PACIFIC ISLANDS UNIVERSITIES RESEARCH NETWORK (PIURN)

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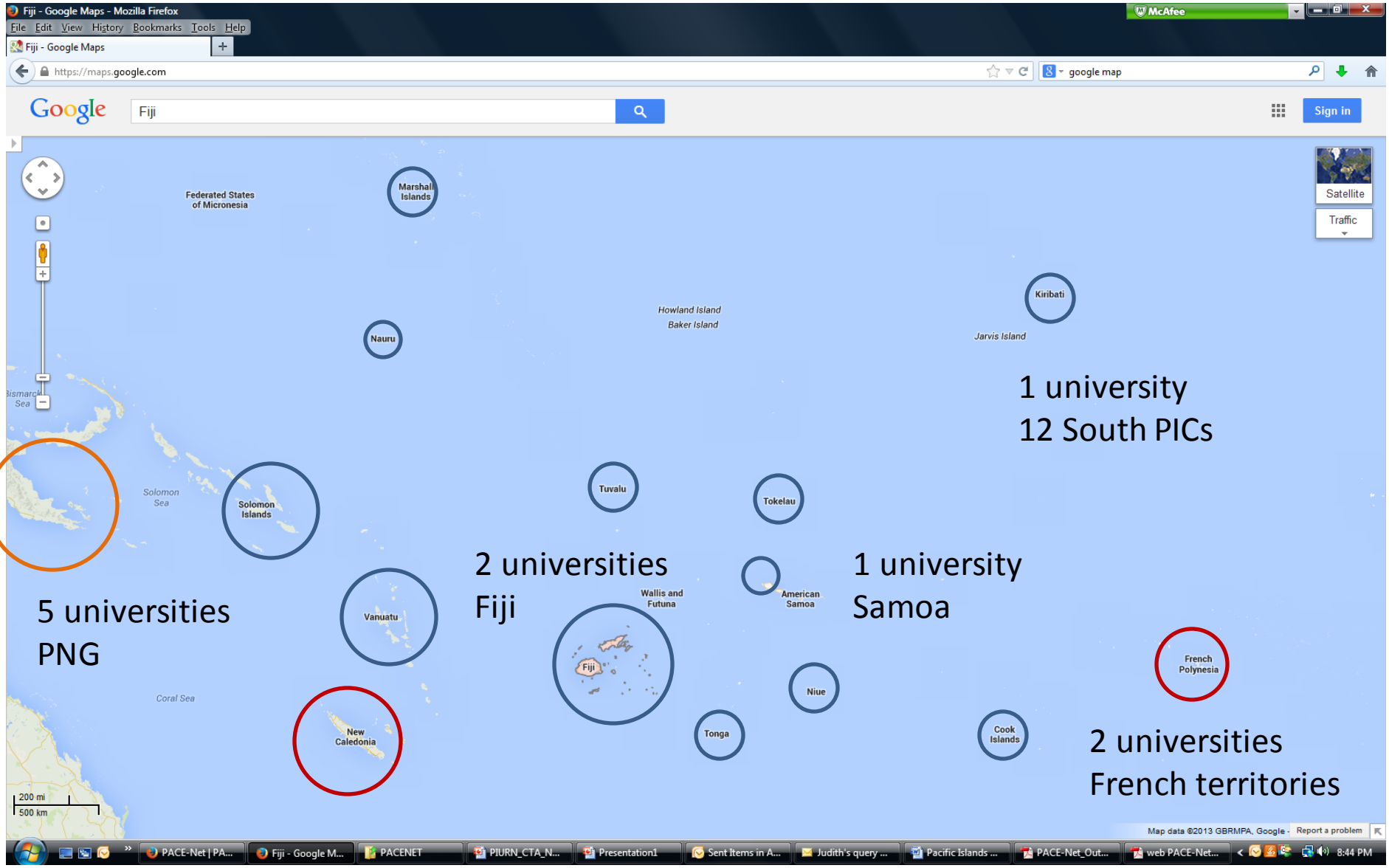
Director of PIURN
University of the South Pacific

