Friday 17<sup>th</sup> July
- Quarantine Protocol: Each student will quarantine in their room for 14 days and follow daily health checks. Security personnel will be deployed in residences to monitor movement.
- Alice Clinic: has been relocated to a bigger facility - Elitheni Residence
- **Code of Conduct:** In line with Covid-19 Precautionary Measures, a protocol to regulate the conduct of students on campus and in residences has been developed.



### MULTI-MODAL REMOTE TEACHING AND LEARNING: University Recovery and Assessment Plan

- DHET has approved the COVID-19 Responsiveness Grant to support the implementation of the University's Multi-modal Teaching and Learning plan. This grant comes from repurposed funds with reprioritisation and redirection of money from other University grants and projects. These funds will enable the university to reach more students through additional online and offline means.
- Faculty recovery and assessment plans have been submitted and are now in the process of being consolidated into a University recovery and assessment plan which will be approved in the Senate Teaching and Learning Committee later this week.
- June statistics suggest 8560 active and unique student users of Blackboard, with a monthly average of 15838 students, and 11501 average course views. The number of active users is expected to increase by end July due to the availability of the MTN zero-rated data, and the arrival of the first batch of laptops.
- By end June 2020, the Virtual Supplemental Instruction support through WhatsApp conducted 100 sessions with 2926 participants. These numbers are expected to grow as more resources become available to reach out quicker and easier to students in remote and far-flung areas.

### INFORMATION AND COMMUNICATION TECHNOLOGY

- **Student Laptops:** All indications are that the university is on track to receive the first batch of laptops by 31 July 2020 and the remainder within 7-10 day (by mid-August). An announcement detailing how the gadgets will be issued to students will be made in the coming days.
- **Student Data:** All network providers, including MTN, have been loading data to students who have updated their records on the system. Those who are still struggling to update their records are encouraged to seek guidance from the SRC.

### MARKETING AND COMMUNICATION

- Covid-19 Updates: Ongoing via internal notices, UFH website (dedicated webpage), all official social media platforms and internal newsletter (*ThisWeek@FortHare*).
- Posters and Standard Operating Procedures (SOPs): Posters are being displayed at strategic spots across all three campuses (EL, Bhisho, Alice).

### Intellectual laziness and academic dishonesty: A threat to academic freedom?



### **By Prof Loyiso Nongxa**

Professor Emeritus, University of the Witwatersrand, Johannesburg, South Africa; Extraordinary Professor, University of the Western Cape, Cape Town, South Africa

Source: South African Journal of Science Vol 116 Special Issue https://doi.org/10.17159/sajs.2020/8585

The National Plan on Higher Education<sup>1</sup> released in 2001 states that:

The value and importance of research cannot be overemphasised. Research, in all its forms and functions, is perhaps the most powerful vehicle that we have to deepen our democracy. Research engenders the values of inquiry, critical thinking, creativity and openmindedness, which are fundamental to building a strong, democratic ethos in society.

Academic freedom matters; it matters a great deal. It is a sine qua non for the success of our science system. When scientists invoke academic freedom whenever they are expected to account, then this poses a threat to academic freedom. It is a perversion of the principle of academic freedom, when it appears to be equated to 'free speech when exercised by scientists', irrespective of whether what the scientist says is informed by expert knowledge or is informed by the findings of rigorous academic research. Academic freedom goes considerably beyond free speech. Amongst other things, academic freedom means that scientists have the freedom not to be hindered in their pursuit of 'truth', in an attempt to push back the boundaries of knowledge, and that they have the freedom to disseminate their findings without fear of victimisation. This freedom comes with responsibility and society must hold scientists to higher levels of ethical conduct of research, of accuracy and truthfulness in their reporting. When they appear to fall short, society has an obligation to hold them to account. Scientists pose a threat to academic freedom when they (ab)use academic freedom as both a spear and a shield: a spear used to attack and a shield behind which they hide when expected to explain themselves.

It is disingenuous to give the public the impression that academic freedom is unfettered; otherwise any rabid racist, or misogynist, or antisemite would have a convenient defence, as long as they claimed to base their utterings on 'research'. Denigrating people under the cloak of academic freedom is not and cannot be acceptable. This would undermine academic freedom. Instead, it would strengthen confidence in the academic endeavour when the public is made aware that there are strict protocols and policies to ensure that academic freedom is not abused. For example, research proposals involving humans or involving animals have to be scrutinised by Research Ethics Committees. It is often a requirement that consent is sought from those that will be subjects of an inquiry. Where there are allegations that these protocols may not have been observed, then it is obligatory for a university to investigate possible violations. This is one of the responsibilities of any Senior Executive responsible for the Research Portfolio within a university. We should also bear in mind that members of a university executive are themselves often active researchers; or they have come through the academic ranks.

