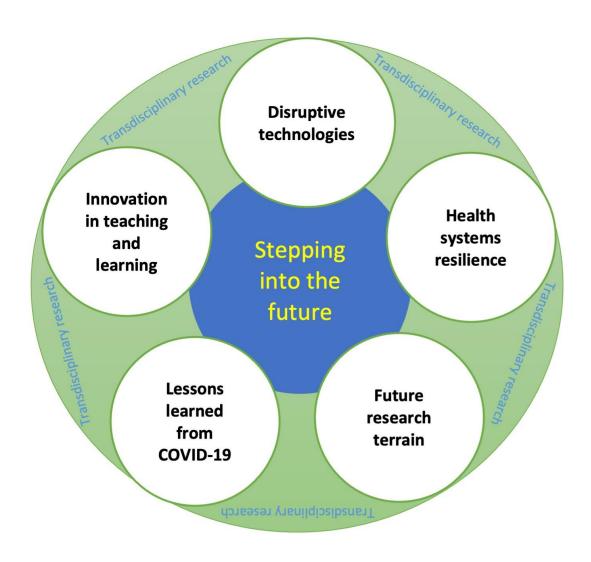


Faculty of Health Sciences

Fakulteit Gesondheidswetenskappe Lefapha la Disaense tša Maphelo

2022 Faculty Research Day Report



About Faculty Research Day

Faculty Research Day is an inspiring annual research conference hosted by the Faculty of Health Sciences (FHS), University of Pretoria (UP). Organised by the Research Office, Faculty Research Day provides an opportunity for staff and students, research entities and partner organisations to interact, share knowledge and showcase their innovative research.

As part of the FHS Research Office's mandate to create a vibrant, enabling and inclusive research environment, Faculty Research Day provides educational opportunities in the form of keynote addresses on topical research areas by experts, thematic oral and poster presentations, as well as workshops that highlight various health science and wellness topics. This annual event also provides networking and collaborating opportunities for students and staff, from different Schools and Departments, to advance the Faculty's transdisciplinary research mandate.

Faculty Research Day involves both undergraduate and postgraduate students. Students gain valuable experience as part of the organising team and as key participants alongside academics. Inclusion of undergraduate students in research and creative activities is one of the FHS Research Office's focus areas. In addition to deepening students' traditional learning and development, undergraduate research experience allows better understanding of research methods and participation in collaborative projects. Students are able to find their research niche areas and accelerate their research careers.

The 2022 Faculty Research Day showcased 24 oral, 47 poster presentations and 118 posters, hosting approximately 750 delegates, exhibitors and speakers. Panel discussions on stimulating topics such as Disruptive Technologies and Lessons Learned from COVID-19, provided a broad overview of topical issues influencing medical research.

Main sponsors







Smith:Nephew



















Table of Contents

ABOUT FACULTY RESEARCH DAY	2
MAIN SPONSORS	3
TABLE OF CONTENTS	4
FOREWORD	7
PROGRAM STRUCTURE	8
PRESENTATIONS FROM SELECTED ABSTRACTS	9
SESSION DESCRIPTION	10
OPENING CEREMONY	11
FACULTY RESEARCH DAY KEYNOTE SPEAKERS	12
SUB-THEME 1: DISRUPTIVE TECHNOLOGIES	13
Sub-theme 1: Disruptive technologies: Keynote address	14
Sub-theme 1: Disruptive technologies: Panel discussion	14
Sub-theme 1: Disruptive technologies: Oral presentations	15
SUB-THEME 2: INNOVATION IN TEACHING AND LEARNING	17
Sub-theme 2: Innovation in teaching and learning: Keynote address	17
Sub-theme 2: Innovation in teaching and learning: Oral presentations	17
SUB-THEME 3: RESILIENCE IN HEALTH SYSTEMS	19
Sub-theme 3: Resilience in health systems: Keynote address	19
Sub-theme 3: Health system resilience: Panel discussion	19
Sub-theme 3: Health system resilience: Oral presentations	20
SUB-THEME 4: LESSONS LEARNED FROM COVID-19	22

Sub-theme 4: Lessons learned from COVID-19: Panel discussion	22
Sub-theme 4: Lessons learned from COVID-19: Oral presentations	23
SUB-THEME 5: THE FUTURE RESEARCH TERRAIN	25
Sub-theme 5: The future research terrain: Keynote address	25
Sub-theme 5: The future research terrain: Panel discussion	25
Sub-theme 5: The future research terrain: Oral presentations	26
RESEARCH SESSIONS	27
Open Access Q&A session	27
The Soap Box Event	28
Panel Discussion: Research myths from the perspective of undergraduate students	29
INTERACTIVE WORKSHOPS	31
Mental health interactive workshop	31
PERSONALIZED HEALTHCARE INTERACTIVE WORKSHOP	31
INTERACTIVE-POSTER SESSION	33
AWARDS CEREMONY	34
Best oral presentation	34
Best e-Poster	35
Best exhibition stand by an entity	36
Faculty of Health Sciences champion of research visibility and impact awards	36
VOTE OF THANKS	37
2022 FACULTY RESEARCH DAY COMMITTEES	39
Scientific committee	39
Names of adjudicators	41
Logistics and planning committee	43
2022 FACULTY RESEARCH DAY EVALUATION FINDINGS	46

ACKNOWLEDGEMENTS	49
APPENDICES	50

Foreword

Professor Tivani Mashamba-Thompson Chairperson of 2022 Faculty Research Day



The 2022 Faculty Research Day at the FHS attracted more than 750 delegates, speakers and exhibitors. The number of attendees grew exponentially, from fewer than 300 online attendees in 2021 to more than 500 in-person and 200 online attendees in 2022. The notable increase in attendees symbolises the improved recognition of FHS research by our partners and sponsors.

This was the first hybrid Faculty Research Day hosted by the FHS. The event took place on the 23rd and 24th August 2022 at the Tswelopele Building, Prinshof South, UP. The two day event was live streamed to enable virtual attendance by students, staff and other partners who were unable to attend in-person.

In line with the FHS's 2022 theme, the Faculty Research Day's theme was "Stepping into the Future". FHS staff and students presented thematic oral and poster presentations. Presentations were complemented by live panel discussions and workshops aligned with the sub-themes. Outside of these sessions, FHS research entities and sponsors exhibited their research foci and products. E-poster presentations were also displayed throughout the day. With support from the Department of Research and Innovation, UP, the event included an award ceremony to promote research excellence.

Faculty Research Day featured prestigious invited speakers, FHS established, emerging and early career researchers, including postgraduate and undergraduate students. The speakers showcased innovative and cutting-edge research on our hybrid platform. This platform incorporated features to encourage attendance, participation and interaction between delegates, speakers and exhibitors. The event inculcated a firm bond between current and future research terrain and knowledge in the evolving field of health science.

Effective dissemination of knowledge is one of our key priorities in line with UP's research visibility and impact strategic objective. We are committed to developing health solutions in collaboration with stakeholders. Knowledge shared during this event will be distributed to all relevant stakeholders through dissemination of this report with all UP Faculty Research Offices and external partners. The knowledge will also be disseminated through publications authored by post-doctoral fellows and undergraduate students in open access peer-reviewed and non-peer reviewed platforms. All presented e-posters, most which were presented by postgraduate students, are accessible via the UP library repository.

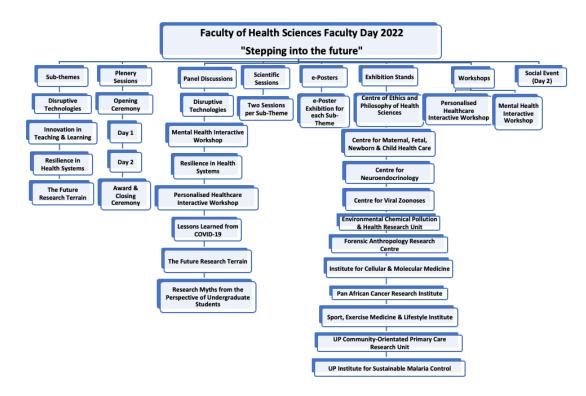
The conceptual and applicable knowledge will also stimulate new research topics and new collaborations among researchers. Thus, nurturing scientific collaborations including opportunities for building sustainable networks between peers, undergraduate and postgraduate students, as well as academics, within different FHS Schools, Departments and industry partners.

