

**REPORT ON THE KNOWLEDGE TRANSLATION AND OPEN ACCESS  
WORKSHOP**

**Organised by**

**The Informatics and Knowledge Management Directorate**

**MEDICAL RESEARCH COUNCIL OF SOUTH AFRICA**

**CAPE TOWN**

**August 2006**

## EXECUTIVE SUMMARY

The Informatics and Knowledge Management Sub-Directorate (IKMD) of the MRC held a workshop on Open Access (OA) and Knowledge Management (KM). The aim of the workshop was to provide a framework that would assist in the development of policies and strategies for research database development and Open Access in the organisation. The significance of developing a research database for the organisation lies firstly within protection of data as a natural resource. Also there is a need to create a research database repository so that data can be reused beyond their initial objectives. Secondly, the MRC's core business is data, information and knowledge creation and utilization. Therefore protecting the pillars (data, information and knowledge) of its business becomes a strategic departure point. There are high risks for the MRC's business if data, information and knowledge are not managed and protected. The objectives of the workshop were to:

- Improve knowledge management in the organisation
- Encourage knowledge sharing
- Entrench knowledge translation
- Improve knowledge transfer
- Increase knowledge management awareness
- Change culture in knowledge production
- Develop a framework for knowledge retention and protection policies
- Develop framework for databases/repositories /knowledge repositories
- Get the support of the entire organisation
- Develop Open Access publishing for MRC outputs

## Outcome of the Workshop

The following points have been made by the participants as milestones leading to the development of policies and strategies for research database development and Open Access. The results of the open access workshop were weighted while the outcomes for database development were not. The outcomes are presented in the original format.

### *Workshop Outcome on Open Access*

#### KEY ELEMENTS OF OPEN ACCESS POLICY FRAMEWORK

No	Key Elements	Weighting
1	Change in reward system	20

2	Awareness of open access	18
3	Mandatory for MRC – funded/employed researchers to publish in open access and deposit in repository	11
4	Quality of peer review process must be defined	9
5	Create a repository	9
6	Government support for OA	9
7	MRC recognition and support	8
8	Copyright retained by author / MRC**	6
9	Direct communication with researchers	6
10	Phased approach to implementation	2

A team has been identified who will take the process forward.

### ***Workshop outcome on research database development***

- Culture, values and knowledge creation policy to be clarified
- Process
  - Who, what, when, where must be known
  - Reward and recognition to be reviewed
  - Ownership of research data to be clarified realizing researchers have certain rights
  - Intellectual property to be reviewed in the context of a data repository
  - Get researchers involved
- Distinguish between an archive and online database
- Create communities of practice - encourage sharing of data, knowledge, expertise and skills
- Develop research data protocols to standardise data before policy and strategy can be enforced
- Define procedures and software
- Enforcement of policy
  - Reward and recognition for data producers
  - Incentives for data submission
  - Include data submission on KRAs and knowledge sharing
  - Change organisational culture of knowledge production
- Top management leadership crucial Fair Trade agreement
  - Maintain integrity of data
  - Consider a grace period of 6-12 months before submission and secondary analysis
- Develop policy and strategy

A team was identified to take the process forward.

The workshop was evaluated as successful although there was poor representation of researchers; this was considered a challenge for the organisation. It was also

emphasised that the participation of top management could assist in taking the process forward.

## **DAY ONE : IKMD KNOWLEDGE TRANSLATION WORKSHOP**

The first Session of the workshop on day one was chaired by ms **Nomfundo Luke**

### **Introduction**

#### **SPEAKER A : Dr N. Mbananga**

Dr Nolwazi Mbananga (Executive Manager IKMD) introduced and welcomed guests and participants on behalf of the Executive Management Committee of the MRC. She welcomed the overseas guest Dr Quaderi from the Biomedical Centre in the UK. Other important guests present were:

- Dr Adi Patterson from the National Department of Science and Technology in South Africa
- Professor Jimmy Volmink from the University of Stellenbosch in South Africa
- Dr Ben Fouché from Knowledge Leadership Institute
- Mrs Monica Hammes from the University of Pretoria
- Dr Roy Page-Shipp from the University of Pretoria
- Dr Anita Ransurum from the University of KwaZulu- Natal

A warm welcome was extended to the MRC employees present. A major concern raised by Dr Mbananga was the poor representation of MRC researchers among participants: only four researchers were present. This poor participation of knowledge producers created grave concern for the success of knowledge management sharing, translation and policy development in the organisation. Dr Mbananga expressed the opinion that IKMD cannot manage knowledge successfully without the wholehearted involvement and participation of the researchers. The knowledge that is managed in the organisation by IKMD is largely produced by researchers and therefore they own the knowledge. It follows that direct input from the researchers is needed regarding packaging of the knowledge..

The objectives of the workshop were outlined as follows:

- To improve KM in the organisation
- To encourage knowledge sharing - more than information sharing: knowledge sharing is linked to capacitating people and to job performance
- To strengthen sharing of knowledge assets
- To entrench knowledge transfer

The ultimate goal was to increase KM awareness in MRC, and to encourage change in the culture of knowledge production, sharing, translation and transfer. Another important aim was to negotiate ways to develop a research data warehouse at the MRC. Pooling of data into a knowledge / data repository was seen as important as it promotes use of these resources beyond the initial objectives. This would also encourage data mining and analysis of data within the country rather than having data analysed outside the country as is the case in some areas of research. Previously some individuals outside the workshop have raised the question of whether MRC has a data warehouse preserving data since its inception. This question emanated from the point of view that data is a natural resource equivalent to natural resources such as diamonds and gold. Dr Mbananga cautioned that SA should not repeat the same mistake with data as has been made with other natural resources, namely that of sending natural resources outside the country for added value. The whole world is moving towards Knowledge Economy: data and knowledge are the new commodities. It was revealed that no research data warehouse or repository is available at the MRC, but the organisation is working hard to remedy the situation - hence the kinds of workshops (such as this one) being held.

Another important area mentioned in the welcoming address was the types of expertise needed to support data warehouses. These were highlighted as:

- Data management
- Data mining
- Information and knowledge management

The lack of expertise for the implementation of the National Electronic Health Record was noted.

The bursary offer made by the University of Columbia to take two South Africans to do PhDs in Biomedical Informatics and Nursing Informatics was mentioned and

DST was requested to support the endeavour in topping up the bursaries as they are not sufficient.

A word of caution was that this trend of IKM is on the way and regrettably, researchers may be left behind if they do not participate. It should be realized that IKM is pushed by the external forces of globalisation and countries will have to choose whether to join forces with other countries or be left behind forever.

Concern was expressed regarding limitations in IT infrastructure needed to support the processes of KM practice in the MRC. ; were expressed. These limitations need to be addressed by the senior members of the organisation, if MRC is to grow into a knowledge-based enterprise.

Against these concerns and issues Dr Mbananga highlighted the need for the organisation to embark on conducting knowledge analysis by categorising knowledge into three portions, namely A, B and C, defined as follows:

- A is key knowledge that determines the competitive edge of the organisation
- B is the know-how (tacit knowledge) of people in the organisation. 80% of this knowledge resides in people's heads; therefore, there is a need for special methodologies for tapping this knowledge
- C comprises common knowledge that should be disseminated to everybody.

Dr Mbananga continued with the following points:

- Knowledge transfer is executed mainly by using group B knowledge
- Group B needs to be linked to risk analysis
- With group B knowledge there is a need to identify knowledge that will be used in trading
- Every employee should have better understanding of knowledge management
- KM needs to be a line function of every unit
- It is not only a responsibility of IKMD
- KM has a long road ahead at the MRC before benefits can be realised!
- Knowledge sharing is key to success and must be encouraged at all costs
- Information sharing is different from knowledge sharing in that it can be linked to performance (and value to the organisation)

- There is a need to define requirements for a framework, including context (and limitations) of data collection
- It should be noted that SA can lead in KM since the concept is not widely understood