One would assume that they do not give up their freedom to express their views on academic matters simply because they are members of the Executive. It is intellectually lazy for those who 'speak truth to power', to often portray those in authority as censorious, when in fact they may be holding scientists to account in order to protect the integrity of the academic project. It is troubling that people who know better, would appear to give the impression that Executives of universities or Boards of Science Councils would go on a fishing expedition or witch-hunt and conduct investigations outside of accepted institutional policies and procedures. Most importantly, all South African citizens enjoy protection under the Promotion of Administrative Justice Act 3 of 2000, which was promulgated:

To give effect to the right to administrative action that is lawful, reasonable and procedurally fair and to the right to written reasons for administrative action as contemplated in section 33 of the Constitution of the Republic of South Africa, 1996; and to give matters incidental thereto.

Investigations of academic misconduct are often conducted by independent committees of a researcher's peers; otherwise the credibility of the findings would be questioned. We find it troubling that an impression would be created that such investigations are uncommon and are conducted or influenced by university executives.

The commentary by Professor Nicoli Natrass in the South African Journal of Science, and some of the responses to it, provides some examples of these troubling tendencies.

- (a) Does an 'opportunistic survey' require ethics clearance? If it does, did she obtain such clearance? It would be troubling if an 'opportunistic survey' does not require ethical clearance.
- (b) Did the 'subjects' give their consent? Do they need to give their consent in an 'opportunistic survey'? It would be troubling if 'opportunistic surveys' do not require consent by those involved. This would be open to abuse.

- (c) Was the sample size big enough to justify a sweeping generalisation that '....difference between black South African students and other students......pertained to career aspirations, attitudes towards evolution and experience with, and attitudes to, animals'.
- (d) Has the author conducted similar research before, namely African people and animals, which may reveal a prior bias?Bias in research is an example of academic dishonesty.
- (e) Reproducibility: would someone else conducting the same 'exploratory survey' on another group of African students arrive at the same conclusions?
- (f) Can credible publishable conclusions be arrived at, about Africans and land, based on an 'exploratory survey'?

The question whether a research finding derives from the evidence presented goes to the heart of the review process, whether by peers or non-experts. The implied correlation between race and 'attitude towards evolution' in this research is at best a spurious correlation. An example of a spurious correlation is that 'per capita consumption of mozzarella cheese correlates with civil engineering doctorates awarded.' In general, attitudes towards evolution seem to be strongly influenced by religious beliefs. Whether one believes in creation or evolution or is agnostic is independent of race. There are fundamentalist Christians of all races, all over the world.

A gentle reminder: our ancestors were dispossessed of their land and, in the process, massacred in large numbers. They were forcefully removed and herded into barren and sometimes overcrowded 'native reserves' or homelands: under Apartheid some of these were cynically granted political 'independence'. It is conceivable that some of these forced removals were aimed at making land available for private game farms for the enjoyment of wealthy tourists. The land question remains a divisive and potentially explosive issue in our society and to treat it in what appears to be a cavalier manner, hardly qualifies as responsible research. As an African child growing up under Apartheid in rural Eastern Cape, my people held the view that some White people treated their pets better than African people. A White child would be encouraged to play with their pets, but scolded when they wanted to play with an African child. The English phrase 'a man's best friend' does not only apply to or have meaning for English-speaking people. In my ancestral village, most families own and take good care of their pets, despite the grinding poverty. When researchers arrive at conclusions which do not accord with our personal experiences, we have an obligation to correct them. Spurious observations from exploratory investigations cannot Trump other forms of knowing.

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The Centre for Research on Evaluation, Science and Technology (CREST) at Stellenbosch University conducts research, amongst other things, on contributions to the academic endeavour, and they disaggregate the research outputs by race and gender. White authors are still disproportionately responsible for a large proportion of research captured in all the traditional databases. Academic freedom is a privilege enjoyed by all scientists and research is not an instrument for validating our personal prejudices. The knee jerk responses from scientists to 'threats' to academic freedom gives the impression to members of the public that academic freedom is a vestige of unearned privilege enjoyed by White people. This poses a serious threat to academic freedom. It may inadvertently be an invitation to or an excuse for politicians to consider whether this needs to be regulated. This is a real threat to academic freedom posed by scientists themselves.