7 Nov 2012 – Historic Day

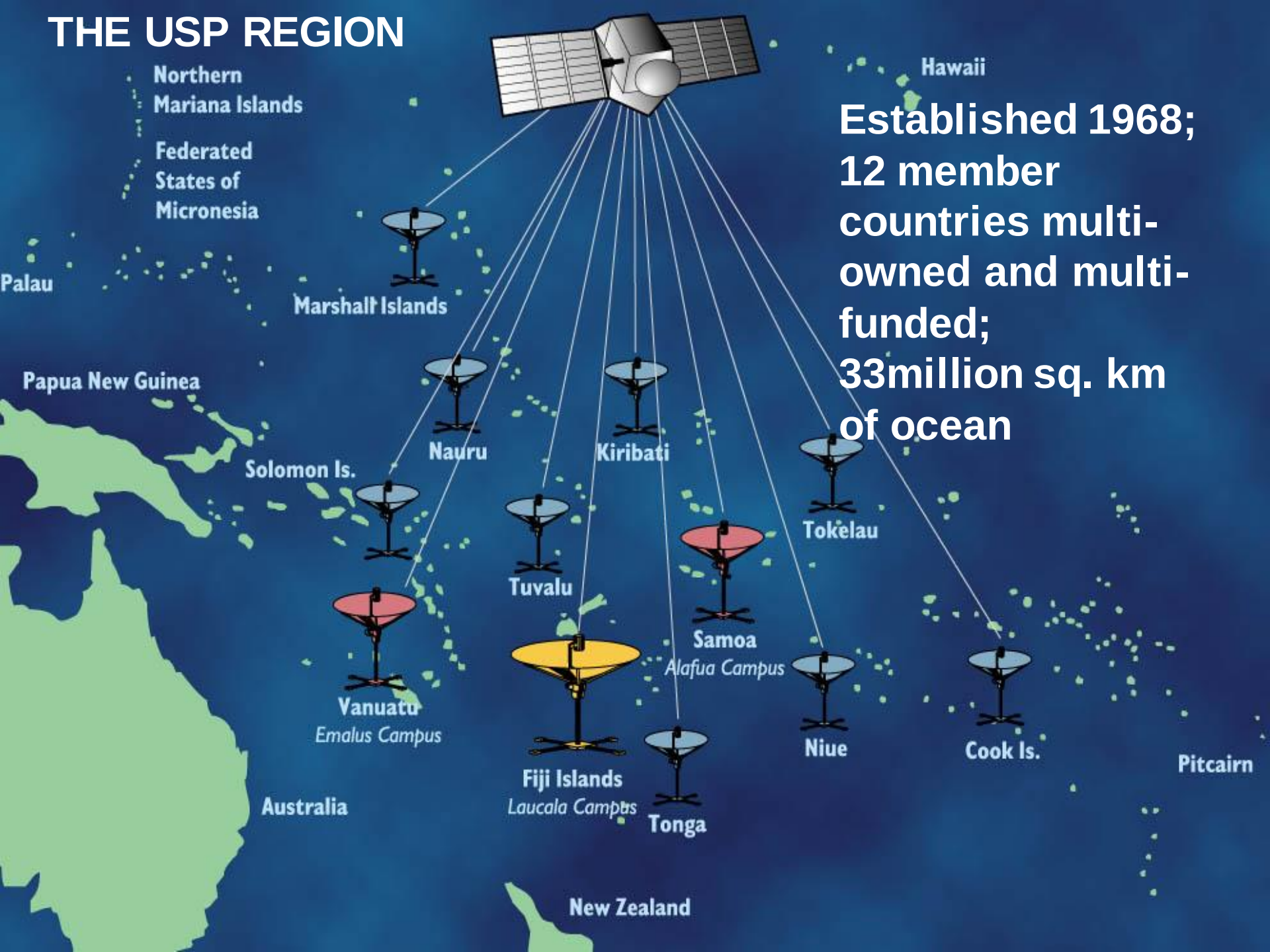
University	Representative	Endorsement
University of New Caledonia	Anne Boutet p/o Pdt UNC	
University of French Polynesia	Alban GABILLON	
National University of Samoa	Dr Desmond Lee Hang	
PNG University of Technology	Dr Albert Schram	
PNG University of Natural Resources and Environment	Dr Alan Quartermain	
University of Papua New Guinea	Prof Alan EASTON	
Pacific Adventist University	Ben Thomas	
The University of the South Pacific	PROF JOHN BYTHELL	
Fiji National University	N.C Ganesh Chand	
University of Fiji		

