



MEMORANDUM OF UNDERSTANDING

Between

**THE GOVERNMENT OF ANDHRA PRADESH,
INDIA**

And

**ASIA PACIFIC BIOINFORMATICS NETWORK
(APBioNet)**

This MEMORANDUM OF UNDERSTANDING (hereinafter referred to as “MoU”) is made on the 27th day of December 2002

Between

The State Government of Andhra Pradesh, India (hereinafter referred to as “The Government of AP”)

And

Asia Pacific Bioinformatics Network (hereinafter referred to as “APBioNet”)

WHEREAS The Government of AP, in its widely publicized Vision 2020 to achieve a level of development that will provide its people varied and realizable opportunities to achieve prosperity and well-being and enjoy a high quality of life, has thus embarked on a vigorous effort to create rapid economic growth;

WHEREAS The Government of AP, being fully cognizant that technology will play a critical role in accelerating the pace of development in the State of Andhra Pradesh, has proposed to give a thrust to knowledge-based industries such as Information Technology, Biotechnology and Pharmaceuticals wherein all these

three sectors, the State has a unique proven expertise, commercial success and thus a competitive edge to forge ahead further with the increasing convergence of these technologies;

WHEREAS The Government of AP, having declared publicly its intention to facilitate the development of biotechnology (<http://www.genomevalley.org>) in the state by creating high quality infrastructure through the strategy of setting up specialized biotech parks in different parts of the state, encouraging research activities, developing human resources and establishing links between research institutions, academia and industry; and to create a hassle-free environment for the biotech industry through simplification of procedures and a single window clearance mechanism;

WHEREAS The Government of AP, has conducted extensive surveys and visits globally to identify international organizations and institutions of excellence to participate in collaborations with it and with research institutions and organizations in the State of Andhra Pradesh;

WHEREAS The Government of AP has identified the Asia Pacific Bioinformatics Network (APBioNet) and its members as such organizations and institutions which are leaders in bioinformatics, a key focus area of the convergence between Information Technology and Biotechnology;

WHEREAS APBioNet (<http://www.apbionet.org/>), an international not-for-profit non-governmental organization set up in 1998 to promote the growth of bioinformatics in the Asia Pacific region, is desirous of increasing the level of bioinformatics competence and expertise amongst members and life scientists in the Asia-Pacific, and has recently adopted the APBioNet Bangkok Resolutions setting out in the Fifth resolution on Human Resource Development to “reinforce and expand these areas of expertise through systematic and institutionalised human resource development, technical training, scientific exchanges, outreach and awareness at all levels of scientific manpower, including scientific policy makers and other decision makers”;

WHEREAS APBioNet, in recognition of the research institutions and organizations in the State of Andhra Pradesh, which are able, ready and willing to participate in networking for research, education, training and exchanges;

WHEREAS both Parties have identified that a stronger relationship between them is mutually beneficial and synergistic, and are both desirous of establishing a more formal relationship with each other;

This Memorandum of Understanding (hereinafter called “MoU”) sets out below, the general and broad-based intentions of both Parties for collaboration and as an umbrella understanding for facilitation of subsequent MoUs and agreements in more specific areas.

1. INTRODUCTION

For many years APBioNet has been spearheading the growth of Bioinformatics in the Asia Pacific Region, in particular, promoting the research, training and education in bioinformatics amongst members in the Asia Pacific region. In the past two years, APBioNet has been actively identifying strategic partners in the region to further accelerate the process of transformation, notably such as the the S* Life Science Informatics Alliance (Singapore, Stanford, Sweden [Karolinska Institutet, Uppsala], Sydney, South Africa National Bioinformatics Institute, UC San Diego) with which APBioNet has an MoU; the International Society for Computational Biology (ISCB) of which APBioNet is an Official Regional Affiliate; the Asia Pacific Advanced Network (APAN), with which APBioNet has a pioneering collaborative project, etc.

More recently, APBioNet has started to promote bioinformatics in specific countries and economies, identifying strategic partners at the national and state and institutional/organisational level. For example, in organizing the International Conference of Bioinformatics (InCoB), the Thai governmental agencies have successfully coordinated with APBioNet for endorsement and for sustaining the conference beyond the first conference; with various universities, APBioNet has been in discussions on setting up nodes of Asia Pacific Bioinformatics Institutes as focal points of excellence in bioinformatics throughout the Asia Pacific

There is therefore a precedence, and an opportunity for APBioNet and the Government of Andhra Pradesh to work together synergistically based on the complementarity of our objectives and of our strengths to promote bioinformatics in the State of Andhra Pradesh, India.

