

Report on the
BioSA / COFISA Intervention
aimed at facilitating South African and Finnish
business-to-business collaboration in the
Biotechnology and Life Science sectors

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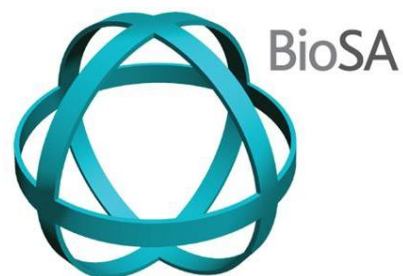


COFISA

Cooperation Framework on Innovation Systems between
Finland & South Africa



MINISTRY FOR FOREIGN
AFFAIRS OF FINLAND



BioSA

Friday 9 May 2008



Executive Summary

COFISA is a development cooperation framework between the Government of South Africa (represented by the Department of Science and Technology) and the Ministry of Foreign Affairs of Finland. Its aim is to enhance the effectiveness of the South African National System of Innovation, thereby contributing to economic growth and poverty alleviation.

BioSA, a not-for-gain independent industry association representing the biotechnology and life sciences industries in South Africa, was appointed by COFISA to assist in capacity development and preparing for, facilitating and coordinating a trade visit to South Africa by senior representatives from the Finnish Biotech Clusters, which took place in March / April 2008.

The purpose of this initiative was to establish networks between senior representatives from the Finnish and South African biotechnology and life science sectors, with the aim of creating long term knowledge exchange of Finnish biotech practices, and assisting with developing research, trade and mutually beneficial relationships between South African biotechnology and life science businesses and their counterparts in Finland.

The initiative kicked off with a visit by a South African delegation to Finland, to promote the initiative amongst key Finnish stakeholders. This was followed by a number of preparatory workshops in South Africa - in the Western Cape, Eastern Cape, Kwa-Zulu-Natal and Gauteng provinces - which included representatives from academia, industry and the public sector, the latter including the DST's biotechnology innovation centres.

The actual trade exchange involved a visit from senior representatives of the Finnish biotech and life sciences sector, including the Centres of Expertise managers, a Finpro Life Sciences team and Finnpartnership.

The workshops with the Finnish representatives again went around the country with the specific purpose of exploring collaboration opportunities at a business-to-business level between Finnish and South African businesses and related biotechnology institutions.

A final workshop, which coincided with the conclusion of the visit by the Finnish delegation to South Africa, was held at the Embassy of Finland in Pretoria. The sole purpose of this workshop was to identify, define and plan specific interventions to follow-on from the various workshops. Such interventions were described to the level of identifying responsible parties in both South Africa and Finland, in order to take these initiatives further.

The next steps from all of the above are to develop a coordination capability in both South Africa (to be facilitated by BioSA) and Finland (to be facilitated by the OSKE (Finnish Centres of Expertise programme) managers in Finland in partnership with Finpro). These platforms will ensure that the identified opportunities are implemented and integrated into existing support platforms, such as those coordinated in Finland by the OSKE's, Finpro and Finnpartnership, as well as those coordinated by South African entities.

It is important to note that the nature of the preparatory and the collaborative workshops held from February to April 2008 empowered all parties, especially institutions in South Africa, to interact with their Finnish counterparts, and vice versa. This is already happening with companies in South Africa that are interacting with targeted entities in Finland, as well as numerous interests and contacts initiated from Finland.

The main objectives of this initiative, i.e. to promote SA-Finnish collaboration in the biotechnology and life science sectors, and to capacitate BioSA as an intermediary institution in the National System of Innovation, were successfully achieved through this BioSA/COFISA Initiative.

The contact points for further action will be BioSA and Finpro.

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Venture Solutions

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List of Abbreviations

AGM	Annual General Meeting
B2B	Business to Business
BICs	Biotechnology Regional Innovation Centers
BioFISA	Finnish program to enhance collaboration between biotech players in Southern Africa
BioPAD	Gauteng based biotechnology regional innovation centre
BioSA	Non-profit organisation representing the interests of the private biotechnology sector in South Africa
CEO	Chief Executive Officer
COFISA	Co-operation Framework on Innovation Systems between Finland & South Africa
DST	Department of Science and Technology
EMBL	European Molecular Biology Laboratories
Finpro	Finnish business consulting organisation
Finnpartnership	Finnish business partnership programme
FIMM	Finnish Institute of Molecular Medicine
IP	Intellectual property
MFA	Ministry of Foreign Affairs
OSKE	Finnish Centers of Expertise Program
PlantBio	National plant biotechnology BIC
SEDA	Small Enterprise Development Agency
SMME's	Small, micro and medium size enterprises

1 Introduction and background

1.1 Background

COFISA is a development cooperation framework between the Government of South Africa (represented by the Department of Science and Technology) and the Ministry of Foreign Affairs of Finland, which aims to enhance the effectiveness of the South African National System of Innovation, thereby contributing to economic growth and poverty alleviation.

BioSA, a not-for-gain independent industry association representing the biotechnology and life sciences industries in South Africa, (*Please refer to the BioSA mandate and overview in the Appendix 0*) was appointed by COFISA to assist in capacity development and preparing for, facilitating and coordinating a trade visit to South Africa by senior representatives from the Finnish Biotech Clusters, which took place in March / April 2008.

This report outlines the motivation for the abovementioned intervention and contains a review of all activities, outputs and related aspects pertaining to the BioSA-COFISA intervention.

1.2 Purpose of intervention and motivation for BioSA's involvement

The purpose of this initiative was to establish networks between senior representatives from the Finnish and South African biotechnology and life science industries, with the aim of creating long term knowledge exchange of Finnish biotech practices, and assisting with developing research, trade and mutually beneficial relationships between South African biotechnology and life science businesses and their counterparts in Finland.

The fledgling biotechnology and life science industry in South Africa is in dire need of capacity development and the establishment of international partnerships. This industry features as one of the 'grand challenges' of the Department of Science and Technology's 10 year plan, and is specifically earmarked under the focus area of 'Farmer to Pharma'.



Internationalization and capacity development with Finnish partners will substantially enhance the growth and sustainability of the South African National System of Innovation. The motivation for the Finnish involvement fits in squarely with the existing COFISA program in South Africa which is aimed at creating a vehicle for collaboration with Finland and learning from the Finnish experience.

BioSA was deemed to be suitably positioned to assist COFISA in facilitating the planned visit as it has a thorough understanding of the South African biotechnology sector and has country-wide representation. Importantly also, BioSA's members – small, micro and medium size enterprises (SMME's) that are active commercially in the South African biotech and life science sectors – will ultimately be the entities that develop and nurture sustainable business relations with Finnish institutions, long after the COFISA program has come to an end.

In parallel to this, COFISA's use of BioSA as the institution to perform this function provided COFISA with an important opportunity to develop and support a local intermediary institution, thereby further aligning itself with the COFISA mandate to develop capacity in the National System of Innovation. Local intermediaries – organizations acting as industry support mechanisms and representative platforms to interface with especially SMME's, industry, academia and government – have been one of the key factors responsible for the growth and success of the Finnish Innovation System.

The Finnish biotechnology sector is well organized and positioned to cover the full spectrum of focus areas (i.e. pharmaceuticals, nutrition, diagnostics, health and well-being and medical devices) and role-players (the clusters contain the whole value chain in each sector comprising research, academia, investors, public support infrastructure such as science parks and living labs, as well as the private sector). It is important to appreciate that the senior delegates from Finland represented their respective biotech clusters and spoke on behalf of all of these stakeholders.

The development of similar clusters in South Africa is still in its infancy, and BioSA is keen to see the development of regional strengths with regards to biotech and life sciences. This function of encouraging closer collaboration within the regional biotech and life science sectors was a critical objective of the entire initiative, especially in an area such as the Eastern Cape where there are clear gaps in the biotech value chain; there is for example no formal public biotech support initiative similar to the Biotechnology Regional Innovation Centers (BICs) found in some of the other provinces.

1.3 Outline of BioSA's services to COFISA

The nature of BioSA's services to COFISA can be summarized into three phases:

1.3.1 Preparatory regional workshops

The first of BioSA's services was to assist in preparing for the visit by the Finnish delegation, by arranging workshops in Gauteng, the Western Cape, the Eastern Cape and Kwazulu-Natal with representatives from key stakeholders (research, academia, the private sector, investors, and public sector players such as the BICs).

