



# Natural Products VRE

(Progress and the lessons we have learnt)

Martie van Deventer

# Is this VRE-stuff really necessary?

- The emerging global scientific research infrastructure and practice require unique and complex skills – more so than ever before.
- VREs are about being part of the global research community and about making it easy to collaborate. Team sizes vary from 2 to 3000 people.
- VRE: helps create structure in a specific area of interest – Nanohub serves as an example.
- VREs are driven by changes in the way we work!
- eResearch infrastructure opens up new possibilities in research methods, workflows and approaches and VREs facilitate easy access to the infrastructure.
- So YES!
  - Our effort is still in the infancy stage but acquiring the skills to work within a virtual eco system/ research environment is essential for any of the large collaborative research projects.

# Roadmap

- What is a VRE?
- Background for the natural products VRE
- Show the interface & basic navigation
- Role of the facilitator
- Look at the lessons we have learnt & identify some opportunities



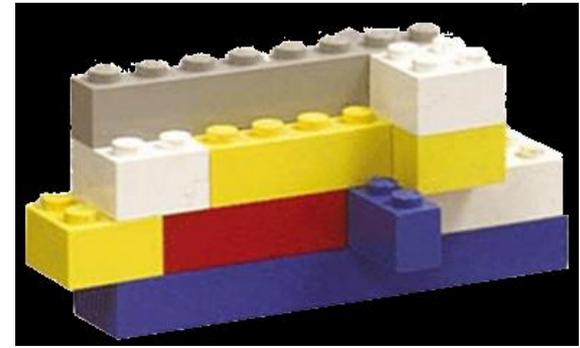
# VRE – what is it?

- It is a workspace – like a physical office is a workplace.
- In brief & ideally - your entire office and laboratory via an Internet access point – no matter where you are.
- NOT a free standing product – you need to create the space that will work for you – *just as you would furnish your workplace*.
- Framework/ interface that gives access to tools, services and resources – *like the office door*.
- Manages security (access and authentication) – *the lock on the door*.
- VREs are part of infrastructure – it influences the infrastructure and is influenced by the infrastructure – *your office does not exist in isolation from the building either*.
- VREs have many commonalities with eLearning.
- Emphasis is on architecture and standards rather than integrating specific applications – *your office needs a chair, a desk & lab equipment – the exact ‘stuff’ is not prescribed*.

# Characteristics of a VRE

- VRE is primarily about **collaboration** - across boundaries.
- VRE is about working smarter – improving, fast tracking, gaining competitive advantage, learning **faster** than your competitors.
- VRE is about continuous **efficiency** improvements.
- VRE is about **transparency**.
- VRE is about collecting **information and tools** and sharing these amongst a trusted network of collaborators.
- Understand that when you do not adhere to the requirements of the team (values, contributions, etc) ... technology allows you to be excluded!

# In summary ...



- A VRE is not a product ...
- It is a collaborative online work environment (which also allows for personalization).
- No two VREs will ever be the same.
- That does not mean that VREs cannot overlap and share infrastructure.
- At the end of the Natural products VRE project the VRE will in all probability look different & have different components than what we added during the early days.