The 2022 Faculty Research Day recordings and pictures can be accessed via the link below:

https://www.up.ac.za/faculty-of-health-sciences-research/article/3074626/faculty-research-day-23-24-august-2022

Program structure

The scientific program was drafted by the Faculty Research Day committee chaired by Prof Tivani Mashamba-Thompson, Deputy Dean for Research and Postgraduate Studies, FHS. The scientific program comprised keynote speeches, panel discussions, scientific sessions (four themes), workshops, FHS Research Entity exhibits and an open poster exhibition (Figure 1). The structure of the program is outlined in Figure 1. The full version of the program can be found in Appendix.



Structure of the Faculty Research Day program, 2022.

Presentations from selected abstracts

The call for abstract submissions was open from 23rd May to 21st June 2022 and delegates were able to register from 6th June to 24th August 2022. In total, 240 abstracts were submitted by FHS students and staff. All submitted abstracts of ethically approved studies were selected by the FHS Research Coordinator, **Ms Anwani Nekhumbe** and submitted to the respective Schools' RESCOM Chairs for review by the School abstract review committees. In total, 189 abstracts (24 oral, 47 poster presentations and 118 posters) were selected. Table 1 presents the number of oral and poster presentations selected for 2022 Faculty Research Day.

Table 1: Number of 2022 Faculty Research Day oral and e-poster presentations per theme.

Presentation session	Oral presentations	Poster presentations	Total
Disruptive technologies	8	11	19
Lessons learned from COVID-19	8	0	8
Innovation in teaching and learning	4	0	4
Resilience in health systems	4	12	16
The future research terrain	0	24	24
Total	24	47	71

Session description

The structure of the program provided the opportunity for all attendees to be present for the keynote speeches before splitting between two venues to observe the parallel oral presentation sessions. Each day had sessions in the morning and afternoon of which both were opened with a plenary session which provided a great opportunity to witness world class speakers share their ground-breaking research and plans to make an impactful change in the world of health science. The table below describes the various sessions, including their objectives and duration.

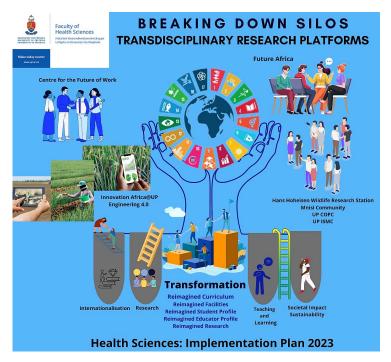
Table 2: Description of various sessions, including the objectives and duration.

Session type	Description	Objectives	Duration/ minutes
Interactive workshops	Sessions for registrars, intern medical scientists and technologists presented by representatives from professional bodies.	Insights on personalised healthcare and mental health within our society	40
Plenary sessions	Standalone sessions featuring various advanced researchers	Sessions designed to complement the faculty day theme and program. Exposure to globally relevant research.	20
Panel discussion	Sessions including 5-6 experts who had wide-ranging discussions on specific topics. Panel discussions did not run in parallel with other sessions	To educate participants on specific topics from different perspectives.	40
Scientific sessions	Sessions including oral presentations by invited speakers from the FHS. Presentations were limited to 10 minutes each.	Provide a platform for established and emerging researchers to showcase their research.	70
e-Poster exhibitions/ presentations	Exhibits of posters arranged per discipline. Posters on the virtual conference platform. E-posters were presented in-person during the parallel sessions	A platform for researchers to showcase their work.	70
Exhibition stands	Sponsors and partners showcased their work and products. Supported by the logistics committee.	An opportunity for sponsors to showcase their work and products.	All day

Opening ceremony

Faculty Research Day was officially opened by **Prof Tiaan de Jager**, the Dean of the FHS, Director of the UP ISMC and a Professor in Environmental Health at the School of Health Systems and Public Health (SHSPH) at UP. In the opening speech, the Dean provided an overview of the 2023 FHS implementation plan and implored the need for FHS researchers to conduct collaborative research. This ceremony was well attended by FHS students and staff as well as invited guest speakers.

During the opening speech, the Dean emphasised the need to move towards transdisciplinary research and break down silos, moving away from working in isolation. He also highlighted the importance of using existing UP research platforms for impactful and collaborative transdisciplinary research and stepping into the future.



Overview of the Faculty of Health Sciences 2023 implementation plan



2022 Faculty Research Day opening ceremony audience.

Faculty Research Day keynote speakers

Table 3: Faculty Research Day keynote speakers

Sub-theme	Speaker	Key point
Disruptive technologies	Prof Nitika Pai (Associate Professor, McGill University, Department of Medicine)	"My hope is that with all this digital transformation, hopefully, they will improve care for the bottom billion, efficiency, reduce costs and improve agility in our healthcare systems, that will trump the iniquity that we see, the inhuman treatment that we see, and the truncated care pathways experienced by the
Innovation in teaching and learning	Dr Irene Dankwa-Mullan (Chief Health Equity Officer, IBM Watson Health)	bottom billion." "Effective teaching should be rooted in principals that are contextually adapted"
Resilience in health systems	Prof Quinette Louw (Executive HOD, Department of Health and Rehabilitation Studies, Stellenbosch University)	"Rehabilitation (rehab) is a restorative health strategy aimed at improving functioning and participation in society. According to a 2020 report, approximately 2.41 billion people need it globally."
The Future Research Terrain	Prof Eric Buch (Professor in Health Policy and Management – SHSPH, UP)	"We talk about collaborations and it's quite clear that global collaborations are the way to go. We have what it takes in South Africa. We have unique research environments, we have unique opportunities for research platforms, and we have the foundation. We have to go out and get a seat at the table"

Sub-theme 1: Disruptive technologies

Program Director: Professor Werner Cordier, Associate Professor and Senior lecturer of the Department of Pharmacology



Prof Werner Cordier kicked the day off by introducing himself and praised Faculty Research Day as a special event that has afforded staff and students with a platform to showcase their high quality research in a diverse array of scientific disciplines. He proceeded to introduce the Dean of the FHS, who opened the event with a short presentation.

The FHS Choir, conducted by Mr Mpumelelo Manyathi, kept everyone in high spirits throughout the event. The significant burden of COVID-

19 pandemic on healthcare professionals and students has been well documented. During the early stages of the COVID-19 pandemic, most of the FHS staff and students were at the heart of trying to stop the spread of infections and developing suitable short-term and long-term solutions to combat the



pandemic. Whilst many lives were saved, the psychological burden and overall wellness of healthcare professionals has suffered as evidenced by high rates of burnout and psychological stress. The music acted as a medium for lifting the spirits and processing emotions, trauma and grief suffered during the COVID-19 pandemic.



Faculty of Health Sciences Choir singing at the 2022 Faculty Research Day Opening
Ceremony

Sub-theme 1: Disruptive Technologies: Keynote address

Professor Nitika Pai from McGill University's Department of Medicine delivered the keynote address where she discussed disruptive technologies. Globally, the COVID-19 pandemic disrupted many healthcare services, which begged the question – how do we catch up? Investment in healthcare needs to compete with important issues such as climate change and economic growth. Disruptive technologies can be used to expand the reach of healthcare into underserved communities.

Examples of disruptive technologies would include novel technologies such as HIV diagnostics (nanotechnologies,



microfluidics, NGS, omics, nanobots), omics technology: combining genomics & metabolomics, metagenomics, multiplexed biomarker testing (paper to lab on paper strip), home-based monitoring (remote sensing technology) and self-testing diagnostic kits for elderly care.

Sub-theme 1: Disruptive Technologies: Panel discussion



Panel discussion on disruptive technologies at the Faculty Research Day, 2022.

Chairperson: Professor Marietjie Venter, Head of Zoonotic Arbo- and Respiratory Virus Research program at UP.

Prof Venter was joined by the following panellists: Professor Veronica Ueckermann (Internal Medicine), Dr Candice Hendricks (Paediatrics and Haematology), Professor Tahir Pillay (Chemical Pathology), Dr Iman van den Bout (Physiology) and Dr Tsakane Hlongwane (Obstetrics and Gynaecology). The panel discussed advantages and disadvantages of disruptive technology in various health departments.

