



The development of strategic research areas at SU



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Task team asked to draft proposal



Task team members:

- Prof Jannie Hofmeyr
- Prof Alakendra Roychoudhury
- Prof Johan Fourie
- Prof Nico Gey von Pittius
- Prof Karen Esler
- Prof Hansie Knoetze
- Prof Cherryl Walker
- Prof Zsa-Zsa Boggenpoel
- Maryke Hunter-Husselmann



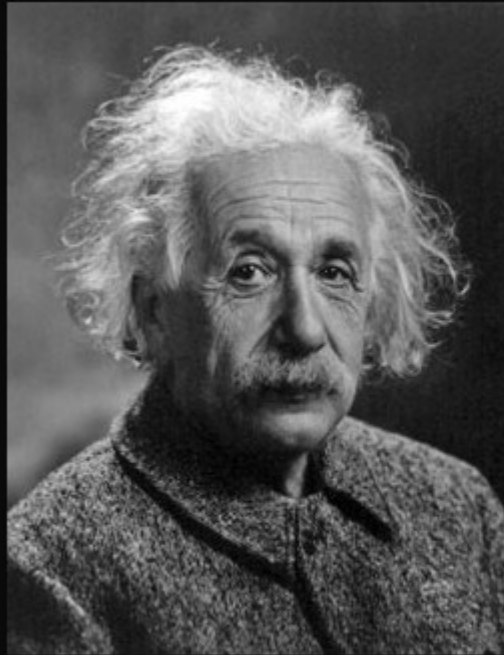
University-wide inputs are needed



- The task team wishes to emphasise that sufficient and proper **consultation with academic staff** is regarded as one of the most important success factors of the proposed research themes. Academic staff, postdocs and post-graduate students at SU need to be part of the process.
- Although the ten faculties will be asked for their inputs in July/August, it is proposed that separate “**think tanks**” also be formed to invite inputs into the final themes. These think-tanks should encourage the participation of more junior academic staff members, post-graduate students and postdocs who would not usually or necessarily attend faculty Board meetings. This will ensure maximum involvement from all stakeholders in the university.



WHY?



If we knew what it was we were doing, it would not be called research, would it?

(Albert Einstein)

izquotes.com



WHY?





WHY?



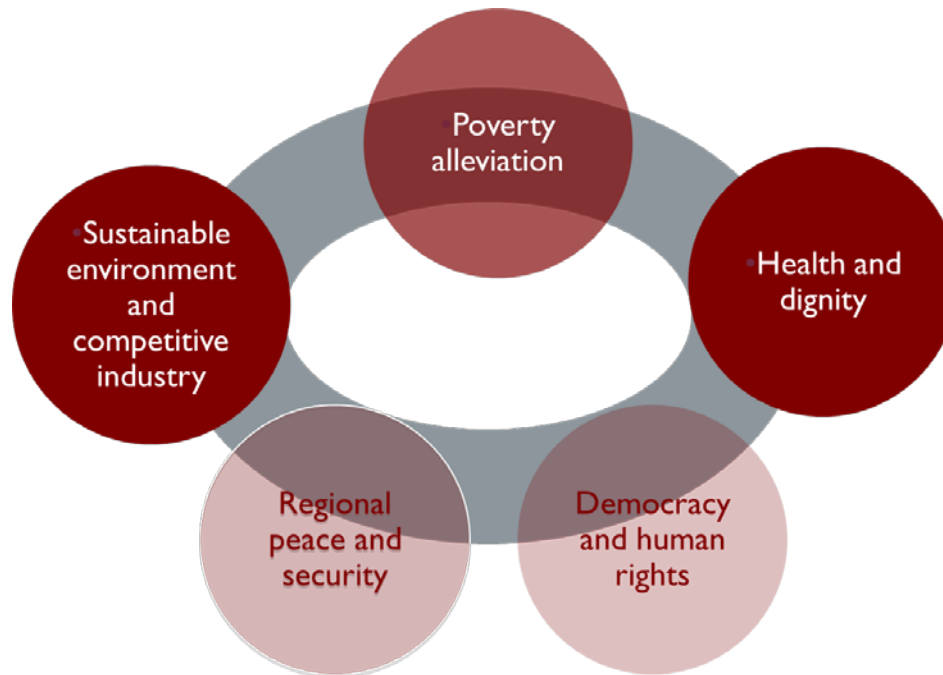
- ❑ To **stimulate new transdisciplinary and cross-faculty research collaborations** to **improve the impact** of SU's research. This has the potential to strengthen and enrich SU's research efforts.
- ❑ To illustrate SU's **unique identity** (unique research strengths and capacities; geographical location) and **competitive advantage**
- ❑ To **attract new research funding, students and researchers (including postdocs)** to SU (a “marketing” purpose), and as formal motivation in research funding applications where needed
- ❑ To inform decisions about **new strategic institutional investment** into research
- ❑ To highlight to stakeholders **SU's unique contribution to societal challenges**, and to local and international research priorities
- ❑ To **improve institutional structures** in support of collaborative cross-faculty/ trans-disciplinary research