Formation of a network of Pacific islands universities dedicated to research

11 Founding Members Representing 15 Pacific Island Countries

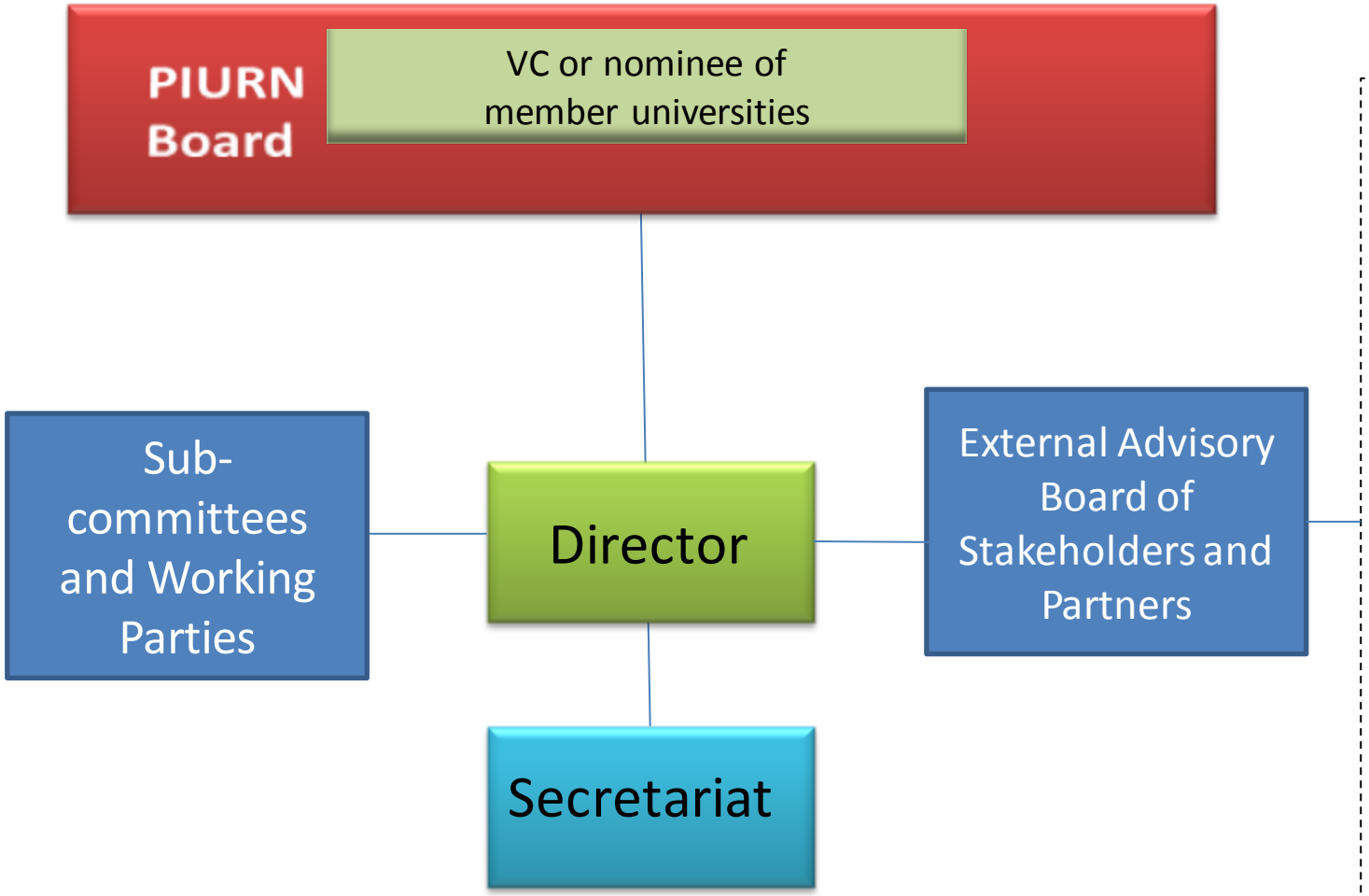


THE USP REGION



Established 1968; 12 member countries multi-owned and multi-funded; 33million sq. km of ocean