2. AREAS OF COOPERATION

2.1 This MoU presents the areas of cooperation, specifically listed in Schedule 1 and any others that in general fall under the next section, and which from time to time may be added to this document by mutual agreement of both parties.

2.2. In general, both Parties agree to cooperate and collaborate in the following areas of :

- a. Promotion of Bioinformatics awareness amongst all levels of leadership in the research and educational sectors of Andhra Pradesh;
- b. Promotion and provision of guidance, consultancy, training and planning in Bioinformatics education amongst various levels of educational institutions in Andhra Pradesh;
- c. Construction and development of bioinformatics network infrastructure, databases, computational grids and other relevant resources in support of

- bioinformatics research and bioinformatics-aided research and education in Andhra Pradesh;
- d. Development of strategic aspects of bioinformatics research;
 - e. Enhanced exchanges of scientific expertise through workshops, seminars, symposia, meetings and conferences; and
 - f. Facilitation of direct cooperation and collaboration between the constituents and members of both Parties, through separate and independent collaborative agreements between such constituents and members which are willing and able to participate.

3. ARRANGEMENTS AND ADMINISTRATION

3.1. Both Parties through representatives shall jointly administer this collaboration. Both Parties may appoint representatives for each of the areas of cooperation in order to carry out the activities so agreed.

3.2. Representatives from either Party may lead or drive or manage or oversee an area of cooperation on a mutually agreeable basis. The representatives may meet as and when necessary in person, by proxy or through electronic methods, to review progress in the implementation of the agreed arrangements, define new areas and programmes of cooperation and collaboration as well as discuss matters related to the MoU.

3.3. Neither of the Parties shall have the power to bind any other Party without such other's consent in writing thereto.

4. FUNDING

4.1. The financial arrangement relating to each project agreement and programme of cooperation shall be in accordance with the specific agreement and programme of cooperation covering each project.

4.2. The Parties agree that in the absence of any specific agreement to the contrary, all expenses, including but not limited to, salary, travel, living and allied costs relating to the Project shall be borne by the Party who incurs such expenses.

4.3. Both Parties may either jointly or severally upon mutual agreement, carry out applications to international funding agencies, respective national agencies, industry and any other reputable sources of funding.

5. INTELLECTUAL PROPERTY, INVENTIONS AND INNOVATIONS

5.1. Each Party and its designated and willing member or constituent, will maintain ownership of its existing intellectual property rights (IPR) prior to this collaboration.

5.2. Both Parties and their designated and willing member or constituent, shall have joint ownership of IPR resulting from activities carried out under this collaboration subject to the conditions of the sources of funding if any, where applicable.

5.3. The terms with respect to title and exploitation of intellectual property, including trademarks and service marks, copyrights, patent designs and confidential information on the subject of such intellectual property, inventions and innovation will be negotiated on a project-by-project basis in the specific project agreements and programmes of cooperation referred to in Schedule 1, subject to the conditions of the sources of funding, if any, for that specific project where applicable.

6. COMMERCIALISATION

6.1. Under the articles of this MoU, both Parties agree to jointly pursue commercialization in accordance to the terms and conditions specifically stated in subsequent and separate project agreements and programmes of cooperation, some of which are referred to in Schedule 1 and including others which may be added on from time to time pursuant to this MoU.

7. NON COLLABORATIVE PURSUITS

7.1. Non-collaborative pursuits made by either Party will not be bound by the Articles of this MoU.

7.2. Other Collaborations initiated by either Party shall not bind the other Party unless adequate notification and consent has been obtained.

8. PUBLICATION OF ARTICLES

8.1. Either Party may, with the written consent of the other Party, such consent not to be unreasonably withheld, publish the reports and findings of the collaborative activities of the Parties in the form of an article in a journal, newspaper or other periodical, or book, in any media, provided that the Parties have decided, where appropriate, that a joint application for registration of a trademark, service mark or design or an application for a patent will be made, such an article shall not be published until the said application has been made. A copy of the article shall be provided prior to publication to the Party whose written consent is required hereunder for that Party's perusal and written consent.

9. CONFIDENTIALITY

9.1. Neither of the Parties shall, at any time, disclose to any third party, any confidential information of the other Party, which is acquired pursuant to this MoU without the prior written consent of the other Party, such consent not to be unreasonably withheld.

10. PRESENTATION TO THE PUBLIC

10.1 The Parties consent and authorize each other to identify and represent the MoU and/or the specific collaborative projects agreed herein and subsequently, to the public in written announcements, releases, publications, advertisements, mailings on any media, or by oral presentations as may seem appropriate provided that the other Party has been duly informed of the public presentation in advance.