What did we have before?

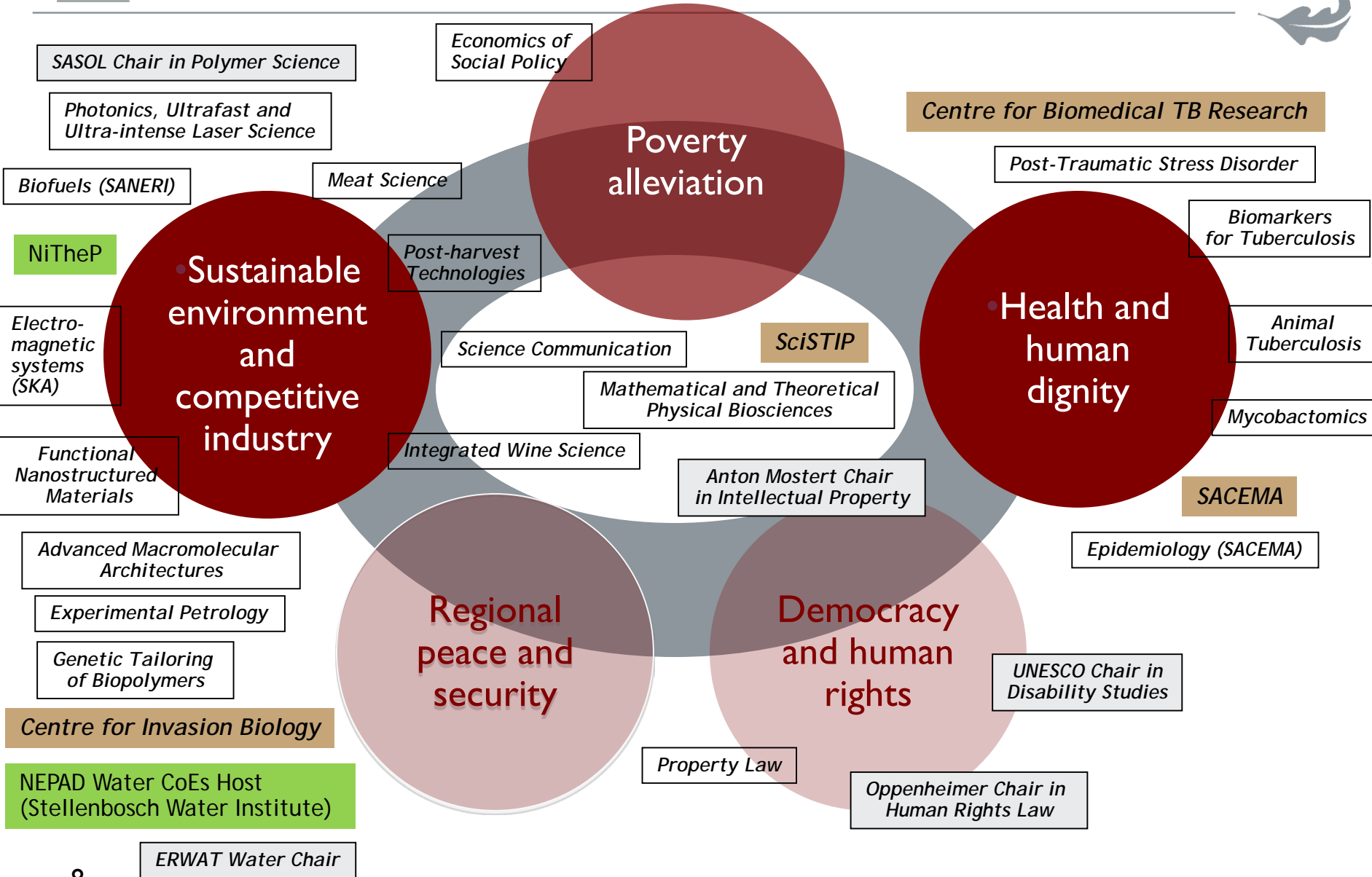


- ❑ Up to 2007/2008 – ten research “focus areas” – *ad hoc* task team was asked to look at these in 2007.
- ❑ In 2009 the five themes of the Hope Project (established by the late Prof Russel Botman) was adopted by Senate as the “research themes” of SU





National Centres of Excellence and Research Chairs; two major national initiatives





WHAT?





WHAT?



1st level: Broad research areas - inclusive





WHAT?



2nd level:

- more focused research groupings should be selected as part of this process, to stand alongside many other existing programmes and projects of different shapes and sizes
- New institutional investment into some of these “high risers”
- Larger, strategic, multi-faculty research projects





WHAT?



NB: SU must acknowledge the critical role that the basic/fundamental disciplines and basic/fundamental research will play in addressing future societal challenges - and pledge continued support for these.

Strength in the fundamental disciplines will form the backbone of future transdisciplinary research efforts.





HOW?



- It should be made clear from the outset that these broad strategic research “umbrellas”, and the “high risers” established under them, **cut across disciplinary and faculty boundaries.**
- They should serve to enrich **teaching and learning** activities at SU too, in particular at **post-graduate** level. It should serve to attract more **postdoctoral fellows** to the university.