# Background – Pol-SABINA VRE

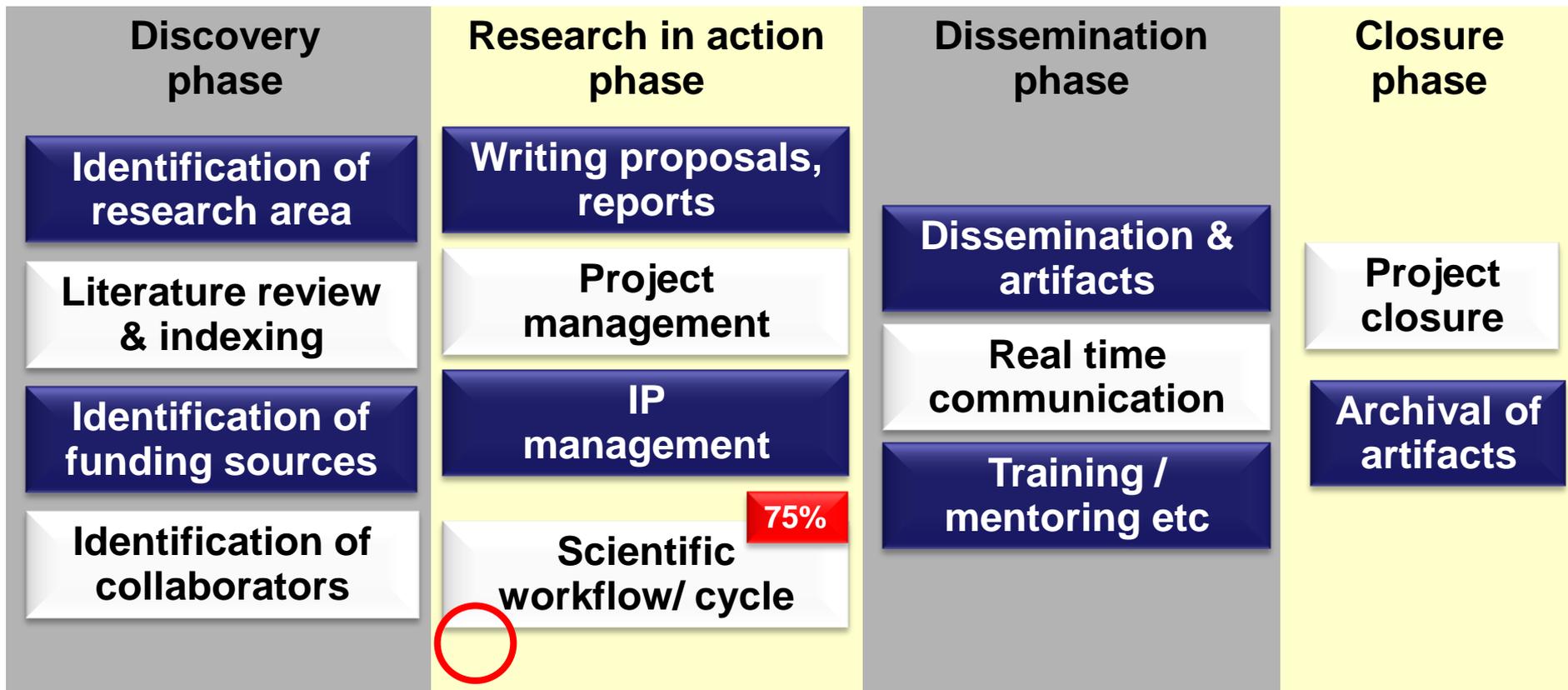
- The South African Biochemistry and Informatics for Natural Products (SABINA) network was established as a collaborative initiative amongst **Namibia, Tanzania, Malawi and South Africa**
- The POL-SABINA project was created to develop policy and support actions for the SABINA network:
  - create a **collaborative environment** amongst partners
  - permit researchers engaged in natural products research and associated capacity building initiatives to **enhance their efficiency and effectiveness as researchers**
  - ensure that an appropriate environment exists **to facilitate the translation** of their research outputs into actual products

# Purpose in brief

- Build a proof of concept VRE – which could be duplicated.
- Teach M & PhD level students to work in the online, collaborative space.
  - Similarities with eLearning are therefore even more obvious.



# First ... understand the research process ... the components



Based upon Pienaar, H., Van Deventer, M. 2009. To VRE or not to VRE? Do South African malaria researchers need a virtual research environment? *Ariadne*, 59, April 2009. <http://www.ariadne.ac.uk/issue59/pienaar-vandeventer/>



# Discovery phase – current reality



No open sharing of information

Limited understanding of open access or of the access models available to low income countries



Personal networks;  
funder portal;  
literature; search engines; conferences

High impact traditional & open journals – data sets required by some journals; conferences

# Making access to resources transparent

The screenshot shows a Mozilla Firefox browser window with the following details:

- Browser Title:** Project: Library resources - Mozilla Firefox
- Address Bar:** naturalproducts.bi.up.ac.za/vre/course/view.php?id=40
- Navigation Menu (Left):**
  - Home
    - My home
    - Site pages
    - My profile
    - My projects
      - student reports
      - Skye Bowers
      - Library Resources
        - Participants
        - Reports
        - Links to library resources
        - Open access searching
        - Search for books online
      - Tools
      - Moodle Training
      - POL-SABINA Administration
      - VPT
      - test

- Topic outline (Main Content):**
- Links to library resources**

These links take you directly to your institution's electronic resources. Please note that each institution has its own licencing agreements. You will not necessarily be able to access resources at a partner institution.

  - CSIR resources
  - University of Malawi
  - University of Namibia
  - University of Pretoria
  - University of Tanzania
  - University of Witwatersrand
  - South African libraries consolidated
  - Tea Research Foundation of Central Africa
  - News forum
- 1 AGORA**

AGORA is a programme set up by the Food and Agriculture Organization of the UN (FAO) together with major publishers that enables developing countries to gain access to an

The Windows taskbar at the bottom shows the Start button, several open applications (Moodle as V..., Project: Libr..., Microsoft Ex..., Malaria VRE..., Skype™ - mv..., Novell Group...), and the system tray with the time 16:02 and the Zotero logo.