The panel identified the following key points which should be considered when introducing disruptive technology into the health sector:

- **Technology in the ICU and handling big data-** technology in the ICU allows for precision medicine. Disruptive technology will need to be ethically sound. Disruptive technologies will enable personalised medicine with advanced interventions as the number of patients increases.
- Chimeric antigen receptor T-cells- genetically modified to express a specific receptor. These
 interventions are developed by using healthy donors rather than sick donors whose health
 may be deleteriously affected by cell harvesting. Genetic engineering is also required to create
 matches to avoid clashing of cells during donation.
- Laboratory medicine- In diagnostic testing, antibodies are usually used to detect antigens. Antibodies have several disadvantages and currently single domain antibodies are being studied as an alternative. Single domain antibodies can be synthesized in the lab and grown in bacteria. They are nanometres in size and produced in bulk. This is a cost-effective intervention. Diagnostic tests going forward need to be low-cost and affordable so they can be deployed globally. In addition, they are thermally stable which allows for affordable and efficient transportation across borders.
- Breast cancer organoids- In-vitro models of tumours in patients. African patients are
 underrepresented in global databases. Breast cancer organoids specific to African populations
 will improve diagnostics. Liquid biopsy is another intervention that is a work in progress to be
 brought into the country. We need to bring cancer diagnosis to the clinical level.
- Obstetrics- Many pregnancies end tragically due to a lack of adequate screening for expecting
 mothers. There are about 2 million stillbirths occurring annually on a global scale, most being
 from low-income communities. Screening of low-risk pregnant women and those at risk of not
 carrying to term allows for the comparison of data to identify high-risk pregnancies outside of
 the known health conditions that could lead to stillbirths.

Sub-theme 1: Disruptive technologies: Oral presentations

Table 4: Oral presentations under Sub-theme 1: Disruptive technologies.

Presenter	Title
Miss Barbara van Deventer	Development of a cardiac channel molecular autopsy in a South African cohort of sudden unexplained deaths in the young
Professor Tahir Pillay	Development of affordable point of care testing (POCT) devices using single domain antibodies (nanobodies) and precision-cut paper strips
Dr Jesné Kistan	Body composition estimates from electrical impedance analysis and its association to cardiovascular risk
Dr Helen Mulol	Anthropometry and body composition outcomes of infants in the first 2 years of life postpartum who were screened with the Uniflow device <i>in utero</i> to assess fetal growth restriction

Dr Iman van den Bout	Breast cancer in South Africa: New ways to advance breast cancer care
Mr Andrea Ellero	Proteomic characterization of inducible proteins in three dimensional cultures
Miss Mamahletsani Sekoli	Efficacy of a novel portable MRI as a biomarker in neonates suspected of hypoxic ischemic encephalopathy
Dr Honest Ndlovu	PET imaging of atherosclerotic plaque calcification with [68Ga]Ga NOGAGA ^{ZOL} : Correlation of uptake with cardiovascular risk profile

of patients



One of the session speakers, **Miss Barbara van Deventer** discussed her research involving the development of a cardiac autopsy to determine possible causes for current unexpected deaths in the young in South Africa.

The following key points were taken from the oral presentations under this sub-theme:

• **Forensic science**: development of post-mortem molecular genetic testing to decipher cause of sudden deaths, focussing on cardiovascular disease and detecting disease-causing gene variants.

- Association of body composition and cardiovascular disease with the aid of bioelectrical impedance analysis.
- **Breast cancer** diagnostics & pharmacology: use of organoids to develop prognostic profiles for therapy decisions and spheroids for drug monitoring.
- Use of portable MRI and blood metabolomics for diagnosing neonatal encephalopathy with suspected hypoxic ischaemic encephalopathy (NEHIE) and PET imaging to determine risk factors for cardiovascular disease, to screen lung changes after TB therapy and to determine biomarker for hypoxia in cervix cancer.
- Use of algorithms to detect variants in cystic fibrosis patients.

Sub-theme 2: Innovation in teaching and learning

Program Director: Dr Kgomotso Mathabe, Head of the Department of Urology.



Dr Kgomotso Mathabe chaired the second half of the scientific sessions on Day 1, introducing the second sub-theme of the day and the keynote speaker. In her opening speech, she highlighted that it had been two years since such an event could be held in-person, while still maintaining a virtual connection with those who could not be there physically.

Sub-theme 2: Innovation in teaching and learning: Keynote address

Dr Irene Dankwa-Mullan, Chief Health Equity Officer - IBM Watson Health shared her insights and findings under this subtheme. Her talk included her perspective and experiences in training and research to promote innovation in teaching and learning. Her three key take-home messages were that the principles of learning and teaching, especially in health sciences, should focus on outcomes that will lead to fair, just and equitable health as well as promote processes and methods.



Secondly, innovation in teaching and learning should embrace a blended inclusive approach and embody translational,

transdisciplinary and transformational research approaches. The final point was that our humanity, empathy and diversity of thought are important aspects of advancing innovation in teaching and learning. Ultimately, we need to develop teaching and learning methods that will shift the paradigm in the healthcare system.

Sub-theme 2: Innovation in teaching and learning: Oral presentations



This parallel session was chaired by **Professor Vanessa Steenkamp**, the Deputy Dean of Teaching and Learning at the FHS. The speakers in this session looked at the gaps that need to be filled or addressed in the curriculum within their departments.

Table 5: Oral presentations under sub-theme 2: Innovation in teaching and learning.

Presenter	Title
Miss Tatum Mitrovich	A survey of knowledge, attitudes and practices of plagiarism by undergraduate Healthcare Science students at a selected tertiary academic institution in Gauteng
Mr Benito Swart	SGMs in the South African medical curriculum: Are final-year medical students aware of this marginalized group's healthcare needs
Mr Mabitja Moeta	Development of a competency-based framework to standardize African traditional health knowledge and practices in the nursing curriculum in South Africa
Dr Gerda Venter	Neuroanatomy in the medical curriculum: Our students' perspective

Ethics plays a big role in health sciences and the healthcare system as a whole. One of the great issues faced in the university space is plagiarism where students move towards academic dishonesty instead of putting in the time and work to learn and grow in their respective fields. **Miss Tatum Mitrovich** explored students' knowledge, attitudes and practices of plagiarism. **Mr Benito Swart** pointed out that a gap exists within the current medical curriculum at UP with regard to SGM health education. There is always room to create a more inclusive curriculum to avoid marginalization.

Mr Mabitja Moeta shared research on developing a competency-based framework for understanding African traditional health knowledge and practices within the context of the nursing curriculum. There is still a lot of bias and misunderstanding of African health practices and modern medicine. The suggested solution is for medical practitioners and researchers to engage on an intellectual level so as to forge an environment that will open doors to the future of medicine in all communities regardless of their beliefs and traditions.

Dr Gerda Venter touched on neuroanatomy in the medical curriculum from the perspective of students. The speaker looked at the perception of the subject and the approaches taken by facilitators when teaching the subject. This has led to a lack of applied theoretical knowledge, resulting in a weak foundation for students working towards becoming professionals in this field. Again, this would require a shift in the way such curricula are taught and adjusted more to how students receive the knowledge given.

Sub-theme 3: Resilience in health systems

Program Directors: Mr Michael Stark, 2021-2022 TURF leader



The second day of the event was divided into two morning sessions and one afternoon session. **Mr Michael Stark** opened up the first session by outlining the program for the day. Mr Stark introduced the keynote speaker.

Sub-theme 3: Resilience in health systems: Keynote address

The keynote speaker for this sub-theme was **Professor**

Quinette Louw who is the Executive Head of the Department of Health and Rehabilitation Studies at Stellenbosch University. In her keynote address she spoke on rehabilitation as a restorative health strategy aimed at improving functioning and participation in society. According to a 2020 report, approximately 2.41 billion people need rehabilitation globally. Factors that drive this need include, but are not limited to, disability, aging, mental health, and non-communicable diseases.



The major conditions contributing to an increase in the need for rehabilitation in South Africa include human immunodeficiency virus (including acquired immune deficiency syndrome), tuberculosis, chronic respiratory disease, diabetes mellitus, congenital and neonatal diseases, and burns. The Capacity of Rehab in SA (CaRe SA) is an organization aimed at assessing the current rehabilitation capacity in the South African public health sector.

Sub-theme 3: Health system resilience: Panel discussion

Program Director: Ms Nthabiseng Nkojoana, 5th year Medical Student



Ms Nthabiseng Nkojoana introduced the chairperson of the panel discussion, Dr Saiendhra Moodley. Dr Moodley opened the discussion by defining this theme as the capacity of health actors, institutions and populations to prepare for, and effectively respond to crises, maintain core functions when a crisis hits and inform the lessons learned during a crisis and reorganize if conditions require it. Professor Flavia Senkubuge thereafter touched on ways to strengthen health systems governance to foster resilience. She pointed out that as a country, we need to be clear on what resilience is then work towards building that up.

One has to be able to adapt to circumstances and adopt different strategies and thereafter, transform.



Panellists discussing ways to make foster more resilient health systems, from left to right: Panel chairperson, **Dr Saiendhra Moodley** (Public Health Medicine Specialist, UP), **Professor Flavia Senkubuge** (Deputy Dean of Stakeholder Relations), **Professor Yogan Pillay** (Country Director for the Clinton Health Access Initiative and Professor of Global Health at Stellenbosch University) and **Dr Suzie Malan** (Senior lecturer in the Department of Family Medicine, UP). Visible on the screen is **Professor Lucy Gilson** (Head of the Division of Health Systems and Policy at the University of Cape Town), who joined the team of panellists virtually.