The purpose of these workshops was to create awareness of the biotechnology value chain in each region, to foster capacity development in terms of collaboration and knowledge exchange, and to identify which interventions could be used to grow such collaborative interactions in each region, beyond the workshops and beyond the Finnish visit.

The workshops provided BioSA and COFISA with an opportunity to promote awareness of their respective mandates and programs and to share the Finnish experience regarding collaboration, clustering and innovation.

It is important to note that even though the COFISA mandate does not cover the Kwazulu-Natal Province, three key stakeholders, these being the LifeLab BIC and the national plant biotechnology BIC (PlantBio), as well as the University of Kwazulu-Natal, are located in this province. These are fundamentally important role-players in the National System of Innovation and have several operations in the Eastern Cape and in Gauteng. Kwazulu-Natal was therefore included in the COFISA initiative.

1.3.2 Facilitate regional visits of the Finnish delegation to South Africa

The second component of BioSA's services was to facilitate the actual Finnish visit, in terms of coordinating and hosting the workshops with the Finnish and their South African counterparts in each region. This comprised a facilitated workshop in each region (Cape Town, Durban and Pretoria) between the Finnish and South African representatives (last-mentioned identified from the preparatory workshops).

The aims of these workshops were to (i) exchange information about the biotechnology industry and activity in each region, (ii) for the Finnish to present and promote their clusters in Finland, and (iii) to identify and discuss relevant topics for collaboration in biotechnology and innovation.

The objective was to establish potential opportunities for synergies and collaboration between the South African regional biotech clusters and the Finnish biotech clusters.

1.3.3 Host a review workshop for the Finnish delegation to South Africa

The third component of BioSA's services entailed hosting a final workshop with the Finnish delegation in Pretoria, at the Embassy of Finland. The purpose of this workshop was to review the findings and observations from the three preceding regional workshops, and to identify suitable interventions and follow-up activities with which to

establish lasting relationships and commercial opportunities between the Finnish and South African biotechnology sectors.

1.4 Finpro and Finnpartnership

The above three workshops as well as the last workshop at the Embassy comprised detailed cooperation with the Finnpartnership Program (a development and funding institution acting on behalf of the Ministry of Foreign Affairs of Finland with the mandate to develop partnerships between Finnish institutions and businesses/organizations in the developing world), and Finpro (a Finnish agency similar to Trade and Investment South Africa, with the mandate to internationalize Finnish industry), so as to promote these programs to the South African biotechnology industry, as well as to identify and pursue collaborative opportunities that can be supported by the Finnpartnership Programme and Finpro.

The results from the COFISA Initiative will be communicated throughout its database by Finpro, so as to assist them in their efforts to promote South African biotechnology businesses to their Finnish clients.

The final outcome of BioSA's services to COFISA are documented in this report, including contact lists and details of participants, so as to assist COFISA in planning follow-up actions.

1.5 Benefits to COFISA

BioSA's services to COFISA ensured that the Finnish visit in March / April 2008 resulted in tangible deliverables and lasting relationships between the South African and Finnish biotechnology and life science sectors. This resulted from the fact that suitable capacity development and preparation prior to the visit prepared and orientated the South African biotech players prior to the Finnish visit, with a clear understanding of the opportunities and expectations that would arise from this visit.

There can be no doubt that BioSA, a neutral and objective South African industry association, was a suitable partner to assist COFISA in achieving its objectives, firstly by having access to all stakeholders in the local biotech arena, including both public and private sector players, and secondly by having the capacity and experience to prepare for and coordinate such knowledge exchange, which included discussions - both scientific and commercial - with the Finnish delegation.

1.6 Benefits to BioSA

BioSA is in the initial phases of creating awareness of its mandate and value-add to members. By coordinating and facilitating the Finnish visit, BioSA had the opportunity to create public awareness of its capabilities and its neutral status, and established its profile as a credible South African biotechnology stakeholder, both locally and in the minds of the Finnish bio sectors.

By appointing BioSA, COFISA greatly assisted in the rollout of the BioSA mandate, including capacity creation and increasing BioSA's membership.

2 BioSA visit to Finland in preparation for the COFISA intervention

2.1 Purposes of the visit:

- To gain a better understanding of the Finnish innovation system (science parks, funding, infrastructure, support organizations, etc)
- To develop key contacts in the regions visited

2.2 Travel details and meetings

The delegation was led by Prof. Michael Pepper (President, BioSA) and included Adv. Donrich Jordaan (BioSA Management Committee, and CEO Sylvean Biotech), Miss Thokozile Mandyu (Project Officer: COFISA, Department of Science and Technology) and Ms Swasthi Soomaroo (Deputy Director: Biotechnology, Department of Science and Technology). The delegation departed from Johannesburg on Monday 11 Feb and arrived in Turku (via

London and Helsinki) on Tuesday 12th Feb. Arrival was followed by dinner with Mr. Tero Piispanen.

On Wednesday 13th Feb the delegation visited the Turku Science Park from 09:00-15:30. The program included the following:

- Welcome by CEO Ilka Kouvonen
- Presentation of BioSA, biotech in South Africa, COFISA project - Michael Pepper
- Presentation of BioTurku concept - Hanna Halme
- Visit to Biovian Ltd (Knut Ringbom, Director, Projects and Marketing)
- Lunch
- Visit to Turku Centre for Biotechnology (Rolf Sara, Laboratory Manager)
- HealthBIO presentation, discussion on future collaboration - Tero Piispanen

The delegation left Turku for Helsinki by train at 16:00.

On Thursday 14th Feb the delegation participated in a seminar with Finpro in Helsinki (Porkkalankatu 1, Helsinki) from 10:00-14:00, and then visited Finnish Bioindustries (www.finbio.net) with Mrs. Saara Hassinen from 14:00-15:30. The delegation then met with the South African Ambassador to Finland in Helsinki from 16:00-17:00.

Participants for the Thursday morning session included:

- Meria Heikelä, Finpro, Head of Industry, Life Sciences
- Christine Grumbach, Finpro, Senior Consultant
- Heli Pasanen-Zentz, Finpro, Senior Consultant
- Johan Alback, Finpro, Project Advisor
- Hanna-Riitta Kurittu, Finnpartnership, Programme Coordinator, Matchmaking
- Asto Vainio, Invest in Finland, Investment director
- Saara Hassinen, Finnish Bioindustries
- Tuula Palmen, Bioforum, Program Director
- Hanna Halme, Turku Science Park Oy Ltd., Project Manager
- Michael Pepper, president of BioSA
- Donrich Jordan, Sylvian Biotech, CEO
- Thokozile Mandyu, COFISA Project Officer

- Swasthi Soomaroo, Dept. of Science and Technology

On Friday 15th Feb, the delegation visited Culminatum (Tekniikantie 12, 02150 Espoo, www.culminatum.fi). The program included the following:

- Coffee and welcome - Riikka Paasikivi
- Culminatum Ltd Oy and Helsinki region innovation environment - Pasi Mäkinen, CEO
- BioSA, biotech in South Africa, COFISA-project - Michael Pepper & Thokozile Mandyu
- HealthBIO sector in Helsinki Region - Riikka Paasikivi
- Lunch at Innopoli 1

Participants for the Friday morning session included:

- Pasi Mäkinen, Culminatum Ltd Oy, CEO
- Riikka Paasikivi, Culminatum Ltd Oy, Program director
- Kati Takaluoma, Culminatum Ltd Oy, Project manager
- Marja- Riitta Viljanen, Turku Science Park
- Michael Pepper, president of BioSA
- Donrich Jordan, Sylvian Biotech, CEO
- Thokozile Mandyu, COFISA project officer
- Swasthi Soomaroo, Dept. of Science and Technology

Riikka Paasikivi had sent slides on the Finnish Institute of Molecular Medicine (FIMM, www.fimm.fi), which is recently founded international institute, partnering with EMBL, to Prof. Pepper. The director, Prof. Olli Kallioniemi was very interested in meeting with the delegation, but unfortunately was not available on Feb 14-15. He asked Riikka Paasikivi to send the slides, and expressed the wish to be able to meet members of the delegation in the future.

The delegation left for South Africa in the Afternoon of Friday 15th Feb.