# Databases to collect references & contacts

Justin Omolo: List of collaborators - Mozilla Firefox

File Edit View History Bookmarks Tools Help

Nigeria - Google Maps Justin Omolo: List of collaborators

naturalproducts.bi.up.ac.za/vre/mod/data/view.php?id=230

Google

- PhD Projects
  - Adushan Pillay
  - Benjamin Kumwenda
  - Godwil Madamombe
  - Jimmy Sumani
- Justin Omolo
  - Participants
  - Reports
  - Communication
  - Identification of research area
  - Identification of funding resources
  - Identification of collaborators
    - List of collaborators
      - View list
      - View single
      - Search
    - Project planning
    - Project proposal / Literature review
    - Standard operating procedures

Name: Prof Charles de Koning

Position: Professor of Organic Chemistry

Location: School of Chemistry, University of The Witwatersrand, Johannesburg, South Africa

Email address: Charles.DeKoning@wits.ac.za

---

Name: Dr Vinesh Maharaj

Position: Technology platform manager of natural and traditional products

Location: Biosciences, CSIR Pretoria, South Africa

Email address: VMaharaj@csir.co.za

---

Name: Dr Dashnie Naidoo

Position:

Location: Biosciences, CSIR Pretoria, South Africa

Email address:

zotero

start Moodle as V... Justin Omolo... Microsoft Ex... Malaria VRE ... Skype™ - mv... Novell Group... 16:05

# Research in action phase – current reality

Sophisticated instruments with own software – write data to servers;  
Free analysis software; Paper lab book; Referencing system between lab book and instruments;  
Ad hoc management of data (curation)

No formal project management tools are being used



MS Word / Open Office; templates; generic proposal; Document management is not common

In future:

Even more sophisticated instruments; Electronic lab book; anything that would allow more time for real research

IP management appears foreign

# Managing research data

The screenshot displays a web-based interface for managing research data. On the left is a sidebar menu with a tree structure. The main content area on the right is divided into several numbered sections, each with a title, a brief description, and a list of sub-items. A black oval highlights the 'Research data' section (step 6).

**Sidebar Menu:**

- Petrina Kapewangolo
- Skye Bowers
- ▼ Kennedy's Ngwira
  - Participants
  - Reports
  - Communication
  - Identification of research area
  - Identification of funding resources
  - Identification of collaborators
  - Project planning
  - Project proposal / Literature review
  - Research data
  - Standard operating procedures
  - Writing reports
  - Dissertation/Thesis
  - Articles & Presentations
- Liberata Mwita
- Moola Nyambe
- Secilia Ilonga
- Tinotenda Shoko
- Management
- Finance

**Main Content Area:**

Step	Title	Description	Sub-items	Checkbox
3	Identification of collaborators	Here you will list the details of all your collaborators in a database as demonstrated below.	List of collaborators	<input type="checkbox"/>
4	Project planning	Here you will add your project planning files.	Workplan	<input type="checkbox"/>
5	Project proposal / Literature review	Here you will add the necessary documents and add the reference manager you use to the database as demonstrated below.	Research proposal List of reference & bookmarking services	<input type="checkbox"/>
6	Research data	Here you will add all your research data.	Results	<input type="checkbox"/>
7				<input type="checkbox"/>

# Kennedy's Data

**VIRE** Kennedy Ngwira

You are logged in as Martie van Deventer (Logout)

Home ▶ My projects ▶ Kennedy's Ngwira ▶ Research data ▶ Results

### Navigation

- Home
  - My home
  - Site pages
  - My profile
  - My projects
    - Tanzania training project \_1
    - SMME Workshop
    - student reports
    - Adushan Pillay
    - Benjamin Kumwenda
    - Godwil Madamombe
    - Jimmy Sumani
    - Justin Omolo
    - Kumbukani Nyirenda
    - Nicholas Ishmael
    - Pelly Malebe
    - Petrina Kapewangolo
    - Skye Bowers
    - Kennedy's Ngwira**
      - Participants
      - Reports
      - Communication