10.2. From time to time, as and when appropriate both Parties agree to make joint press releases to keep the global community apprised of the outcomes of this MoU.

11. AMENDMENTS

11.1. This MoU may be amended and supplemented in writing at any time as decided and agreed by mutual written consent of the Parties.

12. TERM OF MOU

12.1. This MoU shall commence on the date of its execution by the Parties and shall remain in force for a period of two years; thereafter the MoU shall be deemed terminated by lapsing.

13. TERMINATION

13.1. Either of the Parties may terminate this MoU by written notification to the other Party in writing of its desire to terminate.

13.2. The termination of this MoU shall not affect the implementation of the projects or programmes or areas of cooperation established under it prior to such termination, unless the specific projects or programmes are also explicitly terminated under the terms and conditions of the project(s).

13.3. The provisions of the relevant Articles in this document, including Articles 5, 6, 8, 9 and 15, shall survive termination of this MoU howsoever caused.

14. EXTENSION

14.1. This MoU can be extended by agreement of both Parties.

15. DISPUTE RESOLUTION

15.1. Any disputes arising under or in connection with this MoU shall be referred by the Parties to arbitration by a single arbitrator jointly appointed by the Parties.

15.2. In the event that there is no agreement on the choice of arbitrator, an arbitrator shall be appointed according with the Arbitration Rules of an International Arbitration Centre.

16. NON-BINDING NATURE OF THE MOU

16.1. Despite the statements and obligations expressed herein, this MoU is a non-binding expression of the current intentions of the Parties, and neither Party will incur nor be bound to any legal obligations or expense hereunder to the other Party until and unless definitive agreements have been negotiated, approved by the appropriate authorities of each Party and executed and delivered by authorized representatives of both Parties.

IN WITNESS where of the parties hereto have caused this MoU to be signed on the 27th December, 2002, between 10.00 - 10.30 am at Hotel Ritz Carlton, Singapore,

Signed for and on behalf of
APBioNet



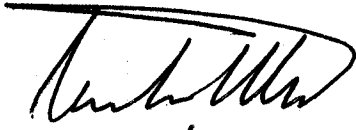
By **S Ranganathan**,
Vice President
for the President
APBioNet

Signed for and on behalf of the
Government of Andhra Pradesh



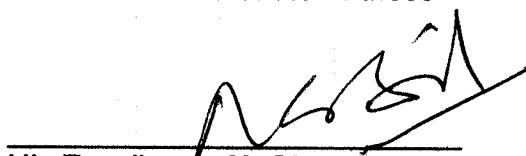
Bibhu Prasad Acharya
Secretary to the Government
The State Government of
Andhra Pradesh, India

In the Presence of the Witness



Dr Tan Tin Wee
Founding Convenor,
APBioNet Secretariat

In the Presence of the Witness



His Excellency, N. Chandrababu Naidu
The Honorable Chief Minister of
The State of Andhra Pradesh, India.

Schedule 1

Potential Collaborative Projects subject to subsequent agreements

1. Bioinformatics Databases

With the EMBnet node at the Centre for DNA Fingerprinting and Diagnostics (CDFD), Hyderabad, to exchange datasets with APBioNet's collaboration with APAN called the BioMirrors Project.

2. APBioGrid

With the Centre for Cellular and Molecular Biology (CCMB), Hyderabad, to be involved in Grid Computing projects in the specific areas of bioinformatics and computational biology.

3. APBioNet collaboration in BioWorldWideWorkflow

With the CCMB and the CDFD, to participate in APBioNet's collaboration with KOOPrime, Cray and Lion BioScience in setting up a testbed for WorldWideWorkflow in Bioinformatics.

4. Replication and Expansion of Mirror Sites of S* Life Science Informatics Alliance online bioinformatics lectures

In collaboration with S* Life Science Informatics Alliance, with which APBioNet has an MoU to expand the number of official mirror sites hosting the S* Online course material, to target specific institutions of higher learning and research centres to host these mirror sites and to coordinate bioinformatics training and education based on such content and to expand these content for the local context.

5. APBioBox Project

Participation by the research institutions in Andhra Pradesh, in the APBioNet's APBioBox project whereby the International Development Research Centre (IDRC) of Canada has provided seed funding for APBioNet to set up a core repository of bioinformatics resources, databases and computational tools and software applications for widespread dissemination, to expand the range of this core repository by contribution of such identified Andhra Pradesh institutions.

6. Any other Projects subsequently identified and added to this Schedule