PIURN STRUCTURE

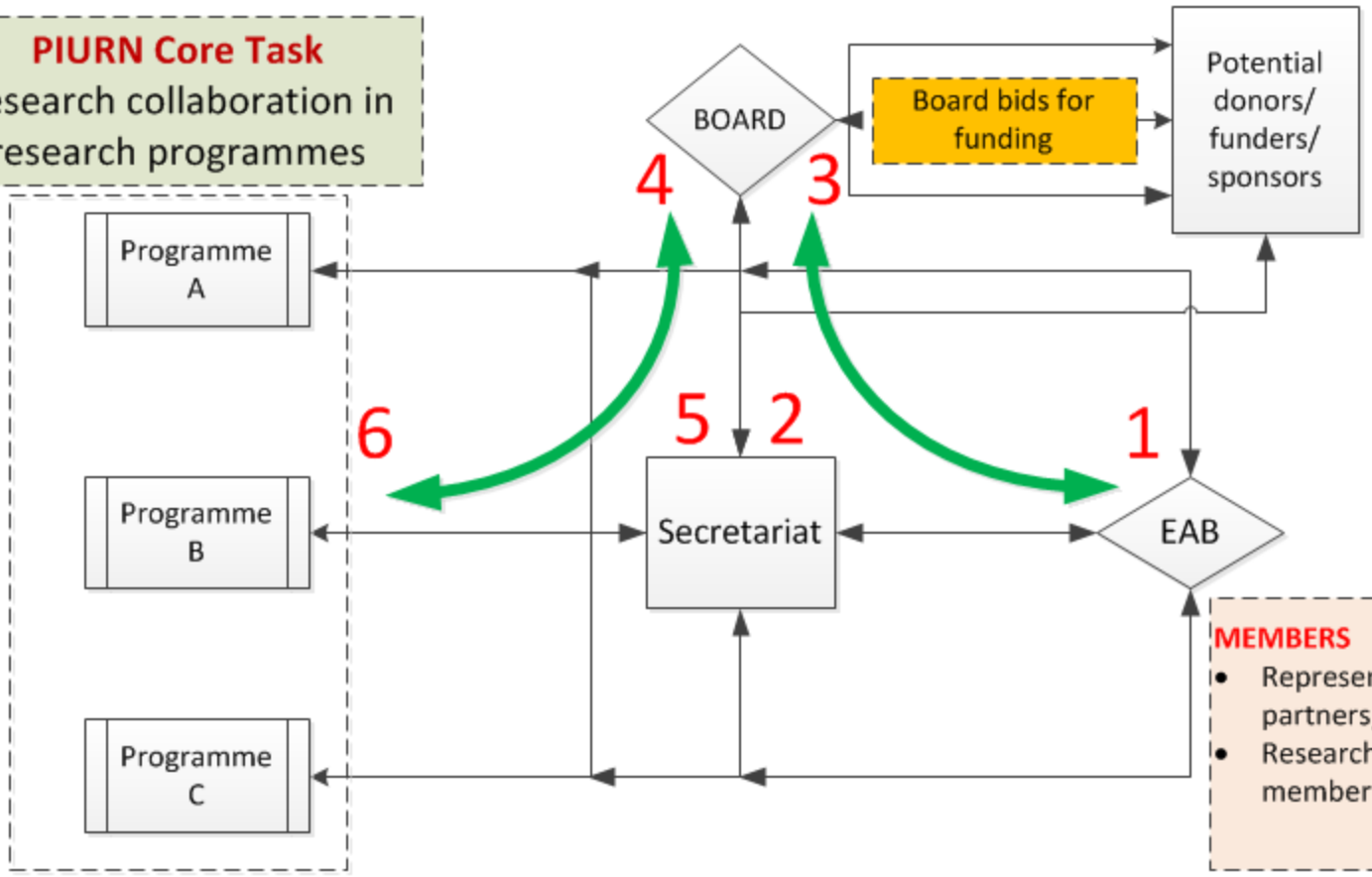


2 MAIN TASKS OF THE BOARD

1. To enable the network to establish effective communications between members, (e.g. board meetings, conferences/workshops, website), and
2. To identify common research programmes and bid for funds for these programmes.

Pacific Islands Universities Research Network Constitutional Process

PIURN Core Task
Research collaboration in research programmes



A research programme can cover a set of activities under a theme. These activities include:

- Conducting basic research;
- Workshops, trainings and conferences;
- Staff/Student exchanges;
- Sharing of resources;
- Capacity building;
- Supporting grant applications; and
- Collecting institutional data.