## Results

Research results

- Activities\_of\_crude\_extracts\_against\_HXB2\_virus.pdf
- Activities\_of\_crude\_extracts\_against\_ZM53\_virus.pdf
- Antiplasmodial\_activities\_of\_isolated\_berberine.pdf
- Cytotoxicity\_of\_alkaloid\_extracts.pdf
- Cytotoxicity\_of\_aqueous\_extracts.pdf
- Cytotoxicity\_of\_DCM\_MeOH\_extracts.pdf
- Dose\_Response\_curves\_of\_crude\_extracts.pdf
- Figure\_8\_antimalarial\_activity\_results\_of\_crude\_extracts.pdf
- Mass\_spectrum\_data\_for\_active\_compound.pdf
- Proposed\_structure\_of\_active\_compound.pdf
- Results\_of\_cytotoxicity\_evaluation\_of\_berberine.pdf
- Results\_of\_parasitic\_activity\_of\_fractions.pdf
- Results\_of\_proton\_and\_carbon\_NMR\_spectra.pdf
- TLC\_profiles\_of\_active\_wells.pdf
- TLC\_profiles\_on\_purification.pdf
- UV\_profile\_of\_active\_compound.pdf

# NMR Spectra data displayed

## NMR SPECTRA

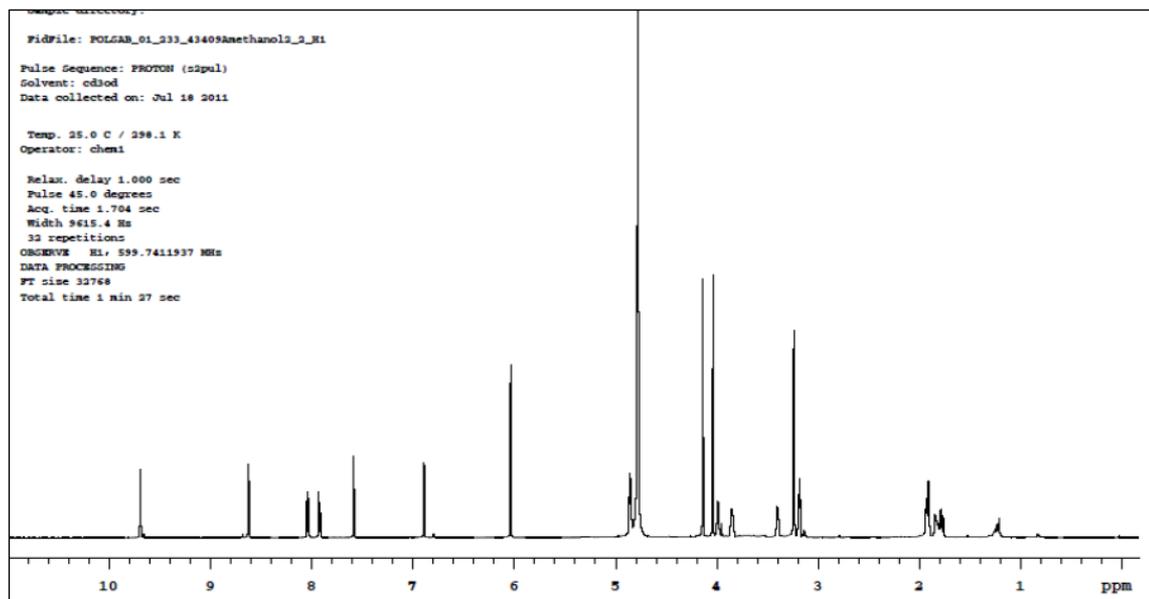


Figure 19: <sup>1</sup>H NMR spectrum for isolated compound

# Identifying existing tools

digitalresearchtools

log in help



Wiki Pages & Files

Search this workspace

VIEW

DiRT

## FrontPage

last edited by Lisa Spiro 9 months, 2 weeks ago

Page history

## Digital Research Tools (DiRT)

This wiki collects information about tools and resources that can help scholars (particularly in the humanities and social sciences) conduct research more efficiently or creatively. Whether you need software to help you manage citations, author a multimedia work, or analyze texts, Digital Research Tools will help you find what you're looking for. We provide a directory of tools organized by research activity, as well as reviews of select tools in which we not only describe the tool's features, but also explore how it might be employed most effectively by researchers.

Please provide [feedback](#) on DiRT and [recommend tools](#) not included here (yet).

If you're interested in contributing to this wiki, please email Lisa Spiro at [lspiro@rice.edu](mailto:lspiro@rice.edu). Please see [Guidelines for Contributors](#) to learn how to add new information to the wiki.

If you are unfamiliar with some of the jargon, please see our [Glossary](#) page.

You do not need an account to *view* information in DiRT; request access only if you would like to *contribute* information.

## Types of Tools

I want to...

- [Analyze data](#)
- [Analyze texts](#)
- [Author an interactive work](#)
- [Blog](#)
- [Brainstorm/generate ideas](#)
- [Build and share collections](#)
- [Collaborate](#)
- [Collect data](#)
- [Communicate with colleagues](#)
- [Compare resources](#)
- [Conduct linguistic research](#)
- [Convert/manipulate files](#)
- [Create a mashup](#)
- [Edit images](#)
- [Find research materials](#)

Tags: [DiRT](#), [Digital Research Tools \(DiRT\)](#), [digitalresearchtools](#), [dirt](#), [orienkin](#), [home](#), [index](#)  
✓ Check for plagiarism

To join this workspace, [request access](#).