Caring, being aware of what is happening around us and collaboration is key. Professor Gilson added that global responses to Covid-19 were very similar, indicating resilient health systems. Implementation was also highlighted as a key point. Professor Pillay's that poor infrastructure should be considered when defining resilience and we need to first create a solid foundation and improve general governance within our communities before pushing for adaptation. Dr Malan suggested looking at resilience through the lens of vulnerability. She emphasised that constant learning needs to happen from household right up to expert level. She touched on the principles of resilience crucial to building a sustainable system including encouraging learning, collaboration and ensuring adequate resources.

Sub-theme 3: Health system resilience: Oral presentations

Table 6: Oral presentations under sub-theme 3: Resilience in health systems.

Title	Presenter
Dr Celia Filmalter	Critical care interventions associated with postoperative paralytic ileus in patients following abdominal surgery
Mr Neo Legare	Lived experiences of patients diagnosed with HIV-associated cryptococcal meningitis attending two public health facilities in Johannesburg: a phenomenological inquiry

Prof Mariatha Yazbek	Birth outcomes of full term pregnant women following discharge after diagnosis of false labour
Dr Leande Kotze	Prevalence of oral mucosal and periodontal disease amongst patients receiving dialysis

From the session, a number of key points stood out as follows:

Generally, a resilient health system needs to:

- Adapt to the current trends (shifts or changes to the status quo e.g., COVID-19 pandemic),
- Absorb its affected citizens or new people (experts) who can help in its reform,
- Restore itself to its former state or find some sort of 'new normal'.

Based on the work that has been carried out so far in some provinces in SA, key points to note are:

- Rehabilitation is not well integrated into primary care
- Financing for rehabilitation is only about 0.3% of the total provincial health budget
- There are very few qualified personnel in the field



There are many opportunities to improve resilience in SA, including a space for more people to voluntee

in SA, including a space for more people to volunteer (increase in manpower), emerging innovations in many fields for transdisciplinary work, and evidence-based packages providing tools and finances to help with rehabilitation in the country.

Sub-theme 4: Lessons learned from COVID-19

Sub-theme 4: Lessons learned from COVID-19: Panel discussion

Program director: Mr Michael Stark

Chairperson: Prof Tivani Mashamba-Thompson, Deputy Dean for Research and Postgraduate Studies,

FHS, UP



Panellists for this session from left to right were: **Prof Tiaan de Jager** (Dean: FHS, UP); **Prof Tivani Mashamba-Thompson** (Deputy Dean for Research and Postgraduate Studies, FHS, UP), **Dr Mathabo Mathebula** (CEO: Steve Biko Academic Hospital); **Prof Tawana Kupe**: (Vice Chancellor and Principal, UP), Dr Karmani Chetty (CEO: National Health Laboratory Services (joined virtually); and **Prof Ahmed Bawa** (CEO: Universities South Africa).

Panellists shared their experiences on the subtheme: Lessons learned from COVID-19. Prof Tivani Mashamba-Thompson opened the session by defining the topic and reflecting back on how the pandemic has taught us new methods of conducting research and interacting with each other. Prof Tiaan de Jager gave key points about measures such as the UP online system put in place by the FHS to ensure that postgraduate students' research was negatively affected. The online system ensured constant communication between students and

their supervisors and allowed academics and research to commence as normal. Research output units increased significantly indicating the determination of students and their mentors to graduate within the prescribed time-frame. Prof Bawa further highlighted how the pandemic brought university vice chancellors together to work in unity towards combating the pandemic and strive to keep studies going. Diversity-driven approaches was one of the lessons that came out of the pandemic and transdisciplinary teachings across various higher learning institutions will also be seen as a new emerging method.

Dr Mathebula highlighted the pressure the pandemic brought to Steve Biko Academic hospital, which was approached by a plan-as-you-go innovative strategy, constant motivation and convincing of colleagues to be all hands on deck. The COVID-19 pandemic also highlighted the need for more health professionals in South Africa. The importance of disseminating factual healthcare information is vital according to Prof Kupe. Organisations should have standards and norms in place for what information needs to be disseminated. Controlled systems also need to be in place during pandemics and health-related matters for disseminating information without violating anyone's freedom of expression. Dr Chetty described the journey the NHLS went through in dealing with the pandemic and stated key

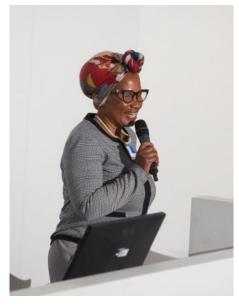
strategies that have been identified and implemented. These include the decentralisation of testing laboratories, rapid procurement of equipment, preparedness, strengthening of surveillance systems, occupational health importance, other testing strategies, improved prevalence studies, strengthening partnerships, maintaining other priority programmes as well as care and support for healthcare workers.

Sub-theme 4: Lessons learned from COVID-19: Oral presentations

Chairperson: **Professor Joyce Mothabeng**, the Head of Department of Physiotherapy

Oral presentations provided insights on South Africa's current position post-COVID-19. The psychological well-being of healthcare professionals has emerged as a significant challenge post COVID-19. Future research and interventions are needed to improve the mental health of healthcare workers and professionals affected by pandemics. Evidence suggests that SARS-CoV-2 also negatively affected athletes. COVID-19 was also found to have a negative effect on mental health, physical activity as well as the quality and amount of sleep of students. Such findings will assist future research in finding ways to treat athletes and students post COVID-19 and prepare them for other pandemics to come. Presentations also brought out the vaccination strategy for COVID-19.

Vulnerable populations (undocumented, remote areas) are a vital target group to consider in the COVID-19 response or any other pandemic. Healthcare workers need to come up with strategies to gain the trust of these individuals and make them



interested in obtaining healthcare. Presentations once again highlighted the negative effects of the pandemic on the mental and physical health of students and healthcare workers. These findings need to be considered when developing future strategies in responding to pandemics and dealing with COVID-19, which is here to stay.

Table 7: Oral presentations under the sub-theme 4: Lessons learned from Covid-19.

Presenter	Title
Dr Moselene du-Plessis	Nursing education in a pandemic: students' perceptions on readiness for their future careers as registered nurses post COVID-19.
Dr Carolette Snyders	Frequency of multi-organ involvement in athletes assessed 10-28 days after onset of SARS-COV-2 infection.
Dr Adriano Mendes	Multi-country study of SARS-COV-2 and associated risk factors and its association to cardiovascular risk - a retrospective review among health care workers in Cote d' Ivoire, Burkina Faso and South Africa.
Ms Nicole Cromme	Impact of the Covid-19 pandemic on the physical health of school of healthcare science students at a selected higher institution.

Ms Kelly Kaulback	Submaximal exercise heart rate is increased in athletes recovering care from recent sars-cov-2 infection.
Ms Jeanne van Rensburg	Describing the impact of covid-19 on research participation in the NESHIE study.
Dr Khanyisile Tshabalala	Clinical disease presentation in vaccinated and unvaccinated COVID- 19 positive patients – experiences from an outpatient health care facility.
Dr Mori Boshomane	COVID-19 vaccination of undocumented and vulnerable populations.

Critical key points emerged from both sessions which can be used to tackle future emerging pandemics. These include:

- Partnerships and collaborations make a difference when dealing with a pandemic.
- Creating critical mass scientists with proper infrastructure to be on the leading and reactive edge when pandemics arise.
- It is vital to educate communities on proper healthcare.
- Steve Biko Academic hospital should stick to its mandate of providing highly specialised services, training competent healthcare professionals and being a platform for research and innovation.
- Universities need to rebuild trust in science and build a framework for social justice in communities.
- Leadership played a huge role at UP for handling COVID-19 and should still be an important factor in coming together to make impactful decisions in future pandemics.
- Prioritise mental and physical well-being of everyone.
- Vulnerable populations (undocumented, remote areas) are a vital target group to consider in pandemic responses.

Sub-theme 5: The future research terrain

Program Director: Dr Emmanuel Matsebatlela, Head: International Electives & Education office



Sub-theme 5: The future research terrain: Keynote address

Dr Emmanuel Matsebatlela introduced **Prof Eric Buch**, the keynote speaker for this session. Prof Buch is the deputy chair and deputy technical lead of the Ministerial Task Team for the National Human Resources for Health Strategy 2030. He is

also Professor of Health Policy and Management at UP and a specialist in Public Health Medicine.