2.3 Major outcomes of the visit to Finland

- Exposure to several key elements of the Finnish innovation system including the Turku Science Park and BioSA's equivalent in Finland, namely Finnish Bioindustries
- Development of an initial understanding of the important funding structures and support services
- Establishment of contacts with several key players in the Finnish innovation system

3 Capacity building and stakeholder consultation

3.1 BioSA capacity building and preparatory workshops – February 2008

3.1.1 Purpose and objectives

The purpose of the preparatory workshops held in Cape Town, Port Elizabeth, Durban and Pretoria during the month of February 2008 was, as mentioned in the introduction, to promote awareness of BioSA, COFISA and the Finnish delegation, and to encourage closer collaboration amongst the various regional stakeholders in biotechnology.

3.1.2 Workshops held

Port Elizabeth Thursday 21 February 2008

Pine Lodge Conference Centre

Pretoria Friday 22 February 2008

The Innovation Hub

Cape Town Tuesday 26 February 2008

The Fountains Hotel and Conference

Durban Wednesday 27 February 2008

Sica's Guest House

3.1.3 Agenda and outcomes

Session 1: Introduction to BioSA

- Obtained inputs on the role of BioSA in general.
- Obtained feedback on the proposed idea of a workshop on SMME-university collaboration.
- Obtained inputs on other activities that BioSA should organize.

The meta-outcome was constituency buy-in and increased legitimacy.

Session 2: Finnish Opportunities

The meta-outcome was to position BioSA as facilitator or door-opener for its constituency so as to expand its activities to Finland, leveraging BioSA's current contacts obtained during the visit to Finland.

Session 3: Regional Biotech Environment Analyses

- Obtained inputs on each region's strengths and weaknesses.
- Obtained inputs on ideas for thematic clustering in the region.
- Obtained inputs about what opportunities, such as IP licensing, access to capital, etc, the participants would like to explore in the Finnish context.

The meta-outcome was gathering information for BioSA to be able to give general feedback to the Fins on the South African biotech and life science environment.

3.1.4 Attendees

(Refer to Appendix 0 for full attendance list)

	Cape Town	Port Elizabeth	Durban	Pretoria	Total
Number	16	9	18	38	81

3.2 Workshops in conjunction with Finnish OSKE's in South Africa – March 2008

3.2.1 Purpose and objectives

Three full day workshops were held in Cape Town, Durban and Pretoria respectively, which included senior local biotech representatives identified through the preparatory workshops, as well as the full Finnish delegation comprising the Finnish OSKE (Centres of Expertise) managers for biotech and life sciences, as well as representatives of Finpro and Finnpartnership.

The purpose of these workshops was for each senior representative (both local and Finnish) to present detailed information about the outline of biotech activity in each region, and to explore areas for collaboration.

3.2.2 Workshops held

Cape Town*	Monday 31 March 2008
	<i>The Lagoon Beach Hotel and Conference</i>
Durban	Tuesday 1 April 2008
	<i>Sica's Guest House</i>
Pretoria	Wednesday 2 April 2008
	<i>The Innovation Hub</i>

* The Cape Town workshop included representatives from the Eastern Cape, and the two venues were combined for logistical reasons, into one workshop in Cape Town.

3.2.3 Agenda

- BioSA welcoming and introductions
- Presentations by Finpro and Finnpartnership
- Presentations by five OSKE (Finnish Centers of Expertise Program) representatives
- Presentations by selected South African biotech role-players



- Round table discussions to identify opportunities for collaboration
- Summary, conclusions and road forward.

3.2.4 Attendees

The following six senior Finnish representatives were invited to South Africa and their full costs for international travel, local travel, accommodation etc, were covered through a special grant secured by BioSA, from the Finnish Embassy in Pretoria's Local Development Fund.

<u>Cluster</u>	<u>Name</u>	<u>Organisation</u>
Oulu	Tuula Palmen	BioForum Oulu
Kuopio	Ilpo Kuronen	Teknia Innovation
Tampere	Tero Valimaa	FinMedi Tampere
Helsinki	Riikka Paasikivi	Culminatum
Turku	Tero Piispanen	Turku Science Park
National	Saara Hassinen	Finnish Bio Industries

Saara Hassinen could not attend and the actual delegation thus comprised the first five people on the above list. The Finnish delegation was further comprised of representatives from Finpro and Finnpartnership, who participated in all workshops at their own cost.

<u>Organisation</u>	<u>Name</u>	<u>Designation</u>
Finpro	Meria Heikelä	Life Sciences Group Manager
Finpro	Christine Grumbach	Head of Finpro Germany
Finpro	Johan Albäck	Finpro South Africa
Finpro	Anneli Virtanen	Finpro South Africa
Finnpartnership	Hanna-Riitta Kurittu	Program Coordinator

3.3 Final workshop at the Embassy of Finland in Pretoria

3.3.1 Purpose and objectives

A final workshop was held with the Finnish delegation at the Embassy of Finland in Pretoria. The purpose of the workshop was to discuss findings from the delegation visit and to identify implementable follow-up actions to increase bilateral collaboration in the biotech and life science sectors.

3.3.2 Agenda

- Welcome and introductions
- Feedback from each delegate regarding the visit
- Facilitated round table discussion to identify follow-up actions
- Next steps and action plans.

3.3.3 Outcomes

The workshop identified a number of follow-up opportunities. These can be subdivided into two categories being those opportunities where responsible parties have been identified in order to develop said opportunities (e.g. interest in tissue engineering or recombinant proteins where South African and Finnish companies have been identified for further collaboration), and those opportunities where further interventions are required to obtain more information in order to identify the way forward (e.g. bringing together all bio-prospecting role-players in South Africa to develop a combined offer to Finnish institutions interested in bio-prospecting).

A key deliverable from the BioSA/COFISA intervention has been to empower institutions participating in the various workshops, to liaise with and interface with identified Finnish institutions. Finpro and Finnpartnership are positioned to assist on the Finnish side, in

partnership with the various OSKE (Centers of Expertise) managers responsible for biotech and life sciences.

Interested parties can obtain financial support through the COFISA Seed Fund to finance visits to Finland.

The workshop agreed that the next steps from the above are to develop a co-ordination capability in both South Africa (proposed to be facilitated by BioSA) and Finland (proposed to be facilitated by the OSKE managers in Finland in partnership with Finpro).

This platform will ensure that the identified opportunities are implemented and integrated into existing support platforms, such as those co-ordinated in Finland by the OSKE's, Finpro and Finnpartnership, as well as those co-ordinated by South African entities.

The full list of identified opportunities is not part of this document as it forms a core component of the co-ordination function following from this intervention, proposed to be a BioSA/Finpro activity for the next 12 months.

However, all parties that participated in the various workshops will be notified by means of a letter from BioSA, endorsed by COFISA. This letter will ensure that all parties are suitably informed of the advised process for interfacing with institutions in Finland, so as to ensure that there is minimum duplication and/or unnecessary communication with the Finnish institutions, as well as informing them of the contact details and platforms for the OSKE's, Finpro, Finnpartnership, BioSA and the COFISA Seed Fund.

3.3.4 Attendees

(Refer to Appendix 0 for full attendance list)

The workshop was attended by the whole Finnish delegation, including Finnpartnership and Finpro as well as the four BioSA board members, COFISA and representatives of the Finnish Embassy, notably the Ambassador of Finland to South Africa.

4. Analysis and review

4.1 Inputs to the roll-out of BioSA

4.1.1 Specific inputs obtained through preparatory workshops

The need for an industry organization representing all players in the SA biotech and life sciences industry was recognized. BioSA is supportive of all organizations in South Africa becoming members, but voting rights are granted only to private SMMEs. This ensures that the body is industry driven.

Possibilities of extending the BioSA mandate beyond South Africa and into Southern Africa were well received. By doing so, BioSA will have a stronger position as an industry organization, attract more members and elevate its status as a suitable partner for international interests such as those from the Finnish.

The general feeling was that BioSA should stick to its core mandate of representing the interests of SMME's in the biotech sector and engage in activities in support of this mandate, be it representation, capacity development, networking or information-sharing.

It was emphasized that the role to 'liaise on behalf of members', stated as one of the key objectives of BioSA, should be developed as a key function of the industry organization, i.e. liaise with other institutions, parties, government, international stakeholders, etc.

Members raised concerns about the new Bioprospecting Act and asked BioSA to provide clearer understanding of the role and impact

of this act, as well as oppose certain implications of the act, if deemed negative to the growth of the industry.

It was strongly suggested that BioSA become a member of SACOB and identify a suitable international biotech industry association for closer alignment and accreditation.

It was communicated that BioSA will include in its mandate 1st, 2nd and 3rd generation biotechnology activity.

It was suggested that BioSA should not charge any student membership fees.