Already have an account? [Log in!](#)

- 7daysinmylife
- About this wiki
- Adobe Photoshop Express
- Analyze statistics
- Annotation and Notetaking Tools
- Articles and Reports on Digital Scholarship

Pages Files options

- [Authoring](#)
- [Blogging](#)
- [Brainstorming](#)
- [Citation Management](#)
- [Collaborative Authoring](#)
- [Collection Building](#)
- [Communication Tools](#)
- [Comparison Tools](#)
- [Data Collection](#)
- [Data Mining](#)
- [Data Visualization](#)
- [Find Research Materials](#)
- [Image Editing](#)
- [Linguistic Tools](#)

# Linking out to the grid

**SOUTH AFRICAN NATIONAL GRID**

Home Applications Support JRU Events Wiki Monitoring

search...

Overview  
Getting Started  
Integrate your site  
What is the grid?  
Middleware  
Collaborations and projects  
Regional e-Infrastructure  
In the News  
Important Links  
Blog

**News from the Grid World**

ISGTW RSS Feed

- Stampede at the Texas Advanced Computing Center
- Building a new bridge between XSEDE and PRACE
- Open data and open science enter the mainstream

**BELIEF-II project**

News

- Announcing the CREDES Summer School "Dependable Systems Design", June 2-3, 2011.
- EuroAfrica-ICT & eAfrica Monthly e-Newsletter/ March 2011

Home

## What will you do with the grid today ?

The South African National Grid is a federation of resources, institutes and Virtual Organisations. It is a platform for collaboration and research, providing many services to scientists. The national grid forms part of an e-Infrastructure and provides support to users of scientific computing and collaboration. The distributed computing facilities are owned, managed and operated by a federation of universities, national laboratories and research groups, integrated with a middleware layer to provide seamless access to a diverse set of research communities. This project is coordinated from the Meraka Institute, as part of the cyberinfrastructure programme.

Share [f](#) [Share](#)

Hey there, come on inside

Username

Password

Remember Me

**LOGIN**

- Forgot your password?
- Forgot your username?
- Create an account

- SAAO and SAGrid - next steps
- Announcement : EPIKH 2011 school and workshop userfaq
- SAGrid TechTuesday
- Training and Open Day at Potchefstroom

LATEST DEVELOPMENTS >>

**SAAO and SAGrid - next steps**

## SAGrid Diary - a week at the SAAO

During week 4 of 2010, I have been working at the South African Nat

**Twitter feed**

SAGrid  
**TheSAGrid**

TheSAGrid RT @shahdol: The Internet Archive Starts Seeding Over a Million Torrents [bit.ly/Hnfx8B](#)  
2 days ago · reply · retweet · favorite

TheSAGrid RT @e\_sctalk: Unused inventions get a crowdsourced creative spark #OpenScience @NewScientist [newscientist.com/article/mg2152...](#)  
2 days ago · reply · retweet · favorite

Join the conversation

**SANREN**  
South African National Research Network

**ORP chain** **EGI**

**SPECIAL** **EPIKH**

**IQI** **CFRN**

# Dissemination phase



E-mail; face-to-face;  
phone; webex; wiki; web  
site; meetings

Face-to-face; hands on;  
UP & WITS: e-Learning for  
undergrads – little  
evidence that it is used  
extensively for researchers



Traditional publications &  
conferences; limited  
understanding of  
interactive media

We added:



Investigated SMME owners as a  
stakeholder grouping

# Getting closer to understanding the needs of the SMMEs



They need a on-stop place to find relevant Internet detail.

Huge need for financial & marketing guidelines/ training.

Showing much interest in our newsletter.

They are more mobile and Internet literate than what was expected.

# Closure & Research Management

Write all the project detail to a mobile format such as DVD or external hard drive; Several copies kept but not made accessible



We created a central store of all content, back-up and protected

## Research Management

Provides a quick, single access place to see all the current and completed research in the system

# VRE for natural products research



Pol-SABINA Virt

<http://naturalproducts.bi.up.ac.za/vre/>



## Login

Username

Password

Login

[Create new account](#)

[Lost password?](#)

[Back to SABINA](#)

This digital workspace is home to a number of researchers concerned with the utilisation of African natural products - to enhance food security and improve human and animal health.