- The investment of some **internal strategic funding by SU** would be critical, in order to capitalise on and optimally develop the chosen research themes.
- This will require new institutional investment into a limited selection of cross-faculty/transdisciplinary research programmes - at least one such programme should be **newly funded** for a five-year period under each of these “umbrellas”.
- Sustainability beyond this initial establishment period should be considered in view of a programme’s potential to **leverage external funding.**



HOW?



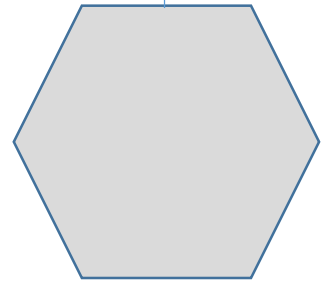
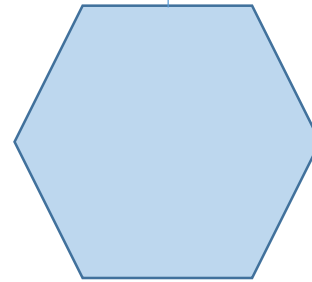
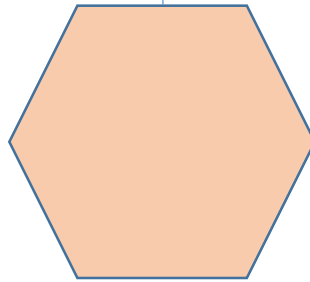
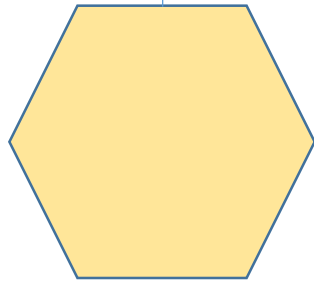
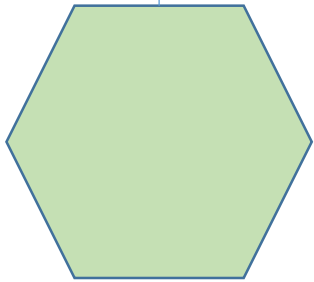
- The **first level** (broad areas/ “umbrellas”) should be selected through a consultative process
- The **second level** (“high risers”) **more focused projects** should be selected via a well thought-through selection process once institutional funding has been secured
- A major success factor will be the creation of **appropriate academic structures** that will enable and stimulate research and post-graduate training across faculty boundaries
- SU will continue to support productive and successful researchers across the spectrum of research fields and interests – the newly funded “high risers” selected under the broad “umbrellas” will **represent new investment** i.e. **not shift existing limited institutional support away from other areas**
- There should be an opportunity to review both levels of strategic research areas every **five years** (room for new emerging areas of the future)