In response to the question of what role BioSA will play in funding and accessing funding, it was communicated that BioSA will be a platform from which to communicate available funding and provide feedback from members, to funding institutions, with regard to ways in which to improve such services and instruments.

In response to a question of the difference between BioSA and AfricaBio, the following facts were stated:

- BioSA is an associate member of AfricaBio
- There is good collaboration and communication between the two institutions
- There is a need to still agree on future roles and collaboration agenda (including funding)
- AfricaBio's mandate is much bigger than BioSA with the latter focused purely on the 'private biotech SMME'
- AfricaBio has a continental focus whilst BioSA is national.

The Public Understanding of Biotechnology (PUB) program asked BioSA to help them fulfill their own mandate of increasing awareness and understanding of biotechnology. PUB would like to become a BioSA member. PUB also raised concerns as to possible duplication with its

own surveys and asked to have a meeting to determine synergies and avoid duplication. BioSA (with PUB) should play a role in getting young people interested in careers in science and biotechnology.

It was clearly stated that issues of importance to BioSA's members may already be covered or addressed by other institutions. In this regard, BioSA was strongly advised to ALWAYS first seek ways to collaborate, before venturing into new territory by itself. In other words, take hands rather than go it alone.

Workshop participants asked BioSA to list a database of skills (available and needed) as well as issues and technologies within the public and academic institutions that could be commercialized by SMMEs.

Participants asked BioSA to clearly document and publish (online and otherwise) local success stories and case studies that could promote the industry and encourage start-ups and entrepreneurs.

BioSA confirmed that its own mandate and interpretation of the scope and definition of biotechnology is wider rather than narrower.

It was voiced that it is difficult for industry, especially SMMEs, to interface and work with the universities and that BioSA could help in terms of skills development, best practices and facilitation.

4.1.2 Priorities identified from preparatory workshops

The preparatory workshops clearly ranked members and potential members' interests in BioSA's activities as follows:

- Communication and liaison with external parties with regards to issues pertinent to the BioSA mandate and SMME interests.
- Establish a voice for the industry, and work towards a culture of co-ownership, shared growth and constructive development.

- Act as the unifying and representative voice of the industry.
- Communicate and champion the need to develop an SMME biotech industry in Southern Africa. This is often assumed but nowhere clearly outlined, disseminated and tested.
- Play an active role in Bio2Biz:
 - Ensure topics and speakers are relevant
 - Ensure focus is not too broad to appeal to industry needs and interests
 - Encourage more networking and commercial knowledge exchange
 - Interface with members to ensure that Bio2Biz addresses their interests and needs.

4.2 Inputs to the establishment of business to business collaboration between SA and Finland

4.2.1 Specific inputs obtained through the SA-Finnish workshops

Each workshop with the Finnish delegation generated numerous items for potential collaboration. The discussions during each workshop resulted in specific business to business and science related collaboration between local and Finnish institutions.

These inputs were recorded and revisited during the final workshop at the Finnish Embassy. Each item was then analyzed in terms of the business and viability potential, the nature and type of participants on both sides to be involved in each initiative, as well as the person or institution that will drive the identified opportunity to the next level.

This resulted in a prioritized list of issues for future collaboration. Many of the issues can be taken further by the individuals or institutions listed in the analysis and the immediate role of BioSA and COFISA in this regard is to ensure that each such entity understands the advised process for taking things further, but that this does not prevent them from taking their own initiative.

It was agreed in the various workshops that the OSKE managers should be the first step for any activity from local players to engage with Finnish institutions. This is not intended as a measure for control but rather to ensure that any planned initiatives are implemented with the insight and experience of the people in Finland with the best overview, reach and understanding of the Finnish biotech environment.

This advised arrangement would also ensure that institutions on the Finnish side are not repeatedly solicited by the same type of requests from South African entities, but that there is an opportunity to develop shared interventions that would eliminate duplication and time wastage.

Other issues identified through the final workshop require further interventions in South Africa before embarking on further interventions with Finnish institutions. This refers to instances where more information is needed to develop the best strategy for taking things further, or where absent parties were identified for inclusion in future activities, that need to be consulted before moving on.

For this reason, BioSA in consultation with Finpro and Finnpartnership is developing a proposed action plan to coordinate such activities so as to ensure that they don't remain at the level of ideas or good plans, but are implemented and expedited within reasonable means and capacity.

As a result of the consultation between the parties, all entities participating in the SA-Finnish intervention outlined in this report are fully able to, and empowered to engage with institutions in Finland, using the contact details and suggested processes discussed during the workshops.

A letter to this effect, including an overview of the different stakeholders and their contact details, as well as the suggested process for engaging with said stakeholders, will be distributed by BioSA to all participants and published on the BioSA and COFISA websites.

The details of all summarized and documented ideas will form part of the process for co-ordination, currently under discussion with Finpro, Finnpartnership and COFISA and will not be made public until this process has been concluded.

The individual opportunities will be properly communicated to the appropriate stakeholders so as to ensure that neither BioSA nor any other party is hindering any local or Finnish institution to implement immediate follow-up activities from the overall intervention.

4.2.2 Advised process for contacting Finnish institutions

The suggested process for taking further those initiatives identified through the SA-Finnish intervention, or generally approaching any Finnish biotech or life science institution, is as follows:

- Do your own homework first, in order to clearly define your need and interests pertaining to a Finnish institution, individual, technology or product.
- Where possible, perform a detailed online search of the Finnish biotech space before contacting institutions directly. Refer to Appendix 0 for a list of useful websites pertaining to the Finnish biotechnology and life science sectors.
- Clearly document your interests and specific needs, and explain what you need from the Finnish entity.
- Even if you know exactly which institution or individual you would like to engage with, first send the document to the appropriate OSKE manager responsible for the sector or cluster of relevance.

- Only send it to all OSKE managers on the contact list if you are not sure who the appropriate one is.
- Copy the communication to Finpro, Finnpartnership and BioSA to ensure that everyone is in the loop. Keep in mind that this is not to obtain anyone's 'permission' or 'approval', but to help you get the maximum assistance in taking your idea further.
- If you don't receive the desired feedback within one week, try to contact the desired entity by phone. Keep in mind that the Finnish holidays are different than ours and that people may very well not be at the office. It is not common for any such requests to be ignored or outright rejected, so if someone doesn't get back to you, there is normally a legitimate practical reason for it.
- Contact BioSA if you don't receive responses from any institutions, or if you experience a bottleneck. Don't harass any party or institution with repeated e-mails or telephone calls.

This is a suggested course of action. Nobody can or is prescribing the way to conduct business but it is advisable to route, so as to ensure sustainable and growing business relations between SA and Finnish institutions, and to conduct business in a way that makes life easy for everyone.

5 Actions and next steps

5.1 BioSA

5.1.1 Strengthening the BioSA mandate

BioSA through the COFISA supported intervention from February to April 2008 rapidly established itself as a national industry association with a high percentage of representation amongst eligible members in the biotech and life sciences sectors. This occurred at a pace much faster than the normal organic development of such organizations and was accompanied by a lot of energy, enthusiasm and learning

experiences which other similar organizations may have encountered only over a much longer period of time.

BioSA, on completion of the COFISA intervention, will review the original mandate from its membership and plan accordingly for the remainder of the current year, and also for the ensuing medium term development of the association. Key issues that surfaced from all workshops and discussions with external parties, and which will be taken further by BioSA, are as follows:

- Ensure that all parties engaged with during this intervention are fully up to date with BioSA's mandate and have been contacted for membership.
- Thank all existing and new members for their involvement in the above-mentioned intervention.
- Ensure that the minimum infrastructure in terms of a website and online presence for members has been implemented and that such fact is communicated to the membership.
- Plan for the upcoming Bio2Biz conference so as to ensure a continued presence in the minds of the biotech sector and to leverage the opportunity as a platform for marketing BioSA, as well as a platform with which to give feedback regarding the role and value of BioSA with regard to the COFISA intervention.
- Respond to any outstanding membership and member related queries that arose from the above intervention.
- Arrange the first BioSA AGM later in 2008 to coincide with the 2008 Bio2Biz conference.
- Plan for future financial sustainability of so as to empower existing and new leadership to continue with the energy and momentum created by the current management team.
- Address issues such as an inclusive mandate, relationships with key stakeholders and government, infrastructure, funding and internal management processes, as outlined in previous sections of this report, to complete the work done in starting up BioSA in 2008.