SABINA is a network that constitutes the following partners: University of Malawi, University of Namibia, University of Dar es Salaam, University of Pretoria, University of Witwatersrand, Council for Scientific and Industrial Research and Tea Research Foundation of Central Africa. SABINA partnership is focused on the building of capacity in natural product research through training of MSc and PhD students. The main goal of the SABINA network initiative is to implement productive postgraduate programmes in the chemistry/biochemistry of natural products. This project is funded as a Carnegie Regional Initiative in Science and Education (see <http://sites.ias.edu/sig/ri/se/>).

The linked POL-SABINA initiative is mainly funded by EU ACP Science and Technology Programme and is supported through the Carnegie-RISE initiative. It focuses on the development of biological resources with application in medicine, health promotion, and

## SciDev.Net

### LATEST NEWS

on science, technology & the developing world.

#### Amazon Peruvians show protection against bat rabies

A study of two communities in northern Peru has revealed that a significant proportion have developed immunity to the rabies

virus. [More...](#)

3 August 2012 | Source:

#### Global initiative seeks to boost health innovation

Catalonia International

# Post login

**VIRE** Pol-SABINA Virtual Research Environment You are logged in as Martie van Deventer (Logout)

Home ► Site pages

### Main menu

- Site news
- Site wiki
- Medicinal plant wiki
- Site wiki

### Navigation

- Home
  - My home
- Site pages
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  - Blogs
  - Notes
  - Tags
  - Calendar
  - Reports
- Site news
- Site wiki
- Medicinal plant wiki
- Site wiki
- My profile
- My projects

### Settings

- Front page settings
  - Turn editing on
  - Edit settings

### Site news

[Add a new topic](#)

**Updates/ Announcements** ↓

**EMBO Global Exchange Lecture Course on Innate Immunity - evolution and advances in clinical medicine**  
*by Natalie Bowers - Friday, 20 July 2012, 11:08 AM*

**The EMBO Global Exchange Lecture Course on Innate Immunity – evolution and advances in clinical medicine will be held in Johannesburg from 2-5 Sept 2012.**

The lecture series is aimed at bringing together young scientists and expose them to the latest findings in the field of innate immunity and to provide a platform for encouraging future immunological research in this area.

Read the rest of this topic(123 words)...

[Edit](#) | [Delete](#)  
Discuss this topic (0 replies so far)

**Call for Applications: E-learning master in Biosafety in Plant Biotechnology**  
*by Natalie Bowers - Friday, 20 July 2012, 11:02 AM*

UNIDO E-Biosafety Training Programme.pdf

This is to inform that the Faculty of Agriculture of the Marche Polytechnic University, Ancona (IT) has opened the call for applications for the V Edition of the International E-Biosafety Master. [Click here](#) for more information and the application forms.

### Calendar

August 2012

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

### Project categories

- Student reports
- PhD Projects
- MSc Projects
- Courses
- Tools and resources
- Moodle training course
- POL-SABINA Admin
- Test

All projects ...

### Messages

No messages waiting

Messages

### Online users

(last 5 minutes)

www.csir.co.za our future through science

# Defining roles



Home ▶ Projects ▶ MSc Projects

Search projects:

## Navigation

Home

- My home
- ▶ Site pages
- ▶ My profile
- ▶ My projects
- ▼ Projects

### ▼ MSc Projects

- ▶ Kennedy's Ngwira
- ▶ Liberata Mwita
- ▶ Moola Nyambe
- ▶ Secilia Ilonga
- ▶ Tinotenda Shoko

## Settings

- ▶ Category: MSc Projects
- ▶ My profile settings
- ▶ Site administration

Project categories:

All the students doing their masters.

### Kennedy Ngwira

Project owner: Kennedy Ngwira  
Project owner: Quintino Mgani  
Project owner: Vinesh Maharaj  
Project observer: Barbara Timmermann  
Project observer: Emmanuel Fabiano  
Project observer: Andrew Marston  
Project observer: Ella Nyakunu  
Project observer: Avrelija Cencic  
Project observer: Shigemi Hara  
Project observer: Jane Morris  
Project observer: John Becker

### Liberata Mwita

Project owner: Oleg Reevea  
Project owner: Sylvester Lyantagaye  
Project owner: Liberata Mwita  
Project observer: Avrelija Cencic  
Project observer: Shigemi Hara  
Project observer: Andrew Marston  
Project observer: John Becker  
Project observer: Barbara Timmermann  
Project observer: Emmanuel Fabiano  
Project observer: Jane Morris  
Project observer: Ella Nyakunu