Prof Buch stated that the FHS has delivered a threefold increase in NRF-rated researchers, published in high-impact factor journals, and has grown to take on more PhD students over the past decade. The address was inspiring and thought-provoking in that it highlighted the critical junction the FHS is at, to continue the same research trajectory or leap to new research levels.



Buch encouraged the FHS to take the time to map out future

research and ask what success will be in the future and what to do to get there. The address emphasised the importance of discovery-based research in scientific focus areas identified by the NIH. Then also to look in the literature to connect with and set up new avenues in partnership and collaboration. In so doing he concluded the FHS will leap to new research levels in the future.

Sub-theme 5: The future research terrain: Panel discussion

Chairperson: Professor Flavia Senkubuge, Deputy Dean of Stakeholder Relations

Panellists for this session were: Professor Jannie Hugo, Director of the UP COPC Research Unit; Professor Lekan Ayo-Yusuf (Chair of SHSPH), Mrs Candice Herd and a PhD candidate at the Institute of Cellular and Molecular Medicine). Joining the virtual panel was Professor Pierre Ongolo-Zogo, Senior Researcher Associate Professor at University of Yaounde Cameroon. Professor Sunil Maharaj, the Vice Principal for Research and Innovation was among the audience for this session. The panellists discussed the challenges of future research including the incongruity between policy and practice, evidence from the community and the lack of incentives for applied science. There is a



Future research terrain panellists from left to right: **Prof**Jannie Hugo (Director COPC), **Prof Sunil Maharaj** (Vice
Principal for Research and Innovation), **Prof Lekan Ayo-Yusuf**(Chair of School of Health Systems and Public Health), **Prof**Flavia Senkubuge, Deputy Dean of Stakeholder Relations, **Prof Eric Buch** (Deputy chair and deputy technical lead of the
Ministerial Task Team for the National Human Resources for
Health Strategy 2030) and **Mrs Candice Herd** (UP ICMM)

pressing need to address the great burden of disease in Africa. The panellists all agreed that intentionality to sustain innovation is what will change lives. Opportunities should be created for young researchers to nurture talent and potential. Undergraduate students should have opportunities to explore and acquire a research interest through improved funding, improved visibility of established programs, and encouraging student contact with research groups. The discussion encouraged the FHS to value what we as Africans are capable of in medical research and to embrace the African research renaissance.

Sub-theme 5: The future research terrain: Oral presentations

Table 9: Oral presentations under sub-theme 5: The future research terrain.

Presenter	Title
Miss Sibongile Mbongo	Phylogenetic analysis and genetic population structure of secondary malaria vectors in Limpopo, Vhembe district.
Dr Anri Human	Every breath counts! Inspiratory muscle training in children with neuromuscular diseases.
Prof Ericka L'Abbe	Beatings, broken bones, bullet holes and 3d prints: the evolution of bone trauma from the morgue to the virtual world/space.
Mr Francois du Toit	Gradual onset cycling injuries are associated with increased years of cycling, increased weekly training, allergies and chronic diseases: a cross-sectional study in 62377 cyclists.

Dr Anri Human presented randomised controlled trials on inspiratory muscular training in children with neuromuscular disease. Inspiratory muscular training may improve the quality of life in children with neuromuscular disease.

Ms Sibongile Mbongo presented on the genetic population structure of malaria vectors in Limpopo where different species of mosquito behave differently and that more data is needed to ensure the efficacy of preventative methods.

Prof Ericka L'Abbe presented on the use of 3D prints in the study of bone trauma. The ethical problem prohibits the use of specimens as bone trauma examples for teaching students. This results in a lack of practical experience. She proposed the use of this technology as it has applications in academia, the medical examiner's offices



and surgical disciplines. **Mr Francois du Toit** discussed risk factors associated with the gradual onset of cycling injuries, which seem to increase in women as they get older. The risk factors identified included increased years of participation, increased weekly training, history of allergies and chronic disease.

Research sessions

Open Access Q&A session

Chairperson: Ms Kabelo Kgarosi, Assistant Director of the FHS Library.

This session was delivered in collaboration with UP Library Services, a FHS partner in delivering on the UP's research visibility and impact mandate. Ms Kabelo Kgarosi opened the Q&A session by reflecting on lessons learned from COVID-19 with regards to the importance of rapid, readily available research outputs, and the need for research findings to be made readily available to all stakeholders. Joining her on the panel was Prof Michael Pepper (Department of Immunology, FHS, researchers at the Open Science engagement, Ms Veliswa Tshetsha (Senior Coordinator for Scholarly Communication in the Department of Library Services), and on the virtual platform and currently based in Kenya, Ms Joy Owango (Director of the Training Centre of Communication).

Ms Tshethsa briefly explained the characteristics of open access publications. Open access publications should be online to allow researchers anywhere in the world to gain access. This does not only include journal articles, but research data too. During Faculty Research Day, collaboration was mentioned repeatedly and sharing research findings and data is one way to find relevant collaborators. Open access publications should also be less restricted in terms of copyrights and licensing. Other characteristics include their ability to enhance what is out there instead of duplicating what has been published already. Visibility is also enhanced by publishing in accredited sources.



Panellists for this session from left to right: Chairperson, **Ms Kabelo Kgarosi** (Assistant Director of the Health Sciences Library), **Prof Michael Pepper** (Department of Immunology, FHS, UP) and **Ms Veliswa Tshetsha** (Senior Scholarly Communication in the Department of Library Services).

Ms Owango observed that how open access publication can aid in the competitiveness of a University, enhance collaborations, improve university ratings and increase funding. Information should be strategically released to promote the ready adoption of open access publishing among higher education institutions and researcher.

Prof Pepper discussed the paradoxes of publishing in the scientific community. Researchers often have to use valuable research funding to be able to share their research with the science community at large. He spoke on how one works towards putting information together that could benefit society but without funding, the information gets hidden behind a paywall which means people

would need to pay to see your work if you do not pay to publish it. He spoke on how the system needs to be revamped in order to overcome restrictions when it comes to finding relevant articles that have the potential to make a difference within the health system.

The Soap Box Event

The Soap Box was a highly entertaining and stimulating event. This session was chaired by Prof Leanne Sykes, the head of the Department of Prosthodontics. Ten undergraduate students/groups took up the challenge. They presented the audience with a wide variety of interesting, relevant and truly innovative research ideas and topics.



Maurice Hinterholzer, Gareth Lubbe and Gerrit Thom presenting their findings on the topic "Asthma mortality in South Africa: a critical look at the availability of anti-asthmatics in Tshwane at the primary care level in the public sector" during the soapbox session on Faculty Research Day.

Table 8: Soapbox event participant names and topics.

Name	Topic
Alexandra Erskine	The utilisation of social media in improving skin cancer screening and self-evaluation behavioural changes amongst South Africans.
Kgothatso Malope	Long term synaptic deficiencies in chronic substance abuse.
Jessica Nicole Smit	Technological innovation to improve life quality of paraplegics.
Nompumelelo Mthimunye	A novel projection of the wrist during trauma radiography.
Benn Johan De Klerk	Happiness" as seen from a student's perspective.
Maurice Hinterholzer, Gareth Lubbe and Gerrit Thom	Asthma mortality in South Africa: a critical look at the availability of anti-asthmatics in Tshwane at the primary care level in the public sector.
Pedran Wessels	The need for improved methods to diagnose pancreas cancer.
McLaud Mokwena	Abrasion Arthroplasty of the knee.
Luandri Van Vuuren	The incidence of self-perceived symptoms related to temporomandibular joint disorders amongst fourth year dental students.
Daniella Samouilhan	Nutrispread to reduce the risk of diseases caused by malnutrition in underprivileged communities.

A panel of five judges voted for the "Best overall presentation" and "The most entertaining presentation", while the third winner was selected based on "The popular peoples' Choice". **Luandri Van Vuuren** won the best overall prize as well as the audience vote, while **Alexandra Erskin**e scooped the most entertaining award. Regardless of who won, every idea presented was a potentially worthwhile project and we have encouraged the students to make contact with any members of TURF or Prof Sykes who will be able to link them up with suitable research supervisors.





Prof Leanne Sykes: 'We really hope they follow through and pursue these projects, and look forward to seeing the outcomes being presented at future research days as well as submitted for publication. We also hope that this event will act as a stimulus for their peers, and other members of staff who were there in support to start thinking of novel and exciting new research avenues to explore.'

Panel Discussion: Research myths from the perspective of undergraduate students

Chairperson: Bryce Svensson (4th year medical student)

Panellists: Emily MacGregor, Mayuri Ramnarain, Alecia Brits, Nicole Creighton, Nobuhle Vanessa Gxekwa, Michael McMaster and McLaud Mokwena.