**Expected outcome of the workshop:**

- Develop a framework that can lead to a KM policy
- Develop framework for research database development
- Identify concerns, barriers and requirements for KM

## National knowledge sharing and management policy

**SPEAKER B : Dr Adi Paterson**

**(See presentation)**

Dr Patterson noted the value of Umyezo (a newsletter on Informatics and Knowledge Management produced by MRC's IKMD) and remarked that it was worth much more than R100 per year which is the current subscription fee. He quoted from the Umyezo particularly regarding types of university and the trend towards employing academic staff on a casual basis. He made a comment that such issues are reflecting the kind of leadership needed in the country. He urged that Umyezo must be disseminated widely as it is essential that it should be read. Although the IKMD of the MRC may view these KM steps as small, they will make an impact in the long run.

He cautioned that organisations couldn't stay in the old paradigm of research: they need a new paradigm, reflecting the international knowledge economy. It is important that we think about the future in new ways. He raised questions such as: ***Do we know how research is going to change?; Was the thinking of Nobel Laureate that of those who change the world along PhD lines?, Should we be thinking about current PhDs only or post-publication PhDs in future?*** Furthermore, he indicated that we really need publication and synthesis.

We need to be moving towards large-scale research and innovation (rather than operating individually, like viruses). We need researchers who can work across boundaries and with other researchers. An example of this collaboration in research is the SKA. He mentioned that young scientists working in the SKA are a good example of research collaboration in achieving a number of objectives. There is a unique opportunity for health research to be the equivalent of the SKA – rather than, as is the case at present, many “DSTV dishes”, meaning different uncoordinated small research projects. If the suggestion of SKA is adopted by health research, it will mean a change in the way people are taught, ethical changes, and changes in approaches to data and knowledge sharing. The overall approach should be how to conquer disease, rather than which research can be done to optimise careers.

The issue of data and repositories is not a trivial issue; it needs proper planning and implementation and should be given the importance it deserved. He moved on to talk

about the New Age of the ipod world and how people can no longer live without ipods!!

We could do the whole school curriculum via podcast for each subject; the teacher could become the facilitator. Further on he highlighted areas that need research pilots for adoption such as:

- SANReN
- Open Access repositories
- Google world – World Wind
- eLearning
- mLearning and
- eResearch

He touched on some of the issues needing attention such as:

- Evaluation and impact assessment
- ASSAf publications report (2006)
- R&D survey – more researchers, but not improved productivity
- MRC IHE
- Government performance is patchy!
- Studies: nothing wrong with the people, but we do have problems with linking people appropriately

Dr Patterson highlighted missing factors in all research agenda, such as:

- Leadership driven initiatives
- 'Generosity' approach – but not false generosity
- Continuous improvement
- Proper foresight
- Enough experimenting
- A community of practice
- A common platform

## Knowledge Translation

### SPEAKER C: Prof Jimmy Volmink

(see presentation)

Professor Volmink gave a presentation on knowledge translation and he described this concept as “trying to connect what we know to what we do”. He critically addressed the following issues and questions facing research translation:

- How trustworthy are expert recommendations?
- Reasons for delay in acceptance of evidence:
  - o Information overload
  - o Biased access to research
  - o Lack of attention to study design and quality
  - o Many studies too small to give needed evidence
- Quality of published work
- New approach:
  - o Research synthesis IS RESEARCH
  - o As in all research, scientifically defensible steps must be taken in this kind of research to reduce:
    - Biases of various kinds
    - The effects of the play of chance, and thus
    - The danger of false conclusions.
  - o Systematic Reviews
    - Note main elements
    - Must also be relevant!! Especially for developing countries, in our context.
    - *Should systematic review be conducted for literature for surveys?*
    - Note emphasis of SACC (South African Cochrane Centre) on issues relevant to Africa BY POLICY of work programme and framework for collaborating centre
    - NB also link between systematic reviews and HTA and other issues on the continuum
- Implementing research findings is a complex process
- Change requires special effort!