5.1.2 Specific interventions to grow and support BioSA membership

BioSA will engage in the following activities:

- Organize a bioprospecting information seminar. Refer to *Appendix 0* for a detailed proposal in this regard.
- Organize an SMME-University workshop. Funding by COFISA has already been approved.
- Follow up on new membership applications.
- Complete the online facility to showcase members as promised.
- Prepare a suitable intervention to coincide with Bio2Biz to ensure that this important platform is used to promote awareness of BioSA and its mandate and for BioSA to contribute to the value and brand of Bio2Biz.

5.1.3 BioSA's potential role in SA-Finnish B2B collaboration

BioSA is ideally positioned as a neutral and objective national organization to play the role of co-ordinator for an initial limited period of time. For this reason, it is suggested that BioSA propose itself as an ongoing co-ordinator of the SA-Finnish collaboration opportunities highlighted in this report, but on a reimbursed basis, so as to bring professional support services into BioSA with which to handle the workload of said co-ordination activities. BioSA will act as a coordinator and facilitator to bring the correct parties to the table and ensure that there is progress.

The scope of such services should include the following:

- Organising bioprospecting and SMME-University workshops. Refer to *Appendix 0* for a detailed proposal in this regard.
- Co-ordination of communication regarding the outputs of the COFISA intervention, which could be a letter from BioSA, endorsed

by COFISA, to all participants outlining the final results and outcomes of the entire initiative.

- Co-ordinating and facilitating information exchange between SA and Finnish institutions, which could be supported by Finpro and/or Flnnpartnership, and which should include the following activities:
 - Provide interested parties with up to date contact details and advice as to the appropriate institutions to contact on either side.
 - Intercede in instances where there is no progress or response from contacted parties, by finding alternative options.
 - Monitor progress of interactions on a regular basis so as to ensure continuity and momentum.
 - Collect, update and disseminate information of interest to all parties, such as contact details, events, etc., using the BioSA website as a common point of access.
 - Identify new opportunities or needs for additional interventions as and where required.
- Act as the host for information from Finland which could be of interest to the SA biotech sector.
- Assist Finpro, Flnnpartnership and COFISA with future facilitation functions such as could be required when any institution wants to interface with the SA biotech sector.
- Co-ordinate and support biotech delegations from South Africa to Finland by supplementing COFISA's administrative and travel arrangements, by finding suitable partners in Finland to visit, and structure the delegation focus, plan and objectives vis-à-vis Finland.
- Act as a single source of information for Finnish biotech institutions wanting to interface with South African institutions.

5.2 COFISA

5.2.1 COFISA's role in supporting BioSA

COFISA has made a major investment in BioSA and in turn has relied heavily on BioSA's services in the intervention outlined in this report.



COFISA should continue its role of empowering and developing BioSA so as to ensure that BioSA will grow into a sustainable and self-funded industry association that will be a permanent fixture in the National System of Innovation.

It is suggested that COFISA subsequently turn to BioSA as a preferred partner in any initiatives related to the biotech and life sciences sectors where such initiatives require the use of a facilitator or neutral intermediary. Initiatives such as the proposed bioprospecting and SMME-University events (that flow from the COFISA intervention described in this report) would be excellent candidates for continued COFISA support.

5.2.2 COFISA's role in future SA-Finnish B2B collaboration

It is recognized that COFISA is a limited period program which will terminate in the near future. It is therefore proposed that COFISA develop and support BioSA as the institution that will continue to support SA-Finnish business to business biotech collaboration, in partnership with applicable institutions such as Finpro and Finnpartnership.

COFISA's proposed role in these matters should therefore be to fund or co-fund the co-ordination of such opportunities by creating capacity within BioSA, and secondly to pass on any requests for such support received by COFISA, to BioSA.

COFISA can further strengthen this capacity within BioSA by promoting BioSA as the preferred provider for biotech information and opportunities when communicating the COFISA mandate both within SA and Finland.

5.3 BioSA, COFISA, MFA, Finpro and Finnpartnership coordination

Given the above, it is suggested that BioSA provides COFISA and the Ministry of Foreign Affairs of Finland through its Embassy in Pretoria, with a full proposal detailing how it intends to co-ordinate and facilitate follow-up action from the identified list of opportunities:

- Outline the scope, nature and costs of acting as co-ordinator.
- Define specific interventions such as, but not limited to co-ordinating and facilitating a workshop on bioprospecting, with such interventions following from the list of opportunities.
- Outline the potential relationship, or include as part of a single proposal, the use or integration of Finpro and/or Finnpartnership services in regards to the co-ordination function.

The above should be proposed for a 12 month period with suitable service level agreements between COFISA and BioSA or BioSA/Finpro/etc.

It is strongly advised that said proposal be structured in a phased manner with specific milestones at the conclusion of each phase. Suggested phases could be:

- Phase One: communicate the list of opportunities and follow up with all parties. (The proposed bioprospecting workshop would be essential to identify the relevant opportunities in this regard.)
- Phase Two: identify follow-up steps for each of the identified opportunities.
- Phase Three: facilitate information exchange between all parties, especially between SA and Finnish counterparts identified at the final workshop.
- Phase Four: operationalize trouble shooting and further information exchange as an ongoing concern.

Appendices

A1 Important contact persons for follow-up actions

A2 Finnish biotech and life science online resources



- A3 List of attendees
- A4 BioSA appointment letter from COFISA
- A5 BioSA mandate
- A6 Bioprospecting breakfast seminar
- A7 Bioprospecting strategising workshop
- A8 SMME-University workshop

A1 Important contact persons for follow-up actions

No	Person	Capacity
1	Prof. Michael Pepper	BioSA president www.biosa.org.za
2	Dr. Viresh Ramburan	BioSA vice president
3	Dr. Antonel Olckers	BioSA board member
4	Adv. Donrich Jordaan	BioSA board member
5	Nirvashnee Seetal	COFISA National Coordinator www.cofisa.org.za
6	Thokozile Mandyu	COFISA Project Officer
7	Meria Heikelä	Finpro Life Science Manager www.finpro.fi
8	Hanna-Riitta Kurittu	Finnpartnership www.finnpartnership.fi
9	Tero Piispanen	OSKE: Finnish HealthBio Cluster (national & Turku) www.turkusciencepark.com
10	Riikka Paasikivi	OSKE: Culminatum (Helsinki) www.culminatum.fi
11	Tuula Palmen	OSKE: BioForum Oulu (Oulu) www.bioforumoulu.net
12	Dr. Tero Välimaa	OSKE: FinnMedi (Tampere) www.finnmedi.fi
13	Ilpo Kuronen	OSKE: Teknia (Kuopio) www.teknia.fi
14	Saara Haasinen	Finnish Bio Industries Association www.finbio.net
15	Johann Albäck	Finpro South Africa
16	Stephan Lamprecht	Venture Solutions www.venturesolutions.co.za
17	Dr Blessed Okole	LifeLab Biotechnology Innovation Centre www.lifelab.org.za
18	Craig Landsberg	Cape Biotech Biotechnology Innovation Centre www.capebiotech.co.za
19	Avril Harvey	PlantBio Biotechnology Innovation Centre www.plantbio.co.za
20	Dr Joe Molete	BioPAD Biotechnology Innovation Centre www.biopad.org.za
21	Dr Tony Bunn	Medical Research Council Innovation Office www.mrc.ac.za

*Phone numbers and email addresses are not included in this report as the actual report will be published online, which will result in such e-mail addresses being open to spam bots. Full contact details of the above individuals will be included in the letter from BioSA to the workshop participants. Contact details are also available from most web sites for above institutions.