Framing a research question in itself requires some background research. Not every question is worth investigating: 'how many angels can dance on the head of a pin' is a common 'example'. Jumping into an opportunistic investigation without the proper background work may be a sign of intellectual laziness. Scientists know that ill-posed research questions would be one of the reasons that many manuscripts are not accepted for publication. In most instances a manuscript is subject to a peer review before it gets published. In the case of Professor Natrass's paper, there was no peer review. Would it have passed a peer review process? This is one of the issues for consideration by those that express a view on this matter. Although I am not a social scientist, I do not believe that it would have passed a peer review process. Personally I would not have recommended it for publication. I challenge any self-respecting social scientist to publicly confirm that they would approve the manuscript for publication. It is disingenuous to claim that this is a 'commentary'. Members of the public may not know the difference between a commentary and a peer-reviewed article. Be that as it may, a scientist should always maintain the same high standards of academic rigour, irrespective.

We understand this 'opportunistic' investigation to be about what influences the choice of career options by university students. Since this is a universal issue, namely an issue that confronts students of all races all over the world, then the obvious question that comes to mind is the rationale for the focus on African students and the choice of conservation biology. One would assume that some background work was undertaken that informed the choice of this combination. Otherwise another or the same researcher can now choose racial group X and subdiscipline Y and produce another research paper, an example of intellectual laziness. The author creates the impression to the reader that biological sciences and conservation biology can be used interchangeably. At present high school students have a choice of Life Sciences and it is not clear whether the author checked the data of Grade 12 results to support her assertions. Do we know how many African students choose Life Sciences as a matric subject? Do we know how many pass Life Sciences and which degree programmes they registered for at university, even just at the University of Cape Town? There is a wide range of sub disciplines at university level that would fall under biological sciences including anatomical sciences; physiological sciences; molecular biology; environmental biology; conservation biology; genetics, etc. The author does not enlighten us whether or not African enrollments are also low in these sub disciplines. At least we do know that there is a high demand for places in the medical sciences. How does this observation fit in with her conclusions? The author could have requested data from the Department of Higher Education and Training, whether evidence of enrollments in the Classification of Educational Subject Matter (CESM) category containing biological sciences supports her hypothesis. The author could have enlightened the readers whether the racial distribution of enrollments in conservation biology is an 'outlier' when compared to enrollments in other programmes. During my previous life at Wits University I observed that men appeared to be underrepresented in therapeutic sciences; white students in Mining Engineering; women in Electrical Engineering. African students admitted to the MBA programme; and Indian students over-represented in Dentistry, etc. 'The invisible hand' of the market, first mentioned by Adam Smith in the 1700s, could be a more plausible explanation for some of these. Researchers are often 'skeptical' about their own initial findings and do not rush to publish, simply because they have discovered something or they have been invited to do so. They would check and doublecheck. The rush to publish is often driven by non-academic motives: and it is a threat to the integrity of the academic project.

The question of career choices by high school or university students generally is not new; it is not unique to the University of Cape Town, it is not unique to South Africa. It is a global issue. There are many reasons that have been advanced for under-representation or overrepresentation by race or gender. All of those reasons that we can think of sound more plausible than the conclusion in this research. These would include issues like parental influence; peer influence; influence by teachers; following in the footsteps of someone they admire; available career guidance; availability of bursaries and scholarships; employment opportunities. Let us just briefly address two of these issues, namely funding and employment opportunities.

Firstly, students' scholarships and bursaries either from the public or private sectors are often targeted at certain programmes. Both the private and public sectors use the language of 'scarce skills'. How many times have we heard academics in the humanities and social sciences complaining about the disproportionate funding channelled towards STEM disciplines? The financial services sector is chasing graduates with strong quantitative skills. The accounting profession is recruiting from high school, Black students in general and African students in particular to address the gross underrepresentation of Black people in the accounting profession. Provinces are funding students in Health Sciences to address the health disparities and inequities in health provision in our country. The list goes on. Are these less plausible than the relationship that African students supposedly (do not?) have with their pets?

Secondly, highest paying jobs in South Africa are disproportionately occupied by White people. Should we conclude that this is because White people are materialistic; or there is a more plausible explanation for this observation? It can be hypothesised that some learners would prefer to take French or Spanish as a second language rather than isiXhosa. If this were to be established, should we conclude that white learners make this choice because their parents are racist<sup>2</sup> and regard isiXhosa as a second-class language or even worse? It is worth reminding ourselves that a few years ago, within the university system, we grappled with the national problem of unemployed graduates. This problem persists. Disproportionately unemployed graduates are African. Should African students now be described as materialistic if employment opportunities were one of the issues they would take into consideration when making career choices? How reliable is the mathematics or statistics underpinning the calculations on materialism?