## Knowledge Translation

- Note Canadian Institute of Health Research (CIHR) definition
- Note key elements
- Knowledge Translation (KT) requires that we draw on people from many backgrounds, **INCLUDING CONSUMER GROUPS**
- NB interaction and iteration are required

Some general thoughts: (Lavis, Grimshaw – Canada)

- Approaches:
  - o Producer-push
  - o User-pull
  - o Knowledge-exchange
    - **STEPP (COCHRANE CENTRE) programme: supporting translation of evidence into policy and practice**
      - *model for HTA; model for KT/KM education/orientation*
      - 1-page report, after intensive discussion and appropriate review
      - Note both strengths and challenges (including resources)

Evidence base for KT strategies

Promote behavioural change among health professionals:

- o Note consistently effective interventions – multi-faceted
- o Uptake of research by policy makers
- o Note facilitating factors, including good evidence; and barriers, including mutual mistrust.

Professor Volmink ended his presentation by making a suggestion that “WE NEED TO EXAMINE AND REVIEW THE EVIDENCE”.

## Promoting knowledge sharing in a changing environment

**SPEAKER D: Dr Ben Fouché**

**(see presentation)**

Dr Ben Fouché started his talk by presenting two case studies. The following issues were then discussed:

- Conceptual issues around HS
- Some research findings on KS
- Thumbnail illustrations of KS practices and tools

He raised the question: "How do we go about developing a KS strategy?" He suggested that we need to change from a culture of knowledge hoarding to one of knowledge sharing. This could be done in the following ways:

- o through clear leadership involvement and responsibility
- o involving a wide range of staff
- o including consumers
- o developing COP (community of practice)
- o using online learning
- o using repositories – WOW! (web of wisdom)
- o Ensuring high quality of leadership -critical to the chance of success
- o Organising people in 'cross-border' groups to effect change.

He also noted that different terminologies, leading to rehashing of concepts and work and a chain in diffusion of innovation (agriculture), knowledge transfer (in health), -> knowledge (tacit) -> disembodiment (codification) – information (explicit) -> personalization (internalisation) He remarked that people must be aware that knowledge is not always true and that it why it is important to manage both explicit and the tacit information and knowledge respectively.

He indicated that information, if managed effectively, will lead to management efficiency, pattern entrainment and best practices. Knowledge management needs leadership as established patterns are disrupted and staff need to change in order to adapt to the new system. In this regard he mentioned the following:

- Two complementary processes in KM, which result in tension; their management of will depends on the form of leadership
- Tension between abstraction and cost of codification
- Need for a change in mindset: he quoted his past experience at CSIR: OB<sup>(2)</sup>OT; on brief, on budget, on time: CSIR in a time of change from 'blue sky' to project-based contract applied research

Dr Ben Fouché named five types of knowledge sharing:

- serial transfer
- near transfer
- far transfer
- strategic transfer
- expert transfer.

He emphasised the need for us to change our thinking and made the following comments:

- experts can be drawn from everywhere
- knowledge is a shared resource

## **DAY TWO**

### **IKMD OPEN ACCESS WORKSHOP**

Cape Town, 16 August 2006

**Chair: Dr Nonhlanhla Madela-Mntla**

#### **Introduction**

**SPEAKER A : Dr Nolwazi Mbananga**

#### **OPEN ACCESS**

(see presentation)

Dr Mbananga once again welcomed Dr Anita Ransurum, speakers for the day and colleagues from different MRC departments and remarked on how few researchers presented, and described the situation as unfortunate. She emphasized the need for researchers to participate in the discussion and decision-making on Open Access. Dr Mbananga raised the following items for discussion in the workshop:

- research reward systems
- Open Access policy
- confidentiality, and other related issues

## **Open Access : An SA perspective**

### **SPEAKERS B: Ms Monica Hammes and Dr Roy Page-Shipp**

(see presentation)

Ms Monica Hammes mentioned that there is barrier in diffusion of scholarly research and research outputs is public good meaning belongs to the public. A historical perspective is that in the 19<sup>th</sup> and 20<sup>th</sup> century there was a growing commercialization of research journals. In the late 20<sup>th</sup> century and the 21<sup>st</sup> century the emergence of WWW enabled new scale and scope in way research is conducted and output accessed. The changes brought about by WWW led to two kinds of publishing: "GOLD" publishing in an Open Access (OA) platform and "GREEN" publishing in a toll access journal and self archive.