# Document management integration

[Home](#) » [Data Management New](#) » Alfresco

Company Home My Home Guest Home My Alfresco

mvandeve

**mvandeve**  
This view allows you to browse the items in this space.

Items Per Page 10

**Browse Spaces**

Name	Description	Created	Modified	Actions
ACP	African, Caribbean and Pacific Group	11 February 2011 11:31	15 April 2011 11:02	[Actions]
COSTS	Project costs	11 February 2011 11:33	4 March 2011 11:12	[Actions]
CSIR CONTRACTS	Contract details and copies	11 February 2011 11:34	15 April 2011 10:59	[Actions]
FUNDING	Budgets, orders, invoices	11 February 2011 11:47	4 March 2011 11:12	[Actions]
Hardy	Plone site	3 March 2011 14:54	3 March 2011 14:54	[Actions]
HUBzero	HUBzero Technology Group	11 February 2011 11:49	4 March 2011 11:12	[Actions]
IMAGES	Photos and logos relevant to project	11 February 2011 11:51	4 March 2011 11:12	[Actions]
INTERNS	CV's, appointments, costs	11 February 2011 11:55	4 March 2011 11:12	[Actions]
Literature	Includes articles, books, reports	16 February 2011 14:03	4 March 2011 12:41	[Actions]
Martie's Space	Testing Alfresco functionality	20 January 2011 14:59	4 March 2011 11:05	[Actions]

Page 1 of 2

**Content Items**

Name	Description	Size	Created	Modified	Actions
Developing a plone site for research	Correspondence regarding the developing of a plone site	4.82 KB	3 March 2011 14:54	3 March 2011 15:06	[Actions]
Test	dddd	0.01 KB	4 March 2011 08:23	4 March 2011 08:24	[Actions]
tino - Jnl of Ethnopharmacol.pdf		79.35 KB	4 March 2011 08:25	4 March 2011 08:25	[Actions]

Page 1 of 1

# Dspace repository



for Natural Products Research

You are logged in as Martie van Deventer (Logout)

Home ► Site pages

## Main menu

- Site news
- Site wiki
- Medicinal plant wiki
- Site wiki
- Natural Products Repository**

## Navigation

- Home
  - My home
- Site pages
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  - Blogs
  - Notes
  - Tags
  - Calendar
  - Reports
  - Site news
  - Site wiki
  - Medicinal plant wiki
  - Site wiki
    - Natural Products Repository
- My profile
- My projects

## Settings

- Front page settings
  - Turn editing on
  - Edit settings
  - Users

## Site news

Add a new topic

### LIBERATA MWITA

by [Ella Nyakunu](#) - Monday, 1 October 2012, 01:52 PM

Ms. Liberata Mwita, last Friday 28 September 2012, successfully defended her MSc (Biotechnology). She will be part of the 2012 UDSM graduation ceremonies on the 27th October 2012. Thanks to everyone at SABINA, POL-SABINA and RISE.

*Congratulations, all the best for the future!*

*"Hongera, wote bora kwa ajili ya baadaye!"*

Edit | Delete

Discuss this topic (9 replies so far)



### New fund for young SA entrepreneurs

by [Natalie Bowers](#) - Thursday, 20 September 2012, 09:32 AM

The department of science & technology's Technology Innovation Agency has launched a new fund to support young local inventors and entrepreneurs. Click here to read this article.

Edit | Delete

Discuss this topic (0 replies so far)



### SANBio Guidelines on Traditional Knowledge & Plant Genetic Resource

by [Natalie Bowers](#) - Thursday, 20 September 2012, 09:27 AM

Published Version of TK PGRC Guidelines 21.8.12.pdf

African leaders, through the New Partnership for Africa's Development

## Calendar

October 2012

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

## Messages

No messages waiting

Messages

## Online users

(last 5 minutes)

- Martie van Deventer
- Natalie Bowers
- Skye Blue
- Liberata Mwita
- Godwil Madamombe

# Natural products repository – subject not institutional!

Natural Products Digital Repository: Home - Mozilla Firefox

naturalproducts.bi.up.ac.za:8181/jspui/

## VIRE for Natural Products

Natural Products Digital Repository >

**THE NATURAL PRODUCTS REPOSITORY IS LIVE!**  
Please forward references to articles you would like to see included. We'll soon have a good collection of articles - please come back!

**SEARCH**  
Enter some text in the box below to search DSpace.

**COMMUNITIES IN DSPACE**  
Choose a community to browse its collections.

- Applications
- Aromatics
- Bacteria
- Compounds
- Fungi
- Methods
- Natural product commercialisation
- Natural products
- Omic technologies
- Plants
- Structure elucidation
- VRE newsletters

**Search DSpace**  
Go

**Advanced Search**

- Home

**Browse**

- Communities & Collections
- Issue Date
- Author
- Title
- Subject

**Sign on to:**

- Receive email updates
- My DSpace authorized users
- Edit Profile
- Help
- About DSpace

**A repository collection for Natural Product publications**

Content on this site is updated continuously. For more information regarding the contents of the repository, or any access problems or concerns please contact Natalie Bowers

SHERPA RoMEO  
Visit this link for Publisher's copyright policies regarding self archiving.