This session was organised by TURF or the TUKS Undergraduate Research Forum. The 2022 leader of TURF, Mclaud Mokwena, was joined by representatives from other FHS undergraduate societies including Bryce Svennson and Alecia Brits (Tuks Student Surgical Society), Emily MacGregor (Reach UP) and Michael McMaster and Nobuhle Vanessa Gxekwa (Pulse UP). Aside from organising the session, McLaud served as one of the panellists, Michael directed the session, while Emily McGregor chaired the session.



Most of the research in the FHS is conducted by postgraduate students, rather than undergraduate students. Limited participation may be attributed to certain myths held by undergraduate students. The panel revealed some interesting insights, including that undergraduate students believed that research is limited to postgraduate studies and that there is limited time is available for studies and research. Undergraduate students also feel that their research ideas may be overly ambitious and won't be accepted or funded, or that they can't publish in peer reviewed journals. Many undergraduate students think that they can only be involved in undergraduate research if they perform well academically. To dispel these myths, the panel of myth-busters suggested various ways to become involved in research:

• Undergraduate students should connect with their peers who are involved in undergraduate research.

- Learn time management techniques and choose research scopes such as secondary research that have flexible hours and are better suited for busy undergraduates.
- Research modules should be incorporated into the undergraduate curriculum.
- Students could be paired with supervisors who can mould their research ideas, secure funding and
 resources and are more likely to publish in peer-reviewed journals through initiatives such as
 TURF.
- Undergraduate students should have mentorship and support to achieve success in both academics and research.

The panel discussion was insightful and informative. The panel members are living proof that undergraduate studies can be successfully paired with research activity. The increased involvement of undergraduate students in research is essential for the producing high-quality research clinicians by the FHS.



This panel discussion was attended by both the Dean of the FHS, Prof Tiaan de Jager (founder of TURF) and the Deputy Dean for Research and Postgraduate Studies, Prof Tivani Mashamba-Thompson (current custodian of TURF). Both the Dean and Deputy Dean are inspired to collaborate with undergraduate societies in tailored developing research capacity building programs for undergraduate students.

Interactive workshops

Mental health interactive workshop

Chairperson: Professor Gerhard Grobler, Head of Clinical Psychiatry at UP.



The session was broken down into different sub-themes to gain a well-rounded discussion about mental health (MH). Most people view MH as affecting emotional regulation, cognition and behaviour. People are viewed as "normal", when they fall within the bracket of the majority. Mental health is also perceived as being age-dependent. Older people seem to be more believed and validated because they have more experience. Positive emotions such as, love, hope, compassion, gratitude are viewed as signs of mental wellbeing. Spirituality helps people to connect with their

positive emotions. Mental wellbeing is associated with the ability to read social cues, regulate emotions accordingly, and be aware of others' emotions. How one responds to stress factors, ultimately affects how they are perceived mentally. Words like strong, weak, brave, courageous and cowardly get thrown around in such circumstances.

Personalized healthcare interactive workshop



Chairperson: **Prof Kitty Uys**, RESCOM Chair for the School of Healthcare Sciences

The workshop highlighted the need for personalised healthcare for people battling with substance use (known as service users), as they are re-integrated back into their communities. The Community Oriented Substance Use Programme (COSUP) team discussed various ways to support service users in this reintegration process. Prof Uys and Dr Michelle Janse van Rensburg,

explained that COSUP is a community-based initiative in the City of Tshwane that uses a harm reduction approach to prevent and manage substance use. COSUP with the help of social workers such as Mr Likwa Ncube, assist service users by keeping them accountable, providing emotional support and assisting family members and communities to better understand the complexities of substance addiction. A former service user, Mr Warren Spannenburg, shared his experience of being supported by COSUP through his recovery and community re-integration, and is now employed by COSUP as a peer educator. Warren highlighted the importance of changing communities' attitudes toward active substance users by asking the audience to "watch your words", as judgment is often a barrier for service users from seeking assistance.

COSUP is also involved in seeking out potential service users in hotspot areas such as those frequented by the homeless under bridges and provides needle exchange initiatives that allow COSUP members to build trust and form relationships with active substance users.

Interactive poster session

Coordinators and technical support: Mrs Hildah Kilani, Mrs Bianca Ahdong, Mrs Linky Mokgohlwa and Mr Lesiba Mpati



Mrs Hildah Kilani, Mrs Bianca Ahdong, Mrs Linky Mokgohlwa and Mr Lesiba Mpati coordinated the e-poster session and provided technical support ensuring that all posters appeared on the screen in the order and time slot presented on the Faculty Research Day program. This section enabled more FHS researchers to showcase their research on the day. The e-poster were presented in line with the allocated theme.

All posters presented at the 2022 Research Faculty Day are

published via the UP library repository (open access).





Interactive e-poster presentations by **Ms Cailin Nieuwenhuizen** (left) (Department of Haematology) and **Ms Nontokozo Zondo** (r ight) (Department of Nursing Science).



Awards ceremony

The Faculty Research Day award ceremony was funded by the UP's Department of Research and Innovation (DRI). **Prof Sunil Maharaj**, the Vice-Principal: Research, Innovation and Postgraduate Education was our special guest for the awards ceremony. In his speech to close the scientific section of the event, he acknowledged the significant increase in FHS research outputs in 2021 before handing over the prizes to the winners of



each session.



The FHS Choir at the Faculty Research Day awards ceremony.



Mr Mabitja Moeta (Department of Nursing Science) with Prof Sunil Maharaj



Prof Tahir Pillay with Prof Sunil Maharaj

Dr Siphesihle Robin Nxele managed the adjudication and selection of the respective award winners with the help of adjudicators who served as judges for each session. The FHS choir joined this session to congratulate the winners and celebrate the end of a successful two day event. The following recipients received awards:

Best oral presentation

Undergraduate/Honours category: Ms Tatum Mitrovich – Department of Physiotherapy

Undergraduate/Honours category: Miss Nicole Cromme – Department of Physiotherapy

Masters category: Mr Neo Legare, SHSPH

Doctoral category: Mr Mabitja Moeta – Department of Nursing Science

Emerging academic (Postdocs, Lecturers, Senior Lecturers) category: Dr Gerda Venter – Department of Anatomy

Advanced academic (Associate Professors and Professors) category: Prof Tahir Pillay—Department of Chemical Pathology.

Best e-Poster

Undergraduate

1st: Miss Robyn Denton, Department of Forensic Medicine

2nd: Miss Melody Murovhi, Department of Physiology

3rd: Miss Lz Spaltman, Department of Medical Microbiology

Honours

1st: Mr Michael Stark, Department of Physiology 2nd: Miss Anjali Mathew, Department of Medical Microbiology

3rd: Mr Darren Chetty, Department of Pharmacology

Masters

1st: Dr Gopolang Zwide, Department of Psychiatry 2nd: Miss Caitlin Mason, Department of Physiology 3rd: Ms Megan Holborn, Department of Immunology

Doctoral

1st: Miss Mandy Naude, Department of Physiology 2nd: Mrs Teresia Dzhugudzha, Department of Occupational Therapy 3rd: Miss Sharon Olifant, Department of Medical Microbiology

Emerging Academics

1st: Ms Hafiza Parkar, Department of Pharmacology 2nd: Miss Nirmala Chengalroyen, Department of Nursing Science

3rd: Dr Jeanine Fourie, Department of Periodontics

Advanced Academics

1st: Prof Sandra Spijkerman, Department of Anesthesiology 2nd: Prof Werner Cordier, Department of Pharmacology

3rd: Prof Thomas Ebenhan, Department of Nuclear Medicine



Mr Michael Stark with Prof Sunil Maharaj



Ms Hafiza Parkar with Prof Sunil Maharaj

Best exhibition stand by an entity



The best exhibition stand by an entity award to the value of R20 000 towards research: **Institute for Cellular and Molecular Medicine (ICMM)**

Faculty of Health Sciences champion of research visibility and impact awards

Researchers with the most citations in 2021

1st prize

Prof Theresa Marié Rossouw, Department of Immunology Dr Michael Terence Boswell, Department of Internal Medicine Prof Veronica Ueckermann, Department of Internal Medicine

2nd prize

Prof Anne Elisabeth Mercier, Department of Physiology

3rd prize

Dr Simbarashe Takuva, SHSPH

Vote of thanks

Prof Tivani Mashamba-Thompson gave special thanks to all keynote speakers, presenters and sponsors of the event. She thanked presenters, attendees and the steering committee of the 2022 Faculty Research day. In giving a special thanks to the logistics and planning committee, she called the team to the stage to be seen by the audience.