Ms Monica Hammes explained Harvesting in Open Access by highlighting the following concepts for the archiving initiative:

- web-based protocol to share metadata
- data provider maintains its documents but shares the metadata
- metadata services can be provided
- 

One of the advantages of open archiving is access to an institution's own research output. Few institutional repositories at universities are rudimentary! Some universities do have electronic repositories of theses. She also mentioned that a CODATA workshop on strategies for permanent access to scientific information in southern Africa has been held and suggested that the website can be visited. She expressed the need for policies which promote Open Access; for example MRC as one funder should consider such a policy for all MRC funded research. She indicated that in the ASSAF report there is a recommendation for funding of publications, to enable open access and open archiving and the necessary bandwidth support. She mentioned that Open Access needs a national initiative, as individual institutions cannot run a national process.

Dr Page-Shipp gave a talk on eResearch support services for South Africa (Er3SA), NADIC and other projects as some of the projects that can contribute to open access in South Africa. He indicated that there is a need for Open Access to be embedded in the whole eResearch domain. The expectation of researchers in this endeavour is that

researchers will take responsibility for publication and also the intellectual property that goes with it. There is also a need for willingness to do this, as well as market the process of Open Access in medical journals and make it available to such journals.

Dr Page-Shipp suggested that software for institutional repositories for Open Access is important, taking the following factors into account:

- software required must be open source
- other requirements must be noted
- human resources are essential
- NEED TO MANAGE AUTHORS! AND PUBLISHERS – LOBBYING IS ESSENTIAL  
will need to speak to SA publishers

Both speakers agreed that MRC as funder can play a very significant role in the following ways:

- MRC has some power over those funded! Can/could/should mandate!
- Learn from others – NB ten lessons for workshop
- Consider a national medical OA repository, as a first step; including DOH and especially medical schools who do not have repositories
- USE A VARIETY OF STRATEGIES – ‘showing’ first
- Get people involved first, then can follow with strategy; but must have strategy in mind.

## **Promoting Open Access: International perspective: Prof Nandita Quaderi**

### **SPEAKER C: Prof Nandita Quaderi**

(See presentation).

Professor Quaderi gave an extensive presentation on Open Access at Biomedical Centre in the UK in the following areas:

- Open review models: reviewer and author known; reviews also published.
- Types of publications: BMC/Independent/'new wave'/specialist
- New wave journals: wider range of authors and readers
- NB PLoS medicine editorial re impact factors.
- NB other citation tracking systems – moving towards individual article citation of Eysenbach paper in PLoS
- Publication cost: \$1300 per article

MRC was highlighted as a member of Biomed Central; it allows funded researchers to use grant funds for Open Access. It was also mentioned that the number of funders which require or promote research results to be published in Open Access publications, is are growing. Another journal that could be part of Open Access is the lay journal. Prof Quaderi emphasized the point that Open Access follows a peer review process. Researchers should be aware that Open Access follows the rigorous peer review mechanism just like all other scientific publishing. Researchers should not think that publishing in Open Access means publishing in an inferior platform. The purpose is to make research output available immediately and widely.

## **Transforming the reward system for research output in an academic environment:**

### **SPEAKER D: Prof Anita Ransurum**

(See presentation)

Professor Ransurum explained that the present subsidy system tends to encourage quantity and not necessarily quality, regarding the university based system. This is encouraged by the fact that the reward system is managed by DOE which decides which journals should be used to publish articles. She explained in detail how the reward system is implemented by DOE. This included the price for an article published and also the funding received by the mentor whenever Masters and PhD students are produced. The funding can range from R78 000.00 to R300 000.00 for a PhD student produced. Professor Ransurum encouraged Open Access and suggested that it should be politically driven as it needs resources and policy. She highlighted a need for National Policy and guidelines.