Most of the books that have been written about the 2008 financial crisis, point to the lure of Wall Street for graduates from especially the prestigious universities in the US. Would it be fair to describe these predominantly White graduates as materialistic? Then most of us are materialistic, irrespective of race, gender, or country of origin. Sweeping negative generalisations about people is offensive; and it is racist when generalisations are made about racial groups. Such generalisations undermine our democracy. People who feel offended by this should rightly call it out. It is intellectually disingenuous and lazy to hide behind academic freedom.

There are other examples of academic disingenuity that one believes pose a serious threat to academic freedom and institutional autonomy. In many academic departments almost everywhere, one sometimes notices that disproportionately the academic staff are graduates of the same university; or share the same country of origin; or are adherents of the same religion; or their skin complexion is similar; and the list goes on. And this would be presented as 'academic merit' when maybe it is just crass 'academic nepotism'. Or sometimes people gloss over wrongdoing by highly rated researchers, because other institutions would be prepared to hold their noses and snap them up to boost their research output or institutional ranking. Or denigrate the achievements of female or Black applicants and dismiss them as 'just a transformation candidate'. Or investigations of similar cases of academic dishonesty resulting in a gentle slap for those that belong to a self-styled and self-referential 'academic aristocracy' and heavy sanctions for the 'children of a lesser God'. Such conduct undermines academic freedom. Scientists have a responsibility to protect academic freedom and institutional autonomy for this and future generations. We expect nothing less.

The International Science Council, to which our Academy of Science of South Africa is affiliated, aims to be 'the global voice of science'. In a statement it released on 9 June 2020 'In the wake of the death of George Floyd and the global response that it has ignited...', we are reminded of the following:

The Principle of Freedom and Responsibility in Science is enshrined in the Statutes of the International Science Council. It states that the free and responsible practice of science is fundamental to scientific advancement and human and environmental wellbeing. Such practice, in all its aspects, requires freedom of movement, association, expression and communication for scientists, as well as equitable access to data, information, and other resources for research. It requires responsibility at all levels to carry out and communicate scientific work with integrity, respect, fairness, trustworthiness and transparency, recognising its benefit and possible harms.<sup>3</sup>

#### Notes:

- www.dhet.gov.za/HED/policies/national\_plan\_on\_ higher\_education/
- 2. This is adapted from a Twitter comment that was shared on one of the WhatsApp groups.
- 3. https://council.science/current/news/statementon-combating-systemic-racism-and-other-forms-ofdiscrimination/

Loyiso Nongxa writes in his personal capacity. He is a Fellow of the Royal Society of South Africa and a Member of the Academy of Science of South Africa.

### The Eastern Cape is in a Covid-19 crisis – time to mobilise our unemployed youth

### Opinion piece by Sonwabile Mnwana:

Associate Professor of Sociology at the University of Fort Hare, South Africa. He holds a PhD in social sciences. He is also a research associate at the Society, Work and Politics Institute and the Southern Centre for Inequality Studies at the University of the Witwatersrand (Wits). He is project leader for several research projects, and he is also a Visiting Fellow at the Stellenbosch Institute for Advanced Study (STIAS).

Source: Published in the Daily Maverick on 9 July 2020. Click here to view original article



There are thousands of unemployed graduates and young people with matric certificates in the Eastern Cape. Why not turn the challenge of youth unemployment into an opportunity in the fight against Covid-19?

Eastern Cape Premier Oscar Mabuyane has finally told us what we knew all along – the province's healthcare system "<u>has been overwhelmed</u>" by the surge in Covid-19 infections. He further urges national government to bring in the army to beef up the province's crippled and almost dysfunctional public healthcare system.

However, deploying the army is not likely to be a lasting or even the best solution. It can prove costly and inadequate, especially if other provinces also begin to make similar requests. Why can't government recruit our unemployed graduates and matriculants as healthcare, and teaching assistants in the Eastern Cape health and education systems?

Of course, that the Eastern Cape public health is overwhelmed does not come as any surprise to the majority of citizens in the province. Almost every citizen who has encountered the system over the past five decades would concur that the system was never ready for a pandemic of any scale. In most rural healthcare centres – where these even exist at all – there have been serious staff and equipment shortages for decades.

Distressing as the situation might be, it should all make some kind of sense when one considers that this is the very province that incorporated two very impoverished and largely neglected former homelands (Transkei and Ciskei) in 1994. Since then, it has suffered from decades of infrastructure neglect, corruption, and rapacious looting of public funds and resources by the political and business elite. As such, the Eastern Cape is in an extremely precarious position as it confronts the current peak in Covid-19 infections and deaths. The province is extremely poor. Unemployment is high. The Eastern Cape provincial leadership is floundering and seems to be out of new ideas on how to fight this pandemic.