**SHERPA RoMEO**

Please forward any links you may have to Natalie Bowers

zotero



### GENERAL NEWS

**The cup of herbal tea that could help fight breast cancer: plant extract can kill cells in test tube (Mail Online Health, Aug 2012)**

A traditional herbal tea may hold the key to fighting breast cancer, claim scientists. Extracts from the plant known as virgin's mantle, which is used as a medicinal tea in some countries, can kill cancerous cells in the test tube. The plant-based tea is already drunk by women in rural Pakistan who have breast cancer, but until now its use as a treatment has been regarded as folklore...[Read more](#). To read the research article [click here](#).

**Drought-resistant tea highlighted in natural product research (SciDev, Sep 2012)**

Researchers in Malawi have developed tea clones able to withstand the worst droughts in the country in recent years, a meeting on natural product development has heard. Chris Kamlongera, principal of Chancellor College, University of Malawi, said the Tea Research Foundation of Central Africa, whose members are Malawi and Zimbabwe, used genetic biomarkers to develop the drought-resistant cultivars...[Read more](#)

**Rethinking herbal medicine (The Scientist, Sep 2012)**

Many scientists raise a skeptical eyebrow to traditional herbal treatments, but a new phylogenetic study suggests that such remedies may hold promise—for both medicine and drug development. In the study, researchers from the University of Reading in the United Kingdom found that many medicinal plants used by nearly 100 cultures on different continents are related...[Read more](#)

### CONFERENCES

**16 Nov 2012**

Realizing the value of plant natural products: from metabolic engineering to biorefining

**Venue:** Stevenage, United Kingdom

**27-30 Nov 2012**

13th Tetrahedron symposium (Asia) - challenges in bioorganic & organic medicinal chemistry

**Venue:** Taipei, Taiwan

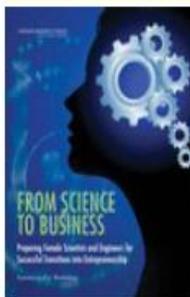
**18-21 Feb 2013**

2nd Biotechnology world congress

**Venue:** Dubai, UAE

### RECENTLY PUBLISHED BOOKS

*Adopted from The National Academic Press*



**From Science to Business**

*Preparing female scientists and engineers for successful transitions into entrepreneurship: summary of a workshop*

From science to business: preparing female scientists and engineers for successful transitions into entrepreneurship is the summary of an August 2009 workshop that assesses the current status of women undertaking entrepreneurial activity in technical fields, to better understand the nature of the barriers they encounter, and to identify what it takes for women scientists and engineers to succeed as entrepreneurs. This report focuses on women's career transitions from academic science and engineering to entrepreneurship, with a goal of identifying knowledge gaps in women's skills as well as experiences crucial to future success in business and critical for achieving leadership positions in entrepreneurial organizations.

# Lessons Learnt & Opportunities

# Lessons

- Do not attempt this without the co-operation of an inquisitive ICT team.
- MUCH change management is required.
- Do not underestimate the role of the facilitator.
- Building the skills and the infrastructure is really rewarding.

# Roles of the facilitator

- Controlling permissions
- Training & troubleshooting
- Evaluating & testing platform & tool features
- Identifying resources to be integrated into Moodle
- Liaison with the VRE developer(s)
- Scouting for relevant content – irrespective of format
- Facilitating the development of relationships
- Spotting opportunities & making linkages
- Pushing only relevant content to the community

# Building skills & infrastructure

- Training/ skills development need is huge.
  - You need to be in control of the subject matter
  - You need to understand what you will need to train
  - It is all about empowerment not intermediation
- Database development.
  - Structure required – for access but also to exchange content
  - Evaluate & determine the best application/ product to use
  - Quality assurance
  - Harvesting and sharing standards
- Advice – what information management tools will fit into their infrastructure
  - Guarding against ‘duplication’
  - Link when possible – each does not require its own!
- Repositories
  - Think wider than just documents – Natural products capture their data in graphic formats

# Opportunities

- UP is busy developing an 'internal VRE' for their librarians to experiment with the facilitation role.
- WITS have decided to use SAKAI as its eLearning platform. Transferring the learning gained while developing Moodle will obviously fast track their learning.
- University of Malawi is investigating the possibility of taking over the facilitation of the VRE.
- Add other opportunities from the RISE meeting.

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# Questions?