## ANNEXURE A: OPEN ACCESS WORKSHOP DISCUSSION

### KEY ELEMENTS OF OPEN ACCESS POLICY FRAMEWORK IDENTIFIED BY WORKSHOP PARTICIPANTS

No	Key Elements	Weighting
1	Change in reward system	20
2	Awareness of Open Access	18
3	Mandatory for MRC – funded/employed researchers to publish in Open Access and deposit in repository	11
4	Quality of peer review process must be defined	9
5	Create a repository	9
6	Government support for OA	9
7	MRC recognition and support	8
8	Copyright retained by Author / MRC**	6
9	Direct communication with researchers	6
10	Phased approach to implementation	2

**\*\*Editorial note:** At least some participants interpreted item 8 as 'copyright retained by author'. This issue will have to be clarified in future discussions.

### WORKING GROUP FOR DEVELOPMENT OF PROPOSALS FOR OPEN ACCESS POLICY

**Open Access policy core group:**

Nomfundo Luke, IKMD (convenor)  
Lulama Dikweni, IKMD  
Ntuthu Somdyala, PROMEC  
Naeema Hoosain, Research Management Division  
Venessa Timmerman, IKMD

**BARRIERS AND BRIDGES TO ACHIEVING OPEN ACCESS  
IDENTIFIED BY WORKSHOP PARTICIPANTS**

	<b>BARRIERS</b>	<b>BRIDGES</b>
1	<b>Change Reward System</b>	
	Fund availability	KRA's incorporated (not just money)
	MRC is only one of multiple evaluations institutions	Promotions
	Conservatism among scientists	Adjust MRC performance management systems
	Scientometric process	
2	<b>Awareness about OA</b>	
	Conservatism among scientist	Memberships
	Lack of interest among MRC top management	Advocates / Champions
		Bits & Bytes
		Internet Access
3	<b>MRC-Funded researchers publish in OA journals and deposit copy in repository</b>	
	Resistance from researchers	Conditions for Grant Funding to be amended
	Researchers could seek other funding avenues	
	Researchers deterred from applying for MRC funding	
4	<b>Quality of Peer Review</b>	
	Perception that OA lesser quality – anything gets published	Peer Review (Panel Beaten)
	Lack of understanding of OA peer-review process	
5	<b>Create a Repository</b>	
	1. Resources	SAMED – Open Access
	2. Lack of compliance	
6	<b>Government support for OA</b>	
	Not a priority	Existing research translation process can be exploited
	Lack of understanding and resistance.	Increase baseline allocation to cover OA
7	<b>MRC recognition and support</b>	
	Lack of EMC buy-in	Adapt existing publishing recognition system
	Lack of funding	Have infrastructure + software – just upgrade
	Not a priority	President / EMC lead the way
	Lack of follow through & follow up	

8	<b>Copyright retained by author / MRC</b>	
	Author can decline or lack of co-operation	Copyright retained by author / MRC
9	<b>Direct communication with researchers</b>	
	Lack of communication strategy	Use intranet, internet communications
		Initiate discussions through intranet discussion forums
	Time factor	Research administration Exec. Office
10	<b>Phased approach to implementation</b>	
	Lack of resources	IT know-how
	Not a priority	Have capacity of research + researchers
	Lack of strategy	Have research strategies in IKMD + research admin

## **ANNEXURE A 1: INPUTS FROM GROUPS**

### **GROUP A**

#### **Key Elements for Successful Strategy in Open Access**

1. Copyright retained by author / MRC
2. Government supports Open Access
3. Institutional recognition and support for Open Access
4. Reward system which promotes OA publication
5. I.S.I. to be considered - assess non ISI journals as well
6. Requirements for quality of peer review for OA publications must be defined
7. Requirements from researchers to use OA for publication
8. Requirements for OA repository for outputs
9. Submit citations and abstracts to the repository
10. Requirements for quality ratings of publication
11. Weighting of greater than 1 for open source