WHAT?

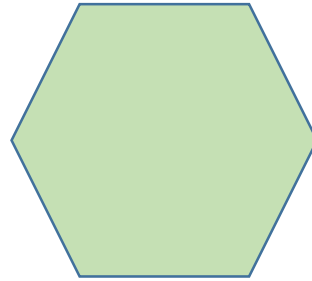


FUNDAMENTAL BASIC RESEARCH





Proposed Strategic Research Area I



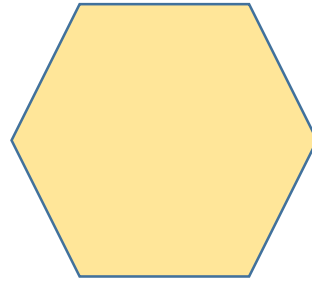
Research on water, energy, food, urban systems, and the complex nexus between these; as well as on biodiversity, environmental challenges and risks, and natural resources.

Proposed titles:

- “Sustainability and the Environment”
- “Preserving our Planet”
- “Adjusting to a changing environment”
- “The Future/Natural Environment”



Proposed Strategic Research Area 2



Research in the field of communicable and non-communicable, including lifestyle diseases. It includes studies on disability, sports medicine, biomedical engineering, as well as a number of major research foci in the broad social sciences.

Proposed titles:

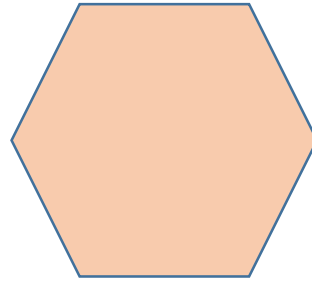
“Health and wellbeing”

“Improving human health and wellbeing”

Q: Human (in)security as global discourse...



Proposed Strategic Research Area 3



This area includes studies on gender, racial and cultural equality and transformation, as well as research on human rights and dignity.

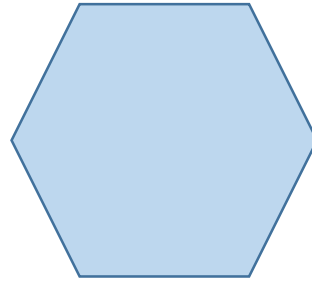
Proposed titles:

“Social Justice and development”

“Ethics in a socially-just society”



Proposed Strategic Research Area 4



This area includes research focused on finding creative and innovative solutions to major societal challenges such as access to education, housing and resources. It focuses on bridging the traditional gap between the sciences, and the creative arts and humanities.

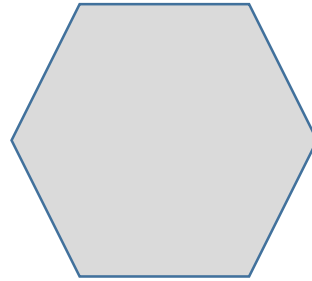
Proposed titles:

“Human creativity and innovation”

“Human invention and creativity ”



Proposed Strategic Research Area 5



This area includes research done in partnership with industry, researching and developing new and improved systems (including economic and business management systems) and technologies (including information technologies, nanotechnology, and contributions to major infrastructural developments).

Proposed titles:

“Systems and technologies for the future”

“Systems/ICT and Innovation”



FUNDAMENTAL BASIC RESEARCH

The natural environment

Health and human security

Social justice and development

Human creativity and social innovation

Systems and technologies for the future



COMMENTS?