A2 Finnish biotech and life science online resources

No	Institution/resource/entity	Address
1	COFISA	www.cofisa.org.za
2	BioSA	www.BioSA.org.za
3	Department of Science & Technology	www.dst.gov.za
4	Culminatum (OSKE)	www.culminatum.fi
5	Health Bio (national cluster)	---
6	Turku Science Park	www.turkusciencepark.com
7	Bio Forum Oulu (OSKE)	www.bioforumoulu.org
8	FinnMedi Tampere (OSKE)	www.finnmedi.fi
9	Finnish Bio Industries Association	www.finbio.net
10	Teknia Kuopio (OSKE)	www.teknia.fi
11	Finpro	www.finpro.fi
12	Finnpartnership	www.finnpartnership.fi

A3 List of attendees**A3.1 Preparatory workshops February 2008**

Port Elizabeth		Thursday 21 February	Pine Lodge
No	Name	Surname	Organisation
1	Wayne	Kirkman	Citrus Research International
2	Stephan	Lamprecht	Venture Solutions
3	Hue	Laue	Laue Technical & Business Consultancy
4	Mosimanegape	Macomo	SEDA
5	Sean (Dr)	Moore	River Bioscience
6	Wayne	Oosthuizen	SEDA
7	Michael	Pepper	BioSA
8	Viresh	Ramburan	BioSA
9	Ernst (Dr)	van Biljon	RedPlane
Pretoria		Friday 22 February	Innovation Hub
No	Name	Surname	Organisation
1	Tony	Bird	New Venture
2	Tracy	Bossenger	NRF
3	Desire (Dr)	Dalton	DNAbiotec
4	Charles	Dettman	eGoli BIO
5	Nicolaas (Dr)	Duneas	Altis Biologics
6	Kobus	Eloff	University of Pretoria
7	Sabine	Hellyer	AEC Amersham
8	Anton	Jordaan	Sylvean Biotech
9	Donrich	Jordaan	BioSA
10	Kerryne	Krause-Neufeldt	iSlices Innovations
11	Stephan	Lamprecht	Venture Solutions
12	Helen	Malherbe	SAASTA
13	Glen	Malherbe	New Venture
14	Peter (Dr)	Manyike	Scientific Medical Research
15	Anita	Marais	WITS
16	Leonard	Mdluli	DNAbiotec
17	Motsei	Mekoe	GEDA
18	Jan	Mentz	BlueSky VC
19	Nozibele (Dr)	Mjoli	Hlathi Development Services
20	Grant	Napier	Elevation Biotech

21	Kenneth	Nkadimeng	DNAbiotec
22	Dean (Dr)	Oelofse	ARC- VOPI
23	Antonel	Olckers	BioSA
24	Nuno	Pires	Altis Biologics
25	Anri	Raath	DNAbiotec
26	Mary-Ann	Richardson	African Clinical Research Organisation
27	Debby	Riddle	eGoliBio
28	Neeresh (Dr)	Rohitlall	CSIR Biosciences
29	Herman	Snyman	ORB Diagnostics
30	Puffy (Prof)	Soundy	University of Pretoria
31	Nikiwe	Thwala	GEDA
32	Thabiso	Tshabalala	WITS
33	Annelize (Dr)	Van Der Merwe	DNAbiotec
34	Adri	Veale	ARC- VOPI
35	Audrey	Verhaeghe	The Research Institute for Innovation and Sustainability
36	JJ	Viljoen	BlueSky VC
37	Carol	Wallace	New Venture
38	David	Walwyn	Arvir Technologies
Cape Town			
Tuesday 26 February			
The Fountains Hotel			
No	Name	Surname	Organisation
1	Ismet	Amod	Bioclones
2	Tony	Bunn	MRC Innovation Centre
3	Rabogajane	Busang	MRC Innovation Centre
4	Johann	Gorgens	Stellenbosch University
5	Stephan	Lamprecht	Venture Solutions
6	Craig	Landsberg	Cape Biotech Trust
7	Vicky	Longshaw	Vonseidels
8	Rickus	Lotter	Separation Scientific
9	Saberi	Marais	MRC Innovation Centre
10	Michael	Pepper	BioSA
11	Viresh	Ramburan	BioSA
12	Heather	Sherwin	Bioventures
13	Andre (Dr)	Trollip	Biotec Laboratories South Africa
14	Tim (Dr)	Tucker	Scientific Medical Research
15	Bernelle	Verster	University of Cape Town
16	Njodzi	Zizhou	Cape Carotene

Durban		Wednesday 27 February	Sica's Guest House
No	Name	Surname	Organisation
1	David	Arnold	Dalin Yebo Innovation
2	Colin	Bouwer	Biocom Biotech
3	Elise	Buntting	Illovo Sugar
4	Mary-Ann	Chetty	LIFElab
5	Thamsanqa	Chiliza	LifeLab
6	Thobile	Dladla	LIFElab
7	Stephan	Lamprecht	Venture Solutions
8	Mmule	Makgamathe	LIFElab
9	Jaclyn	McDowell	LifeLAB - Inst for Diagnostic Research
10	Rizwana	Mia	LifeLAB - Inst for Diagnostic Research
11	Carl	Montague	LifeLAB
12	Fidzani	Nduna	PlantBIO
13	Viresh	Ramburan	BioSA
14	Santosh (Dr)	Ramchuran	Lifelab
15	James	Sakwa	LIFElab
16	Lungile (Dr)	Shoba-Zikhali	The Institute of Diagnostics Research
17	Suvina	Sooknandan	LifeLab
18	Dawn	Stephens	LIFElab National Genomics Platform

A3.2 SA-Finnish workshops March and April 2008

Cape Town		Monday 31 March 2008	Lagoon Beach Hotel
No	Name	Surname	Organisation
1	Carrie	Blackburn	Roche Diagnostics
2	Tony	Bunn	MRC Innovation Centre
3	Shaun	Cochrane	Bioclones
4	Christine	Grumbach	Finpro
5	Meria	Heikela	Finpro
6	Hannz-Riittz	Kurittu	Finnpartnership
7	Ilpo	Kuronen	Teknia Kuopio

8	Stephan	Lamprecht	Venture Solutions
9	Craig	Landsberg	Cape Biotech Trust
10	Hugh	Laue	Laue Technical & Business Consultancy
11	Sean	Moore	River Bioscience
12	Wayne	Oosthuizen	SEDA
13	Riikka	Paasikivi	Culminatum
14	Tuula	Palmen	BioForum Oulu
15	Michael	Pepper	BioSA
16	Tero	Piispanen	Turku Science Park
17	Viresh	Ramburan	BioSA
18	Nirvashnee	Seetal	COFISA
19	Robin	Thomas	Roche Diagnostics
20	Tero	Valimaa	FinMedi Tampere
21	Bernelle	Verster	University of Cape Town
Durban			
		Tuesday 1 April 2008	Sica's Guest House
<i>No</i>	<i>Name</i>	<i>Surname</i>	<i>Organisation</i>
1	Dave	Arnold	Dalim Yebo
2	Faizal	Bux	DUT
3	Thamsanga	Chiliza	LifeLab
4	Kay	Devchand	LifeLab
5	Lungile	Dladla	DIPA
6	Thobile	Dladla	LifeLab
7	Christine	Grumbach	Finpro
8	Avril	Harvey	PlantBio
9	Meria	Heikela	Finpro
10	Donrich	Jordaan	BioSA
11	Hannz-Riittz	Kurittu	Finnpartnership
12	Ilpo	Kuronen	Teknia Kuopio
13	Stephan	Lamprecht	Venture Solutions
14	Mmule	Makgamathe	LifeLab
15	Leila	Mansoor	CAPRISA
16	Jaclyn	McDowall	LifeLab
17	Rizwana	Mia	LifeLab
18	Carl	Montague	LifeLab
19	Mnqobi	Nuathikazi	Durban Investment
20	Blessed	Okole	LifeLab
21	Riikka	Paasikivi	Culminatum

22	Tuula	Palmen	BioForum Oulu
23	Michael	Pepper	BioSA
24	Tero	Piispanen	Turku Science Park
25	Bala	Pillay	UKZN
26	Viresh	Ramburan	BioSA
27	Santosh	Ramchuran	LifeLab
28	Dakshina	Reddy	ACRO
29	Sandra	Rowe	Roche
30	Nirvashnee	Seetal	COFISA
31	Lungile	Shoba	LifeLab
32	Suvina	Sooknandan	LifeLab
33	Dawn	Stephens	LifeLab
34	Tero	Valimaa	FinMedi Tampere
35	Tanja	Wartnaby	Scientific Group
Pretoria		Wednesday 2 April 2008	
		The Innovation Hub	
<i>No</i>	<i>Name</i>	<i>Surname</i>	<i>Organisation</i>
1	Johan	Albach	Finpro
2	Eugene	Cloete	University of Pretoria
3	Nic	Duneas	Altis Biologics
4	Ben	Durham	Department of Science & Technology
5	Christine	Grumbach	Finpro
6	Meria	Heikela	Finpro
7	Sabine	Hellyer	AEC Amersham
8	Donrich	Jordaan	BioSA
9	Anton	Jordaan	Sylvean Biotech
10	Meria	Kurittu	Finnpartnership
11	Ilpo	Kuronen	Teknia Kuopio
12	Lauri	Kuukasjarvi	COFISA
13	Stephan	Lamprecht	Venture Solutions
14	Thokozi	Mandyu	COFISA
15	Jan	Mentz	Blue Sky VP
17	Antonel	Olckers	BioSA
18	Riikka	Paasikivi	Culminatum
19	Tuula	Palmen	BioForum Oulu
20	Michael	Pepper	BioSA
21	Tero	Piispanen	Turku Science Park