### **GROUP B**

1. Mandatory for MRC – funded researchers to publish in Open Access
2. Subscription / collaboration – to present OA systems
3. Buy-in from researchers – change reward / incentive system
4. DOH involved to change reward system
5. Internal lay journal
  - Funded by DOH
  - Accredited by DOH
  - Rigorous peer-review process
  - Incentives

#### **Bridges:**

#### **Challenges:**

Existing subscription to Biomed/Pta  
ISD  
Researchers / Research Capacity  
system  
IT infrastructure – national portal  
Missing abstracts (Web)  
OA papers on MRC – website

Funding  
Buy-in / Mindset change / action!  
Advocacy / Advertise current online-  
  
Human Resources (repository )

## **GROUP C**

### **Key Elements of Open Access Policy Framework**

1. Awareness about Open Access
2. Willingness
3. Ability to publish and use
4. Create a repository (electronic)
5. Clear cut reward system
6. Establish a format structure to compile the pool of information
7. Phase approach implementation
8. Direct communication with researchers

## **GROUP D**

1. A clear definition of Open Access
2. Mandate deposition of output into Open Access repository
3. Creating a national repository for journal articles produced by SA researchers
4. Changing reward system

## ANNEXTURE B : WORKSHOP DISCUSSION

### Knowledge Translation Workshop

#### **SUMMARY OF POLICY ELEMENTS IDENTIFIED IN THE WORKSHOP (SEE ANNEXURES FOR FURTHER DETAIL)**

1. Culture and values underlying the policy
2. Process
  - Who, What, When, How, Where
  - Rewards
  - Ownership (of data) – researcher has certain rights
  - Intellectual property
  - GET RESEARCHERS INVOLVED
3. Distinguish between an archive and an online database
4. Create COP (community of practice) to encourage sharing of expertise and skills
5. Develop research protocols to standardise data before policy is enforced. → software + procedures
6. Enforcement of policy:
  - reward + recognition
  - incentives
  - KRA's
  - organisational culture
  - top level management / leadership
7. Fair trade agreement
  - maintain integrity of the data
  - consider a grace period (six months) before secondary analysis

#### **WORKING GROUP FOR DEVELOPMENT OF PROPOSALS FOR KNOWLEDGE SHARING POLICY**

**Knowledge sharing policy core group:**

Francois Venter, NIVS  
Ntuthu Somdyala, PROMEC

**IKMD personnel to be identified**

## ANNEXURE B 1

### WORKSHOP FRAMEWORK:

Agree major themes:

- MRC RESEARCH KNOWLEDGE SHARING: concerns and requirements
- MRC RESEARCH DATA REPOSITORY: concerns and requirements
- Ensuring involvement of those not participating in the workshop, especially scientists.

### GROUPS:

- concerns re. knowledge sharing; proposals for addressing concerns
- concerns re data repository; proposals for addressing concerns
  
- *reportback*:
  - o concerns and requirements
  - o issues to be addressed to address concerns
  
- key issues for inclusion in policy for knowledge sharing
- key issues for inclusion in policy for data repository/sharing of data
  
- *reportback*
  - o summary of key issues.

### PLENARY

- how do we include others in this process?

## **ANNEXURE B 2**

### **CONCERNS ABOUT KNOWLEDGE SHARING AND DATA REPOSITORY**

#### **GROUP A**

##### Sharing Knowledge

###### Barriers:

1. Confidentiality – Ethics
2. Recognition
3. Change – Context
4. Format
5. Career

###### Enablers:

1. Progress – timeously learning
2. Recognition
3. Community
4. International Connection

##### Developing a Database

###### Issues to be considered:

1. Metadata  
Taxonomy
2. Standards & Formats
3. International Cooperation
4. Data Curation

#### **GROUP B**

##### Sharing / Ideas of Research Knowledge

Rewards – Concerns about Recognition  
Sharing to Gain Upper hand

###### Concerns

1. Include the person who generated the info.
2. No formal policy
3. Concern of the individual not gaining / lack (there) of rewards
4. Plagiarism