MEMBERS

- Representatives of stakeholders and partners;
- Research Directors/Managers of member universities.

A Programme Committee consists of:

- Coordinator (Chair);
- Representatives and researchers of participating universities;
- Other technical experts.

1. EAB recommends major research programs relevant to member countries and suitable for cooperation by researchers in the member universities;
2. Secretariat prepares bid/proposal documents;
3. Board submits proposal;
4. If bid successful, Board assigns Secretariat to coordinate programmes;
5. Secretariat form Programme Committees to execute programmes, and
6. Programme Committees execute programmes.

Two Major Initial Undertakings in 2014 to Realise Vision on Research Collaboration

- **INITIATIVE 1**: Identify research strengths of Pacific research institutes;
- **INITIATIVE 2**: Develop and execute short-term and long-term capacity building programs.

Initiative I: Identifying Research Strengths (What to Do)

- Analyse research and development capacities and capabilities of member countries in a specific thematic area; and
- Evaluate these capacities and capabilities in terms of their suitability for initiation of more continuous cooperation.

2 Planned Actions (How to Do)

(1) Collation of Essential Data

Essential data include:

- research needs of the Pacific region;
- available research resources in the Pacific region
- member university's capacity and capability to conduct research;
- research funding opportunities;
- postgraduate courses and programs of each member university;
- institutional research data required for collaborative grant applications.

(2) Provision of Essential Data

Development of an Electronic Research Repository to disseminate world-wide research outputs from the Pacific and contribute to pool of knowledge

USP's Electronic Research Repository was developed in-house. It was launched in 2010. It contains USP's research outputs from 2001 till 2013. Total 6,000 articles. http://repository.usp.ac.fj/

EXAMPLE


Items where Author is "Vanualailai, Jito" - USP Electronic Research Repository - Mozilla Firefox
File Edit View History Bookmarks Tools Help
Jito Vanualailai - Outlook Web A...
CTA
Research: Research Outputs & A...
Items where Author is "Vanualail...
homemade - Google zoeken
Google
repository.usp.ac.fj/view/creators/Vanualailai=3AJito=3A=3A/article.html
Search
Advanced Search
Home
About
Browse by Year
Browse by Subject
Browse by Division
Browse by Author
Browse by Type
Latest
USPERR Policy
USPERR User Manual
Research@USP
Items where Author is "Vanualailai, Jito"
Up a level
Export as ASCII Citation
Export
RSS 2.0 RSS 1.0 Atom
Group by: Item Type | No Grouping
Jump to: Journal Article
Number of items: 31.
Journal Article
Singh, Shonal and Sharma, Bibhya N. and Vanualailai, Jito and Prasad, Avinesh (2012) Autonomous control of multiple mobile manipulators. World Academy of Science, Engineering and Technology, NA (72). pp. 834-843. ISSN 2070-3740
Sharma, Bibhya N. and Vanualailai, Jito and Singh, Shonal (2012) Lyapunov - based nonlinear controllers for obstacle avoidance with a planar n - link doubly nonholonomic manipulator. Robotics and Autonomous Systems, 60 (12). pp. 1484-1497. ISSN 0921-8890
Sharma, Bibhya N. and Vanualailai, Jito and Singh, Shonal (2012) Tunnel passing maneuvers of prescribed formations. International Journal of Robust and Nonlinear Control, N/A . N/A-N/A. ISSN 1049-8923
Prasad, Avinesh and Sharma, Bibhya N. and Vanualailai, Jito (2012) A collision-free algorithm of a point-mass robot using neural networks. Journal of Artifical Intelligence, 3 (1). pp. 49-55. ISSN 2229-3965
Sharma, Bibhya N. and Vanualailai, Jito and Prasad, Avinesh (2011) Formation control of a swarm of mobile manipulators. The Rocky Mountain Journal of Mathematics, 41 (3). pp. 909-940. ISSN 0035-7596
Sharma, Bibhya N. and Vanualailai, Jito and Prasad, Avinesh (2010) Trajectory planning and posture control of multiple
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Initiative II: Develop/Execute Capacity Building programmes (2 Planned Actions)

Short term:

- Hold annual workshops on essentials of research;
- Sponsor young researchers to international workshops and trainings;
- Hold bi-annual PIURN Research Conference to encourage shift from teachers only to teachers and researchers.