22	Viresh	Ramburan	BioSA
23	Nirvashnee	Seetal	COFISA
24	Theresa	Smit	BioPAD
25	Helena	Tapper	MFA Pretoria Embassy
26	Tero	Valimaa	FinMedi Tampere
27	Annelize	Van der Merwe	DNAbiotec

A3.3 Final Workshop 2008

Pretoria		Thursday 3 April 2008		Embassy of Finland	
No	Name	Surname		Organisation	
1	Siv	Ahlberg		Finnpartnership	
2	Johann	Albäck		Finpro	
3	Christine	Grumbach		Finpro	
4	Meria	Heikelä		Finpro	
5	Donrich	Jordaan		BioSA	
6	Hanna-Riitta	Kurittu		Finnpartnership	
7	Ilpo	Kuronen		Teknia Innovation	
8	Lauri	Kuukasjarvi		COFISA	
9	Stephan	Lamprecht		Venture Solutions	
10	Thokozile	Mandyi		COFISA	
11	Antonel	Olckers		BioSA	
12	Riikka	Paasikivi		Culminatum	
13	Tuula	Palmen		BioForum Oulu	
14	Michael	Pepper		BioSA	
15	Tero	Piispanen		Turku Science Park	
17	Viresh	Ramburan		BioSA	
18	Nirvashnee	Seetal		COFISA	
19	Helena	Tapper		MFA Pretoria Embassy	
20	Heiki	Tuunanen		Finnish Ambassador to South Africa	
21	Tero	Valimaa		FinMedi Tampere	
22	Aneli	Virtanen		Finpro	

A4 BioSA appointment letter from COFISA



BioSA appointment and endorsement

To Whom It May Concern:

This is to confirm COFISA's (Collaborative Framework on Innovation Systems between Finland and South Africa) endorsement of the mandate and activities of BioSA (Biotechnology and Life Science Industry Organisation of Southern Africa) towards representing the interests of SME's in the Southern African life science sector.

This letter is also an official letter of appointment of BioSA as the coordinator and facilitator of the upcoming Finnish-South African life science clustering and capacity building initiative of COFISA.

The purpose of this initiative is to create an enabling platform to encourage and support business-to-business networking and trade between life science entities in Finland and South Africa and will take place in February and March 2008.

The planned initiative will entail numerous preparatory workshops around South Africa, coordinated and facilitated by BioSA, with the purpose of bringing together key representatives from industry, government, academia and research with an interest in the life science sector, and creating common platforms and cooperative agendas so as to interface with similar clusters and key players in Finland.

Please contact Prof. Michael Pepper President of BioSA or Miss Thokozile Mandyu from COFISA for more information about this initiative and the BioSA mandate.

About COFISA (www.cofisa.org.za)

COFISA is a development cooperation framework between the Government of South Africa (represented by the Department of Science and Technology) and the Ministry of Foreign Affairs of Finland, with the main objective to enhance the effectiveness of the South African National System of Innovation (SANSI), thereby contributing to economic growth and poverty alleviation.

About BioSA (www.cofisa.org.za/biosa)



BioSA, a Biotechnology and Life Science Industry Organization of Southern Africa (BioSA) is an association of businesses and individuals dedicated to promoting the growth and prosperity of the Southern African biotechnology and life science industry.

It is a newly formed not-for-gain industry association for the biotechnology and life science sectors of South Africa. The association is a membership-driven body that represents small-and medium size biotechnology and life science businesses in Southern Africa.

A5 BioSA mandate

1. The BioSA mandate

The Biotechnology Industry Organization of Southern Africa (BioSA) is an association of businesses and individuals dedicated to promoting the growth and prosperity of the Southern African biotechnology and life science industry.

It is a newly formed *not-for-gain industry association* for the *biotechnology and life science sectors* of South Africa. The association is a *membership-driven* body that *represents small-and medium size* biotechnology and life science businesses in Southern Africa.

BioSA fulfils this mandate of ensuring sustainability and growth of this important sector of the economy 1) by providing information and best-practice exchange; 2) through industry representation; 3) by creating education and capacity building opportunities; 4) by engaging with the key stakeholders (public, private and academic) in the South African biotech and life science industry.

BioSA is a national industry body representing the unique and diverse needs of biotechnology and life science oriented SMME businesses in South Africa, regardless of funding history (either public or private invested), sector focus or location.

The association is *membership driven, governed by a board elected* on an annual basis *by its members, operating from a Constitution*, and *funded in a not-for-gain model* through a combination of membership fees, grants and limited revenue-earning activity such as conferences, training and services.

There are three types of membership to BioSA, these being student membership, individual membership and corporate membership.

Although BioSA is essentially a South African based organisation, engaging with the South African Biotechnology Industry, its *membership is open to the entire Southern African region.*

2. The BioSA Mission

BioSA's mission is to cultivate a supportive environment to enable Southern African biotechnology and life science SMME's to grow and advance their commercial interests and to assist them to become global players, thereby positioning the Southern African biotechnology and life science industry as a significant market for attracting international interest and investment.

BioSA will achieve this mission by advancing the interest of members through developing and contributing to policy development and implementation, advocacy, networking, advice, education, support services and international out-reach.

3. The need for BioSA

Biotechnology and life science activity is still very new to Southern Africa with South Africa releasing its National Biotechnology Strategy as recently as 2001.

The majority of activity in the South African biotech and life science industry is at the R&D level and most investment in this sector supports such R&D activity. There are a number of key stakeholders, supported by the National Government of South Africa to establish a biotechnology and life science industry. These BICs (Biotechnology Innovation Centres) are primarily public funding mechanisms established in Gauteng (BioPAD), Kwa-zulu Natal (LifeLab and PlantBio) as well as the Western Cape (Cape Biotech Trust).

The publicly-funded biotechnology and life science entities, i.e. those receiving funding from the BICs, Innovation Fund, NRF or other public sources, represent only a portion of the overall biotech and life science industry in South Africa.

Many such businesses don't currently fit into any formal support system, such as the BICs or one of the two biotech incubators (EgoliBio in Gauteng and Acorn Technologies Cape Town) and are therefore out in the cold, having to navigate the difficult path from idea to sustainable enterprises by themselves.

BioSA membership is open to EVERYONE, regardless of funding history, sector focus or location.

4. BioSA objectives for 2008

In order to fulfil its mandate, BioSA aims to achieve the following key objectives in 2008:

- Define and obtain membership approval for the BioSA Constitution.
- Develop a five year business plan for BioSA, for the period 2009 to 2013.
- Establish an online presence by virtue of the BioSA website.
- Promote awareness of BioSA through various activities such as:
 - participating in Bio2Biz, the annual event for the SA biotech and life science industry, hosted by the BICs and DST;
 - hosting trade exchanges (such as the planned Finnish Biotech Cluster visit in March 2008);
 - representing members at important discussions regarding the biotechnology and life science industry (such as the National Biotech Advisory Council, an advisory group to the Minister of Science and Technology and of which one of the BioSA board is a member of); and
 - Promotional and public relations initiatives aimed at increasing membership.
- Increase awareness of BioSA members and awareness of the South African biotechnology and life science industry by publishing profiles of corporate members online and participating in initiatives with which to support and grow the South African biotech and life science industry.
- Double the number of existing Corporate Members.
- Promote and sign up Individual Membership through awareness at industry events such as Bio2Biz.

- Promote and sign up Student Membership through awareness creation at academic institutions.
- Promote equality and equal representation through the composition of the Board.
- Encourage collaboration with all existing South African biotech and life science stakeholders through participation and representation at appropriate events, forums, association meetings and discussions.
- Assist, where possible in the deployment of programmes and initiatives aimed at supporting and growing the South African biotech and life sciences industries, such as for example BioFISA (Finnish programme to enhance collaboration between biotech players in Southern Africa), the COFISA Centres of Expertise biotech pilot in Gauteng, as well as participating in capacity development in establishing Regional Biotechnology Strategies such as the one currently developed for Gauteng.