Recently, the health ministry in the province <u>controversially spent</u> R10.1-million purchasing 100 "ambulance" motorbikes, apparently for transporting Covid-19 patients. It is difficult to imagine just how these bikes will transport sick people for long trips to healthcare facilities on <u>almost impossible rural roads</u> where even buses (with much larger wheels) struggle to finish a safe trip in a day.

Some major healthcare centres in the cities are in <u>total</u> <u>disarray and chaos</u> due to poor management and derisory

working conditions for medical, and support staff. Several schools have also shut down as more educators and learners are testing positive. No wonder the premier is calling for the army.

However, in our army of unemployed youth can lie our first source of hope. Like in other provinces, there are thousands of unemployed graduates and young people with matric certificates in the Eastern Cape. Why not turn the challenge of youth unemployment into an opportunity in the fight against Covid-19?

The army should be kept at bay, especially considering its <u>contested role</u> during Covid-19. I propose that government urgently consider hiring unemployed young graduates (and those with a matric certificate), as healthcare and educator assistants in healthcare centres, and schools.

Having healthcare assistants could provide much-needed reinforcement in hospitals and clinic non-specialised (but very demanding), tasks such as taking temperature and doing blood pressure tests, feeding patients who are unable to eat on their own, and administering medication. Our professional healthcare workers on the frontlines are being stretched too thin. Those who remain behind when their colleagues fall sick or contract Covid-19 are often compelled to carry a higher workload.

Healthcare assistants could be paid a monthly stipend of around R5,000. Each assistant can work for three days per week. Just imagine, with the R10-million that the Eastern Cape Health Department used to purchase motorbikes, they could provide jobs for 2,000 young graduates for a month at a R5,000 stipend for each of them. For R40million, you can keep them in the system for four months. In a province where "more than 6,000 vacancies existed... before the pandemic began", assistants, although not a permanent solution, could bring support to the system in this time of need.

Of course, they will need basic training. A few weeks of primarily practical training may be all that is needed. The stipends that the young people will receive could go a long way in supplementing the precarious livelihoods in many households in the province. The education department in the province could adopt a similar model as the Western Cape provincial department of education is already recruiting teaching assistants.

If national and provincial governments fail to take drastic action to handle the spread of Covid-19, this pandemic will completely ravage the Eastern Cape's population.

## MATHEMATICAL SCIENCES AND FOURTH INDUSTRIAL REVOLUTION TECHNOLOGIES

Source: Voices360, 14 July 2020 by Professor Tshilidzi Marwala and Professor Loyiso Nongxa. Click here to view original article



Professor Tshilidzi Marwala is the Vice-Chancellor and Principal of the University of Johannesburg. He is the Deputy Chair of the Presidential Commission on the Fourth Industrial Revolution.

The fourth industrial revolution has become more than just a buzzword, and to say that it is a new reality is an understatement because it is here – permeating every aspect of our lives. It is revolutionising society in various ways; cars are driving themselves, aeroplanes are flying with autopilots instead of human pilots and machines are talking to people as well as each other.

That the fourth industrial revolution (4IR) is a confluence of technologies such as artificial intelligence (AI), blockchain, internet of things and biotechnology has been written about that it is something all-too-familiar now. For starters, artificial intelligence is the use of data and mathematics to create intelligent machines. There are three types of artificial intelligence; machine learning, soft computing and computational intelligence. Machine learning is the use of data and statistics to create intelligent machines. It employs the language of the mathematical sciences to express ideas and concepts that appear intuitively correct but are often difficult to formulate precisely. Machine learning has been successful in applications such as automated diagnosis of diseases, speech recognition and face recognition.

Recently, a new type of machine learning called deep learning has seen so much success that it is now implemented by Facebook to label the identity of a person in a picture. Deep learning is so influential that in 2018, Geoffrey Hinton of Google, Joshua Bengio of Montreal and Yann LeCun of Facebook were awarded the Turing Award, considered equivalent to the Nobel Prize for computer science.