Prof Mashamba-Thompson's vote of thanks with special appreciation for the logistics and planning committee

In her speech, Prof Mashamba-Thompson announced the following research initiatives that are part of the 2023 FHS research implementation plan.

- To improve staff and student participation in future Faculty Research Days and in line with our commitment to providing an enabling and supportive environment for the conduct of research in the faculty, FHS members of staff were invited to join tailored research mentorship and collaboration programs. The program can be a <u>self-evaluation form</u>. Results of this evaluation will help inform 2023 faculty-based support activities i.e. grant writing, scientific writing, research methodology support, research mentoring.
- In line with the UP's priority area, 'visibility and impact of research', she called for existing research groups to become visible so they can be assisted and linked with existing UP research platforms. FHS research groups are defined as a group of researchers working together on a particular health science-related research topic, outside of the existing FHS research entities. These research groups may be composed of researchers all from the same school/subject/research focus. FHS Research Group visibility form can be accessed via this link: https://forms.gle/GrgVteiB3FNfA6Qc6

Mashamba-Thompson ended her vote of thanks by opening the social event, the final session of the 2022 Faculty Research Day. This event was aimed at creating a networking environment for researchers to start new collaborative research projects.

2022 Faculty Research Day committees

Scientific committee

The 2022 Faculty Research Day scientific committee consists of a diverse, dynamic team from the FHS and UP Library Services. The scientific committee was responsible for conceptualising the conference programme as well as identifying and nominating speakers and key stakeholders to ensure participants were attracted to the 2022 Faculty Research Day. The Faculty Research Day adjudicators also form part of the scientific committee. This was done under the leadership of Prof Mashamba-Thompson, as the chairperson of the Scientific Committee.



Prof Tivani Mashamba-Thompson (Chairperson) – Deputy Dean: Research and Postgraduate Studies



Prof Vanessa Steenkamp Deputy Dean: Teaching and Learning



Prof Flavia Senkubuge Deputy Dean: Stakeholder Relations



Prof Tahir Pillay,
Department of Chemical
Pathology, School of
Medicine (SoM)



Prof Kitty Uys,
Department of Occupational
Therapy, School of Healthcare
Sciences (SoHCS)



Prof Razia Khammissa, Department of Periodontics and Oral Medicine, School of Dentistry (SoD)



Prof Joyce Mothabeng, Department of Physiotherapy, SoHCS



Dr Joyce Shirinde, SHSPH



Dr Michelle Visagie, TURF



Mrs Natasha Jeftha, Research office



Ms Anwani Nekhumbe, Research office



Ms Kabelo Kgarosi, Library services



Ms Veliswa Tshetsha, Library services



Mrs Samantha Hodgson, Dean's office



Mrs Gertrude Mamabolo, Research office



Mrs Marianna Kotze, Marketing



Mr Michael Stark, TURF



Mr McClaud Mokwena, TURF

Names of adjudicators

The names of the adjudicators and reviewing allocations are listed in Table 10.

Table 10: Faculty day adjudicators and type of research reviewed.

Adjudicator	Type of Research to review
Dr Mlindeli Gamede	Pre-poster adjudication
Dr Moloko Cholo	Pre-poster adjudication & exhibition
Prof Isabel Coetzee	Pre-poster adjudication & exhibition
Ms Christa Ellis	Pre-poster adjudication
Prof Rhena Delport	Pre-poster adjudication & exhibition
Dr Chrisna Durant	Pre-poster adjudication & exhibition
Prof Marthie Ehlers	Pre-poster adjudication & exhibition
Prof Werner Cordier	Pre-poster adjudication
Mrs Hafsa Essop	Pre-poster adjudication
Dr Brian Flepisi	Pre-poster adjudication
Dr Marissa Balmith	Pre-poster adjudication & e-poster
Dr Craig Grobbelaar	Pre-poster adjudication
Dr Yvette Hlophe	Pre-poster adjudication
Prof Annie Joubert	Pre-poster adjudication
Dr Abe Kasonga	Pre-poster adjudication & exhibition

Prof Marleen Kock Pre-poster adjudication

Miss Gabi Kruger Pre-poster adjudication

Ms Helga Lister Pre-poster adjudication

Dr Kathryn Malherbe Pre-poster adjudication

Dr Astrid Turner Pre-poster adjudication

Prof Janet Mans Pre-poster adjudication

Prof Doriccah Peu Pre-poster adjudication

Dr Rahaba Marima Pre-poster adjudication

Mr Henry Msimango Oral presentation

Ms Claudia Nogueira Oral presentation

Dr Trevor Nyakudya Oral presentation

Miss Andrea Prinsloo Oral presentation

Dr Heleen Roos Oral presentation

Mr Okuhle Sapo Oral presentation

Prof Prashilla Soma Oral presentation

Prof Leanne Sykes Oral presentation

Dr Cheryl Tosh Oral presentation

Dr Iman van den Bout Oral presentation

Dr Chantal van Niekerk Oral presentation

Dr Mia van Rooy Oral presentation

Prof Albert Schoor Oral presentation

Prof Candice van Wyk Oral presentation

Prof Friede Wenhold Oral presentation

Prof Janine Wichmann Oral presentation

Prof Michael Pepper Oral presentation

Logistics and planning committee

The 2022 Faculty Research Day Organising Committee comprised 35 FHS staff, under the leadership of **Mrs Gertrude Mamabolo** and **Ms Anwani Nekhumbe** as the Chairpersons of this committee. The committee members consisted of staff members from various FHS schools and departments including the Deanery, marketing and logistics departments. This committee was responsible for inviting sponsors, managing the website and all logistics, including delegates' registration, online attendance and in-person attendance sites. The committee worked closely with the Scientific Committee to ensure efficient communication and coordination with delegates and presenters in preparation for the event.



Gertrude Mamabolo (Research office)



Anwani Nekhumbe (Research office)



Linky Mokgohlwa (Library services)



Leanne Sykes (Prosthodontics)



Glenda Makate (Library services)



Bianca Camilla Ahdong (SHSPH)



Hildah Kilani (SHSPH)



Lesiba Islen Mpati (SHSPH)



Jacky Mabokela (Dean's office)



Violet Phooko (Research intern)



Bonolo Lenonyane (Research intern)



Takalani Makhanthisa (Research assistant)



Samantha Hodgson (Dean's office)



Natasha Jeftha (Research office)



Michael McMaster (Undergraduate volunteer)



Emily Mac Gregor (Undergraduate volunteer)



Nicole Creighton (Undergraduate volunteer)



Tasha Erasmus (Undergraduate volunteer)



Dipuo Tshelane (Undergraduate volunteer)



Mclaud Mokwena (Undergraduate volunteer)



Alecia Brits (Undergraduate volunteer)



Mayuri Ramnarain (Undergraduate volunteer)



Michael Stark (Undergraduate volunteer)



Tronel Visser (Undergraduat e volunteer)



Nthabiseng Nkojoana (Undergraduate volunteer)



Marianna Kotze (Marketing)



Bong-Akee Shy (Postdoc)



Boitumelo Moetlhola (Postdoc)



Ane Pieters (Postdoc)

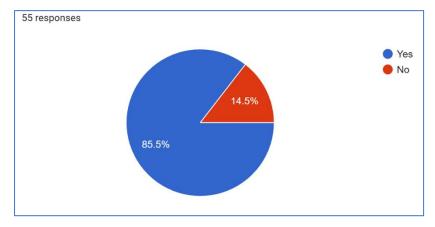


Robin Nxele (Postdoc)

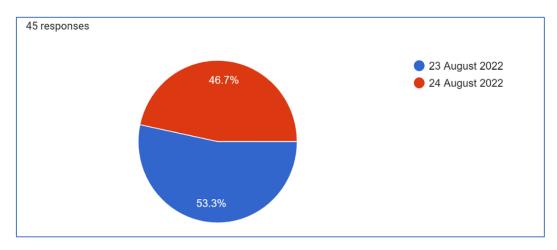
2022 Faculty Research Day evaluation findings

We received 59 (7.9% of attendees) responses to our Google form evaluation. Of these 36 were from the School of Medicine, 5 from School of Dentistry, 7 from School of Healthcare Sciences, 5 from School of Health Systems and Public Health and the rest were from other departments.