5. BioSA governance and structuring

BioSA is governed by a board, elected by its members at the Annual General Meeting of BioSA. The current Board was elected for a period of one year at the recent Bio2Biz conference in September 2007 in Cape Town.

The Board will remain elected until the next Annual General Meeting of BioSA, to take place in conjunction with, or close to the next Bio2Biz meeting in September/October 2008. The Board meets on a regular basis and such meetings are duly facilitated with an agenda and recorded minutes.

6. BioSA interim management committee:

Prof. Michael Pepper (President)

Extraordinary Professor, Department of Immunology, University of Pretoria

Dr Viresh Ramburan (Vice-president)

Project Manager: SunBio



Dr Antonel Olckers
CEO: DNAbiotec (Pty) Ltd

Adv Donrich Jordaan
CEO: Sylvean Biotech (Pty) Ltd

7. Membership profile and type

Given the fact that the South African biotech and life science industry is still in its early stages, BioSA offers a combination of membership options so as to cover anyone or any entity involved with, or interested in the South African biotech and life science industry:

- ***Corporate membership:*** for any institution, business enterprise or other corporate entity that supports the BioSA mandate, including SMME's, investors, public entities and science councils, research and education institutions, as well as service providers and consultants to the biotech and life science industry.
- ***Individual membership:*** for any person that supports the BioSA mandate in his/her personal capacity including entrepreneurs, researchers, investors and consultants.
- ***Student membership:*** in order to cater for the unique needs of academic scholars enrolled in any academic institution as for the purposes of achieving a graduate or post-graduate qualification, (therefore not applicable to employed researchers at academic institutions) supporting the BioSA mandate, and with an interest in the South African biotechnology and life science industry.

Membership is for one calendar year, and is renewable thereafter.

8. Objectives for next five years

2008 will be the watershed year for BioSA, positioning itself to implement its mandate and address the objectives for 2008, outlined above in section 4. A full business plan will be developed during 2008, containing detailed plans to

establish BioSA as a vibrant and sustainable player in the Southern African biotechnology and life science industry over the next five years.

This includes establishing a BioSA office with appropriate human resource(s) so as to better serve its members, and to expand activities and outreach so as to enhance value add offerings to its clients, regardless of their location.

9. For further information

Prof. Michael S. Pepper

President, BioSA

Dr. Viresh P. Ramburan

Vice-president, BioSA

A6 Bioprospecting breakfast seminar

Appendix 6

Bioprospecting breakfast seminar

Introduction

The recently promulgated Regulations on Bioprospecting provide the legal framework for bioprospecting in South Africa. The regulations deal with benefit sharing agreements, material transfer agreements, and other legal-technical concepts that are not necessarily within the framework of reference or experience of most scientists. Moreover, at the Finnish-SA cooperation workshops facilitated by BioSA during the past two months, uncertainty about the new legal framework was identified as a major issue facing the South African biotech sector – both by private and public sector participants. The urgent need to inform the players in the bioprospecting arena is apparent.

Seminar output

The purpose of the seminar will be to a) demystify the substance of the new Regulations and to b) disseminate information about the processes to be followed according to the Regulations. The relevant officials at the Department of Environmental Affairs and Tourism (DEAT) who are administering the Regulations have already indicated their willingness to present at this event.

Inviting a broad spectrum

The seminar will aim to attract a broad spectrum of interested players in the bioprospecting arena. Invitations will be sent to all the biotech stakeholders within the databases of AfricaBio and BioSA. In addition, the BICs will also be requested to forward the invitation to their databases.

Duration and location

The workshop will be a morning event, hosted at the Innovation Hub in Pretoria.

Alignment with COFISA's mission

This seminar will greatly assist to capacitate the South African biotech sector. In addition, it will complement the bioprospecting strategizing workshop that will be organized as a follow-up activity to the Finnish-SA cooperation workshops facilitated by BioSA.

A7 Bioprospecting strategizing workshop

Appendix 7

Bioprospecting strategizing workshop

Introduction

South Africa is one of the world's biologically mega-diverse countries. This offers the biotech sector in South Africa considerable opportunities, as evidenced by the interest expressed by a high-level Finnish delegation that visited South Africa recently. How can the South African biotech sector position itself to optimally benefit from our country's natural biodiversity? This high-level strategic question points to some underlying questions:

- What is the current bioprospecting activity in South Africa?
- What is the planned bioprospecting activity in South Africa?
- What are the priority areas of bioprospecting in the South African context?
- What are the strategic visions of the players (private and public)?
- What are the opportunities, and how can we best make use of these?

These questions must also be answered taking due cognisance of the legal framework against which bioprospecting in South Africa will take place, namely the recently promulgated Regulations on Bioprospecting.

Workshop output

The purpose of the intended workshop is firstly to map the current strengths, growth opportunities, and priorities of the South African bioprospecting community and secondly to formulate a strategy on how to reap the most benefit from international interest in bioprospecting. Following the workshop, a comprehensive Workshop Report will be drafted to encapsulate these outputs and serve as a solid basis for taking the process of Finnish-SA cooperation on bioprospecting further. The Workshop Report will also be a valuable input to

the DST and its agencies to guide their current strategy formulation regarding biotechnology in general and bioprospecting in particular.

Identification of workshop participants

The workshop will include the key players in the field of bioprospecting in South Africa. During the COFISA-BioSA workshops some of these players have already been identified. BioPAD (the BIC tasked by the DST with establishing a bioprospecting Centre of Competence) will be further consulted in order to finalise the list of participants. The intention is to invite only the eight to twelve most prominent players in the field.

Duration and location

The workshop will be a one-day event, hosted at the Innovation Hub in Pretoria.

Alignment with COFISA's mission

This workshop will firstly capacitate the South African biotech sector, and secondly facilitate the process of SA-Finnish cooperation that has started with the recent COFISA-BioSA workshops. The workshop is a direct result of these workshops and is also an essential follow-up activity to take the opportunities that were identified during the workshops to the next stage.

A8 SMME-University workshop

Appendix 8

SMME-University workshop

Introduction

Biotech SMMEs have ideas, universities have research infrastructure – a good reason to co-operate? From this perspective, it seems that SMME-university partnership is a perfect match. However, in practice, multiple stumbling blocks arise, ranging from perceptions of inaccessibility to the IPR bill. How can these stumbling blocks be overcome? Join BioSA and COFISA in a workshop on exploring these issues and directly engaging with key players both from industry and academia in South Africa and Europe.

Key objectives/outcomes

- Define expectations of both South African universities and SMMEs with respect to co-operation at the levels of R&D and commercialization of IP;
- Examine the feasibility of co-operation between an SMME and a university;
- Establish an understanding of South African and Finnish university procedures and approaches towards external co-operation;
- Produce a series of recommendations to facilitate co-operation between SMMEs and Universities.

Logistics

To be held at the Innovation Hub as a one-day workshop

Representation from the Universities (Gauteng, Eastern Cape, Western Cape) and from SA biotech SMMEs to attend

Fly in 2-3 experts from Finland and elsewhere.



BioSA Contribution

1. Project planning, implementation, monitoring and reporting.
2. Human resources.

COFISA Contribution

1. Full financial support
2. Limited human resource support.

Links to 10 year plan

1. Establishment of a more efficient framework for co-operation between SMMEs and universities in order to build an effective National System of Innovation; and
2. Contribute to the “Farmer to Pharma” grand challenge through the establishment of a more efficient framework for co-operation between SMMEs and universities to assist long term strategic visioning and planning as well as building sectoral and inter-sectoral innovation networks.

ProgramLectures

1. Short introductory lecture to present the findings of a baseline study report and comparison with Finnish data.
2. How should an SMME approach the University with a view to entering into R&D collaboration?

3. What clauses to negotiate with the Universities (IP ownership, royalties, use of university name, commercialization conditions, publication of results)?
4. Do South African universities encourage commercially attractive R&D? Should they be doing research that is not commercially attractive?
5. University-based Platforms – what are they, who do they serve and can they be managed on a commercially-viable basis?
6. Why don't South African Universities spin out more companies? Case study comparison with the Finnish systems.
7. Costing of research at Universities: some guidelines and experiences.

Panel discussions

1. IP ownership and royalties
2. The University as an incubator

Alignment with COFISA's mission

This workshop will firstly capacitate the South African biotech sector, and secondly facilitate the process of SA-Finnish cooperation that has started with the recent COFISA-BioSA workshops. The workshop is a direct result of these workshops and is also an essential follow-up activity to take the opportunities that were identified during the workshops to the next stage.