What are the mathematical foundations of machine learning? Firstly, it requires the understanding of vectors; a vector is simply 'string' of features or characteristics expressed as numbers, letters, etc. For example, a person, e.g. Sipho, can be described by a vector of several attributes such as height, weight, race, and gender. All these attributes collectively form a vector that provides some useful information about Sipho. Secondly, it requires the understanding of a matrix. A matrix is just a rectangular grid of 'numbers'. To make the machine learning algorithms learn, optimisation is required. This is a mathematical technique of finding the 'best' possible outcome under given circumstances or constraints, for example finding the shortest distance between two points. Algorithms are a set of instructions that make a computer work. The word algorithm is derived from the last name of a Persian Muslim mathematician Muḥammad ibn Mūsā al-Khwārizmī. For example, when we use Google Maps to find the shortest road between Craighall and Soweto, we are using an optimisation method.

The second type of AI is soft computing. An example of soft computing is fuzzy logic, which is a method of reasoning that seeks to mimic human reasoning. Soft computing is important for cases where the quality and quantity of data is limited. Fuzzy logic has been applied in complex problems such as selfdriving cars and on decoding the expertise of professionals, e.g. doctors and encoding it into a computer program. What mathematics is used in soft computing? Set theory and discrete mathematics are essential in understanding fuzzy logic. Fuzzy set theory, which does not often feature in the mathematical sciences offerings to engineering, science and mathematics students, is a generalisation of classical set theory and is more appropriate for soft computing.

The third type of Al is computational intelligence. Computational intelligence involves building an intelligent machine using the observation from nature. For example, the behaviour of a population of ants when they move from the nest to the food source, thereby forming the shortest distance between the two locations, has been used to create ant colony optimisation. Ant colony optimisation is used to find the shortest distance between two locations in electronics maps. Other forms of computational intelligence include particle swarm optimisation, which is inspired by the swarming of birds and genetic algorithm, which is inspired by Darwin's theory of revolution. The theory of evolution explains how species evolve to better adapt to their changing environment. The mathematics required to understand computational intelligence include vectors

and matrices. Furthermore, understanding computational intelligence includes understanding biological sciences.

Blockchain is a piece of technology that became famous through its application to create the first cryptocurrency bitcoin. It is electronic money instead of real money such as notes and coin. Blockchain is an electronic ledger where each transaction is witnessed and approved by miners. Once a block has been approved, then it is permanently stored, and it cannot be modified without the collaboration of the miners. The next transaction is verified by different miners, but the code these miners generate after approval is linked to the miners of the previous block. So, the more blocks are added to the chain of the ledger, the more difficult it becomes to modify the latest block because it involves conspiring with all the previous miners. What mathematics do we need to understand blockchain? We need to understand functional analysis.

Students at the EPFL University in Switzerland developed a smart brathis year that screens for breast cancer. This intelligent bra has sensors that sense the state of a woman's breast. Once it detects some anomaly, it can potentially automatically call a doctor and set up an appointment. The impact of this on the early diagnosis and treatment of breast cancer is extensive. This is what is called the internet of things. The bra is equipped with piezoelectric sensors that measure the vitals of the breast. This measurement is processed using signal processing techniques and fed into an artificial intelligence machine for classification of the health status of the breast. The signal analysis requires mathematical techniques such as the Fourier analysis which was invented by a French mathematician in the 18th century. Fourier analysis breaks down the data into cycles that serve as a signature and in this particular example, the signature of the breast.

The 4IR is revolutionising the world of work through the adoption of robots. On 8 July 2020, in the prestigious journal Nature, Benjamin Burger and collaborator describes a mobile



Professor Loyiso Nongxa is the former Vice-Chancellor and Principal of the University of the Witwatersrand.

robotic chemist, which automated the researcher rather than the instruments to perform complex and often dangerous experiments. In Japan, because of the coronavirus, robots are used as bartenders, security guards, and messengers. Where are we as South Africa as far as robotics is concerned?

Not very close as there is no single university in South Africa that offers a course that specialises in robotics. However, there is some silver lining such as a school, Curro Mount Richmore, in the North Coast that now offers a course in robotics to learners up to Grade 6. What sort of mathematics do we need to master robotics? We need the mathematics described above such as vectors, matrices, and functional analysis, but furthermore, we need to teach a mathematical topic called topology. Topology is a study of shapes and their relations.

What is the state of mathematics in South Africa? The concerning aspect of mathematics learning in South Africa is that the number of pupils studying mathematics dropped from 270,516 in 2018 to 222,034 in 2019. Furthermore, only 54% of the exam passed it, and this is concerning, particularly given the fact that the pass mark is 30%. We have to fix this; otherwise, we will irreparably damage our path to the 4IR in South Africa. We need to undergo serious curriculum reform across the board in primary, secondary and tertiary levels.