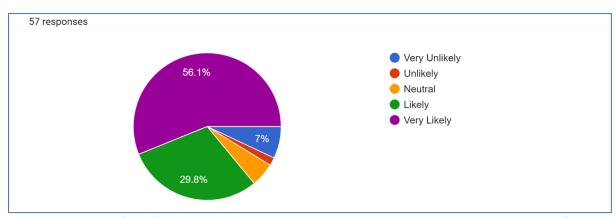
Most respondents attended both days (85.5%) of Faculty Research Day. Of those respondents who only attended one day, 53.3% attended Day 1.



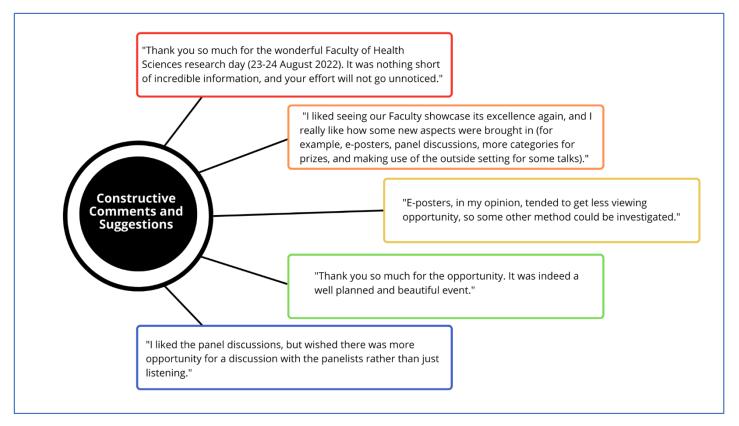
Most respondents attended both days (85.5%) of Faculty Research Day.



Of those respondents who only attended one day, 53.3% attended on Day 1.



Most respondents (85.9%) indicated that they are likely to recommend Faculty Research Day to a friend or colleague, suggesting that Faculty Research Day was well-received.



Respondents gave constructive comments and suggestions with a few summarised above, which will be considered for the planning of Faculty Research Day 2023.

Acknowledgements

- Dr Siphesihle Robin Nxele: For drafting of the Faculty Research Day report under the supervision of Prof Tivani Mashamba-Thompson.
- Dr Cheryl Tosh for editing the report.
- Dr Boitumelo Moetlhoa for writing the summary on the sub-theme: Lessons learned from COVID-19.
- Dr Ané Pieters for writing the summary on the sub-theme: The future research terrain.
- Dr Bong-ackee Shey for writing summaries on the sub-theme: Resilience in health systems as well as the Mental Health Interactive workshop.
- Dr Hyunsul Jung for writing the summary on the sub-theme: Disruptive technologies.
- Dr Thabo Hamiwe for writing summaries on the workshop: Personalised Healthcare Interactive and panel discussion: Research myths from the perspective of undergraduate students.
- Prof Leanne Sykes for writing a summary for the Soap Box session.
- 2022 Faculty Research Day Steering Committee.
- 2022 Faculty Research Day Scientific Committee.
- The undergraduate students who assisted in putting together the panel discussion led by their peers and those who facilitated it.
- Eyescape photography and the production team for documenting all aspects of Faculty Research Day 2022.
- All volunteers who gave up time to assist in the smooth running of the two day event.
- UP Services and Technical Services who assisted with preparing the venue.
- Amor caterers for their culinary delights.

Appendices

VENUE: TSWELOPELE BUILDING, PRINSHOF SOUTH CAMPUS DAY 1: 23 August 2022

Programme directors: Prof Werner Cordier and Dr Kgomotso Mathabe

Time	Item			
12:30 - 12:40	Welcome and opening remarks - Prof de Jager (Dean, Faculty of Health Sciences) Venue: Tswelopele Building – Lecture hall			
12:40 - 12:50	Faculty of Health Sciences Choir Venue: Tswelopele Building – Lecture hall			
12:55 - 13:15	First keynote address Sub-theme 1: Disruptive technologies Presenter: Professor Nitika Pai (Associate Professor - McGill University) Venue: Tswelopele Building – Lecture hall			
13:25 - 14:05	Panel discussion Sub-theme 1: Disruptive technologies Chairperson: Professor Marietjie Venter (Head: Zoonotic arbo- and Respiratory virus Research program, University of Pretoria) Venue: Tswelopele Square			
14:15 - 15:35	Parallel session 1 Oral presentations Sub-theme 1 Disruptive technologies	Parallel session 2 Oral presentations Sub-theme 4 Lessons learned from COVID-19 Chairperson: Professor Joyce Mothabeng (HOD – Physiotherapy, University of Pretoria)	E-Poster presentations Sub-theme 5 The future research terrain	
	Venue: Tswelopele Building – Lecture hall	Venue: Tswelopele Building – Lecture hall	Venue: Tswelopele Building - Foyer	
15:35 - 15:50	COMFORT BREAK			
16:00 - 16:20	Second keynote address Sub-theme 2: Innovation in teaching and learning Presenter: Dr Irene Dankwa-Mullan, Chief Health Equity Officer: Merative - formerly known as IBM Watson Health Venue: Tswelopele Building – Lecture hall			
16:25 - 17:05	Parallel session 3 Oral Presentations Sub-theme 2 Innovation in teaching and learning Chairperson: Professor Vanessa Steenkamp (Deputy Dean: Teaching & Learning)	Parallel Session 4 Mental Health Interactive Workshop Chairperson: Professor Gerhard Grobler (Head of Clinical Unit Psychiatry, University of Pretoria)	E-Poster presentations – Sub- theme 3 Resilience in health systems	
	Venue: Tswelopele Building – Lecture Hall	Venue: Tswelopele Building – Lecture Hall	Venue: Tswelopele Building-Foyer	

DAY 2: 24 August 2022

Programme Directors: Ms Nthabiseng Nkojoana and Mr Michael Stark

08:30 - 08:50	Third keynote address Sub-theme 3: Resilience in health systems Presenter: Professor Quinette Louw (Executive Head of the Department of Health and Rehabilitation Studies at Stellenbosch University)					
	Venue: Tswelopele Building – Lecture h					
09:00 - 09:40	Panel discussion – <i>Sub-theme 3</i> : Resilience in health systems Chairperson: Dr Saiendhra Moodley (Public Health Medicine Specialist, University of Pretoria)					
	Venue: Tswelopele Square					
09:50 - 10:30	Parallel session 5 Oral Presentations Sub-theme 3 Resilience in health systems	Parallel session 6 Workshop: Personalised healthcare interactive Chairperson: Prof Kitty Uys (HOD: Occupational Therapy – University of Pretoria)		E-Poster Presentations Sub-theme 1 Disruptive Technologies		
	Venue: Tswelopele Building – Lecture hall	Venue: Tswelopele Building hall	g – Lecture	Venue: Tswelopele Building - Foyer		
10:30 - 11:00	MORNING REFRESHMENTS					
11:00 - 11:40	Panel discussion – <i>Sub-theme 4</i> : Lessons learned from COVID-19 Chairperson: Prof Tivani Mashamba-Thompson (Deputy Dean: Research and Postgraduate Studies)					
	Venue: Tswelopele Square					
11:50 - 12:30	Parallel session 7 Open Access Q&A session: Library and Research Office Chairperson: Ms Kabelo Kgarosi (Assistant Director: Faculty of Health Sciences Libraries)		Parallel session 8 SoapBox Chairperson: Prof Leanne Sykes			
	Venue: Tswelopele Building – Lecture h	all	Venue: Tswelopele Building – Lecture hall			
12:30 - 13:20	LUNCH BREAK					
	Programn	ne Director: Dr Emmanuel Mat	sebetlela			
13:30 - 13:50	Fourth keynote address Sub-theme 5: The future research terrain Presenter: Professor Eric Buch (Professor, Health Policy and Management – SHSPH)					
	Venue: Tswelopele Building – Lecture Hall					
14:00 - 14:40	Panel discussion – <i>Sub-theme 5</i> : The future research terrain Chairperson: Professor Flavia Senkubuge (Deputy Dean: Stakeholder Relations)					
	Venue: Tswelopele Square					

14:50 - 15:30	Parallel session 9 Oral presentations Sub-theme 5 The future research terrain	Parallel session 10 Undergraduate session Round table discussion on research myths from the perspective of undergraduate students	
	Venue: Tswelopele Building – Lecture hall	Venue: Tswelopele Building – Lecture hall	
15:40 - 16:10	Awards ceremony: Professor Sunil Maharaj - Vice-Principal: Research, Innovation and Postgraduate Education Venue: Tswelopele Building – Lecture hall		
16:10 - 16:20	Closing remarks: Professor Tivani Mashamba-Thompson (Deputy Dean: Research and Postgraduate Studies) Venue: Tswelopele Building – Lecture hall		
16:30 -	SOCIAL FUNCTION		