

"Australia's biota is unique in the world. Due to Continental Drift, Australia has been isolated from the rest of the world for over 40 million years, and therefore has evolved its specialised biota.

There is a window of opportunity for Australia to capitalise on bioprospecting its flora and fauna.

Over a third of medicinal drugs currently in use have been developed from plants. Moreover, there is a huge global groundswell towards the use of Herbal Medicines, with a global market worth over \$10 billion. Most recently there has been keen interest by multinationals in the concept of Australian plants as "Nutriceuticals" or "Functional Foods".

Moreover, biotechnology advances now provide a further opportunity in the area of "Genetic Bioprospecting," For example, through research we have been involved in at Southern Cross University, we have identified and isolated an antifungal gene from an Australian rainforest plant that may have application to introducing antifungal properties to any cultivated plant.

To capitalise on these opportunities, Southern Cross University has established the "Cellulose Valley Project". This project aims to position Australia as the "Silicon Valley of Natural Plant Products."

Cellulose Valley incorporates:-

1. The Research Centre for Phytochemistry
2. The Research Centre for Plant Conservation Genetics.
3. The School of Natural and Complementary Medicine.
4. A Technology Park devoted primarily to Natural Plant Products.

In collaboration with BioProspect Ltd, we have begun the task of establishing a library of extracts of Australian plants.

We have strong links with the Australian industry in this area, including Fauldings, Blackmores, Mediherb, BioProspect Ltd, Lane Laboratories, and Thursday Plantations. We also have strong links to the relevant Primary Industries in the Area including the Organic Herb Growers, the Macadamia Society and the Tea Tree Growers Association.

We have recently travelled the world exploring opportunities, and there is significant global interest in obtaining access to Australian biota.

It is essential that we capitalise on these opportunities by capturing the Intellectual Property developed from these initiatives for the benefit of Australia.

The project has already created over 70 new jobs for the region, and we expect the project to generate over 1,000 jobs over the next 10 years, with a consequent benefit to a region of Australia with the highest unemployment rate - 13%.

The major impediments we see to progress in the area are twofold.

Firstly, there is a lack of synergy between various disciplines, and a lack of clearly defined goals and market.

Secondly, there are major difficulties relating to IP ownership in the area of Indigenous knowledge.

We would be keen to discuss to discuss this project further with the Committee.

Yours sincerely

Professor Peter Baverstock, Dean of Research

Professor Peter Waterman, Director Centre for Phytochemistry

Professor Robert Henry, Director Centre for Plant Conservation Genetics

Associate Professor Stephen Myers, Head School Natural and Complementary Medicine

Professor Peter Baverstock,
Dean, Graduate Research College &
Chair of Cellulose Valley Project,
Southern Cross University,
P.O. Box 157,
LISMORE NSW 2480 AUSTRALIA

Ph: (066) 20 3719 Fax: (066) 22 3180

<http://scu.edu.au/research>

<http://www.cellulosevalley.com>

Cellulose Valley - Winner of the 1999 AHII 'Innovation' Award.

"If you think biomedical research and education are expensive,
try disease and ignorance".