The mathematical sciences curricula at some universities lead to early specialisation, sometimes at the third-year level. It is not uncommon for students to complete their first degrees without having been exposed to foundational topics that underpin the essential pillars of artificial intelligence. No university graduate in engineering, computer science and the mathematical sciences should graduate without a foundational knowledge of areas like linear algebra, probability and statistics, signal processing, optimisation, discrete mathematics and functional analysis.









# **RETURNING STAFF**

**PPE DISTRIBUTION TO** 

On Wednesday 8th July 2020, the university distributed Personal Protection Equipment (PPEs) to the first 33% cohort of staff who returned to their work stations since the Covid-19 lockdown in March.

The distribution process was facilitated by the Safety, Health and Environment Practitioner, located within the Property and Services department, and was carried out at all three campuses (East London, Alice and Bhisho).

Each returning staff member was provided with cloth masks and a bottle of hand sanitizer. In addition, strict protocols such as daily screening, physical distancing and hand hygiene are being observed in order to minimize the spread of Covid-19.

The first cohort of students is expected to arrive this week.

by Aretha Linden











## **BENEFITS OF CLOTH MASKS IN THE WORK PLACE**

Scientific research has proven that wearing face masks will decrease exposure and the infection risks posed by the **Covid-19 pandemic** 



Source: Makrosafe

**UFH COVID-19 TASK TEAM** CONTACT NUMBER: 043 704 7616

Stops coughing on other people

**Re-usable and can be washed** 

Halts the spread of respiratory viruses



University of Fort Hare Together in Excellence

## WRC AND UFH WEBINAR UNPACKS WATER RESEARCH FINDINGS



Prof Priscilla Monyai Project Leader and Senior Researcher Associate Professor and Senior Lecturer in Development Studies



Dr Shylet Chivanga

Researcher

Postdoctoral Fellow and Lecturer

in Development Studies



Sikhanyiso Ndlovu Researcher PhD student in Development Studies

On 7 July, the Water Research Commission (WRC) in partnership with the University of Fort Hare hosted a live webinar to unpack the findings of a study titled: The role of communities as water services intermediaries in South Africa: The Case of the Eastern Cape and Free State Province.

The study was conducted by a team of researchers from the Department of Development Studies in the Faculty of Management and Commerce.

The project intends to highlight the growing concerns and the role of communities in regard to adequate clean potable water supply. It started in April 2019 and was funded by the WRC. The relationship between UFH and WRC dates back to the year 2000 and this is the fourth project to be funded by the Commission.

During the study, teams of fieldworkers visited communities in Mbizana (Eastern Cape) and Ngwathe Local Municipality on the banks of the Vaal River (Free State), where adequate water supply remains a challenge.

The team comprises the following UFH researchers:

- Prof Priscilla Monyai (Project Leader), Senior Researcher Associate Professor and Senior Lecturer
- Dr Shylet Chivanga, Postdoctoral Fellow and Lecturer
- Sikhanyiso Ndlovu, PhD student
- Thapelo Monyai, Masters student

The meeting was chaired by WRC Research Manager, Ms Virginia Molose. According to her, the study looks at why communities step into the role of municipalities when it comes to water provision. "The team found that communities come in and play this role for various reasons; either the systems have collapsed and are nonfunctional leaving them without water, or there are no services at all." said Ms Molose

In welcoming the participants, WRC Research and Development Group Executive, Prof Stanley Liphadzi shared some insightful remarks that laid bare the dire state of water supply in the country.

"Our water supply story in South Africa is heart-breaking. At first it was a love story when the constitution promised access to water for everyone as a basic human right. That love story never happened. Today we find ourselves having to come up with all kinds of alternatives to address the heartbreak," said Dr Laphadzi.

Delivering the opening remarks, Prof Nokwethemba Ndlazi (DVC: Institutional Support), said the research highlights the importance of involving communities in the design and maintenance of infrastructure. It presents this as a socio-technical exercise, rather than one that is driven by engineers only. "The tendency is that whenever we talk water, we talk about the engineering field and leave out the role of communities."

Prof Ndlazi encouraged Professor Monyai and her team to take the findings back to communities where they did the research.

"Our water supply story in South Africa is heart-breaking. At first it was a love story when the constitution promised access to water for everyone as a basic human right. That love story never happened. Today we find ourselves having to come up with all kinds of alternatives to address the heartbreak,"

"We can only build a developmental state if these forms of knowledge production continue and we are able to sustain and strengthen conversations and cooperation between the university community, government departments, institutions, as well as the communities we serve," she said.

### Major findings of the study (as presented by Prof Monyai):

- · Community participation was minimal- a critical element of empowerment for local communities to play a meaningful role in the management of water supply services in their localities.
- · Communities play a better role as water service commissioners than as water services intermediaries.
- There is a need for water cooperatives to promote community participation.
- · There are legislative frameworks that enhance, inhibit and impede community participation.