### Suggestion

1. Include individual in decision making process
2. Create policy – include staff & researchers
3. Implement reward system. Internationally & National
4. Database created to check research created

## **GROUP C**

### Knowledge sharing

#### Concerns

1. Threat of an individual intellect
2. Lack of a reward system
3. The use of information without acknowledgement

### Research data repository

1. *Find a group of research*
2. *Title will be associated with*
3. *MRC must develop a framework e.g. Bioinformatics*
4. *We need and organisational*
5. *Look at the global standards*

## **GROUP D**

### Concerns with Knowledge Sharing

1. Protection of IP before release of research information
2. Laboratory data: capture & archive
3. Control & manage access to raw research data
4. Protection of integrity of data once being publicity released
5. Questions raised on quality of research data that is freely available
6. Access to information at an institutional level – policy & policy enforcement
7. Creation of a database that reflects the research outputs, programs & future plans of the institution
8. Understand the difference between research data & data on research

### Developing Research Knowledge Database

1. What data is relevant?
2. Categorizing / Taxonomy / Classification
3. Format
4. Policy

Key issues

1. Recognition / Rewards / Acknowledgement. → Towards keeper / creator of the knowledge
2. Ethical concerns with regards to research transfer / translation.

## **NNEXTURE B 3: WRITTEN INPUT RECEIVED FROM BURDEN OF DISEASE UNIT**

### Knowledge Sharing

#### Researchers' concerns:

1. How to ensure appropriate acknowledgement for work done to data, when sharing research prior to publication?
2. Who "owns" the data particularly where data in question is secondary data e.g. national mortality data?
3. How does one deal with the issue of 'selling' knowledge based on data that we believe should be made available to the public e.g. mortality data
4. How does one ensure that the 'quirks' of the data will not be overlooked by that users of the data. Sometimes these are only known through experience with similar data over a number of years. This experience may not be possible or very difficult to 'document' adequately.

#### Pros

1. Identify areas where research overlaps or could add / improve other research, possible areas of collaboration & support.
2. Exchange of ideas that may stimulate new or improved research methods.
3. Prevent the "working in isolation" syndrome.
4. Helps distil & clarify ideas & select better methods.
5. Builds capacity

## **ANNEXURE C**

### **KEY ISSUES FOR INCLUSION IN POLICY FOR KNOWLEDGE SHARING AND POLICY FOR DATA REPOSITORY/SHARING OF DATA**

#### **GROUP A**

##### Policy Proposals

8. Culture and values underlying the policy
9. Process
  - Who
  - What
  - When
  - How
  - Where
  - Leading
  - Rewards
  - Ownership
  - Intellectual property
  - Implementation MRC Researchers
  - MRC
  - Senior Managers

#### **GROUP B**

##### Key issues to be addressed in creation (of) a policy on KM at the MRC

1. Distinguish between an archive and an online database
2. Creating COP to encourage sharing of expertise and skills
3. Develop research protocols to standardise data before policy is enforced. → software + procedures
4. Enforcement of policy:
  - reward + recognition
  - incentives
  - KRA's
  - organisational culture
  - top level MGT [management] leadership

#### **GROUP C**

##### Policy Issues

1. Who owns data?
  - Researcher has certain rights
2. Fair trade agreement
  - maintain integrity of the data
3. Grace period (six months) before secondary analysis

## **ANNEXURE D**

### **SUGGESTIONS FOR GETTING SCIENTISTS INVOLVED**

- \* Support at senior level for implementation
- \* Information to Unit Directors
- \* Take culture into account: start with key decision makers e.g. Unit Directors
- \* Small grants for demos
- Make it valuable – what is in it for researchers?

**Knowledge sharing policy core group:**

Francois Venter, NIVS  
Ntuthu Somdyala, PROMEC

**IKMD personnel to be identified**