Thapelo Monyai Researcher Masters student in Development Studies

### Growing concerns highlighted in the study:

- Inadequate and/or lack of access to clean potable water in many communities.
- Communities do not participate meaningfully (for empowerment) in the water sector as required by the Water Legislation.
- Water inequalities are more prevalent in black communities, villages, townships and settlements.
- In 2018, only 67.5% of the South African population had easy access to handwashing and soap

Presentations from the fou UFH researchers were followed by robust discussion chaired by Dr Barbara van Koppen, Principal Researcher at the International Water Management Institute.

The webinar concluded with a vote of thanks by Dr Antony Sambumbu, Department of Public Administration, UFH.

bv Aretha Linden

## DEPRESSION IN MEN

By Thobeka Msengana: Senior Counselling Psychologist and Student Counselling Unit Acting HOD

Men tend to think of themselves as being strong and in control of their emotions. When they feel hopeless, overwhelmed or in despair, they often go into denial or try to cover up. However, depression is a common condition that affects many at some point, not a sign of emotional weakness or failing masculinity.

Many men find it difficult to talk about their feelings. Instead, they tend to focus on the physical symptoms that often accompany male depression, such as back pain, headaches, difficulty sleeping, or sexual problems. This can result in the underlying depression going untreated and may lead to serious consequences.

Men suffering from depression are four times more likely to commit suicide than women. It is therefore vital to seek help before feelings of despair become feelings of suicide.

#### Signs and symptoms of depression in men

Men tend to be less adept at recognizing symptoms of depression than women. A man is more likely to deny his feelings, hide them from himself and others, or try to mask them with other behaviours. While men may experience classic symptoms of depression such as low mood, loss of interest in work or hobbies, weight and sleep disturbances, fatigue, and concentration problems; they are more likely than women to experience "stealth" depression symptoms such as anger, substance abuse, and agitation.

The three most commonly overlooked signs of depression in men are:

- **1. Physical pain.** Sometimes depression in men shows up as physical symptoms-such as backache, frequent headaches, sleep problems, sexual dysfunction, or digestive disorders-that don't respond to normal treatment.
- 2. Anger. This could range from irritability, sensitivity to criticism, a loss of sense of humour, to road rage, a short temper, or even violence. Some men become abusive or controlling.
- 3. Reckless behaviour. A man suffering from depression may exhibit escapist or risky behaviour such as pursuing dangerous sports, driving recklessly, or engaging in unsafe sex. They may drink excessively, abuse drugs, or gamble compulsively.

#### Getting help for male depression

Men are advised not to try to tough out depression on their own. It takes courage to seek help-from a loved one or a professional. Most men with depression respond well to self-help steps such as exercising, switching to a healthy diet, and making other lifestyle changes.

A person should not expect the mood to improve instantly. He will likely begin to feel a little better each day. Many men recovering from depression notice improvements in sleep patterns and appetite before experiencing improvements in their mood.

#### FOR HELP:

Students can contact the Student Counselling Unit as follows:

- EL Campus-0437047017
- Alice Campus- 0406022011
- Email scu@ufh.ac.za

Staff can contact SADAG for free services:

- Mental Health Line is 011 234 4837 •
- Suicide Crisis line is 080 056 7567

Staff on medical aid can contact a psychologist of their choice in town.



For more information please contact Ms Msengana @ Tmsengana@ufh.ac.za

# VIRTUAL CAREER **GRAD EXPO**

Due to Covid-19 regulations that prohibit large gatherings and promote social distancing, the University of Fort Hare has collaborated with the South African Graduate Employers Association (SAGEA) to hold a virtual Career Grad Expo. The event will take place on 21st, 29<sup>th</sup> July and on 13<sup>th</sup> August between 10 am and 3pm.

In order to participate, students have to register online as follows: https://virtualgradexpo. easyvirtualfair.com before 21 July 2020

The fair will allow students to connect with over 100 South African organisations interested in sharing and exploring bursary, vacation employment and graduate opportunities.

There will be three pavilions: The General Pavilion, •

- The Accounting pavilion and

Please see this attached link to a demo of the career fair: https://virtualgradexpo.easyvirtualfair.com/DEMO/#!home

For more information please contact Mrs Denny Emslie, Senior Lecturer at the Accounting Department: demslie@ufh.ac.za



The Science, Technology, Engineering and Maths Pavilion



University of Fort Hare Together in Excellence

### ThisWeek@FortHare your weekly newsletter

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