Initiative II: Develop and execute Capacity Building programmes

- **Long-term**: Implement the **Research Skills Development** (RSD) framework across the universities in the Pacific. The RSD framework, developed by the University of Adelaide in 2007, oversees the explicit and coherent development of research literacy and skills in a systematic manner from the undergraduate to postgraduate levels in University curricula.

Research Skill Development Framework

www.rsd.edu.au

A conceptual framework for the explicit, coherent, incremental and spiralling development of students' research skills

Extent of Students' Autonomy

What characterises the difference between 'search' and 'research'? More searching and more data generation is just a 'biggasearch'! Research is **when students...**

Facet of Research		Level 1 (Prescribed Research) Highly structured directions and modelling from educator prompt student research	Level 2 (Bounded Research) Boundaries set by and limited directions from educator channel student research	Level 3 (Scaffolded Research) Scaffolds placed by educator shape student independent research	Level 4 (Student-initiated Research) Students initiate the research and this is guided by the educator	Level 5 (Open Research) Students research within self-determined guidelines that are in accord with discipline or context.
a. Embark & Clarify Respond to or initiate research and clarify or determine what knowledge is required, heeding ethical/cultural and social/team considerations.	Curious	Respond to questions/tasks arising explicitly from a closed inquiry. Use a provided structured approach to clarify questions, terms, requirements and expectations.	Respond to questions/tasks required by and implicit in a closed inquiry. Choose from several provided structures to clarify questions, terms, requirements and expectations.	Respond to questions/tasks generated from a closed inquiry. Choose from a range of provided structures or approaches to clarify questions, terms, requirements and expectations.	**Generate questions/aims/ hypotheses framed within structured guidelines*.*	**Generate questions/aims/ hypotheses based on experience, expertise and literature*.*
b. Find & Generate Find and generate needed information/data using appropriate methodology.	Determined	Collect and record required information or data using a prescribed methodology from a prescribed source in which the information/data is clearly evident.	Collect and record required information/data using a prescribed methodology from prescribed source/s in which the information/ data is not clearly evident.	Collect and record required information/data from self-selected sources using one of several prescribed methodologies.	Collect and record self-determined information/ data from self-selected sources, choosing an appropriate methodology based on structured guidelines.	Collect and record self-determined information/data from self-selected sources, choosing or devising an appropriate methodology with self-structured guidelines.
c. Evaluate & Reflect Determine and critique the degree of credibility of selected sources and of data generated, and reflect on the research processes used.	Discerning	Evaluate information/data and reflects on inquiry process using simple prescribed criteria.	Evaluate information/data and reflect on the inquiry process using given criteria.	Evaluate information/data and inquiry process using criteria related to the aims of the inquiry. Reflect insightfully to improve own processes used.	Evaluate information/data and the inquiry process comprehensively using self-determined criteria developed within structured guidelines. Reflect insightfully to refine others' processes.	Evaluate information/data and inquiry process rigorously using self-generated criteria based on experience, expertise and the literature. Reflect insightfully to renew others' processes.
d. Organise & Manage Organise information and data to reveal patterns and themes, and manage teams and research processes.	Harmonising	Organise information/data using prescribed structure. Manage linear process provided.	Organise information/data using a choice of given structures. Manage a process which has alternative pathways.	Organise information/data using recommended structures. Manage self-determined processes with multiple possible pathways.	Organise information/data using student-determined structures, and manage the processes, within the parameters set by the guidelines.	Organise information/data using student-determined structures and management of processes.
e. Analyse & Synthesise Analyse information/data critically and synthesise new knowledge to produce coherent individual/team understandings.	Creative	Analyse and synthesise information/data to reproduce existing knowledge in prescribed formats. **Ask emergent questions of clarification/curiosity*.*	Analyse and synthesise information/data to reorganize existing knowledge in standard formats. **Ask relevant, researchable questions emerging from the research*.*	Analyse and synthesise information/data to construct emergent knowledge. **Ask rigorous, researchable questions based on new understandings*.*	Analyse and create information/data to fill knowledge gaps stated by others.	Analyse and create information/data to fill student-identified gaps or extend knowledge.
f. Communicate and Apply Write, present and perform the processes, understandings and applications of the research, and respond to feedback, accounting for ethical, social and cultural (ESC) issues.	Constructive	Use mainly lay language and prescribed genre to demonstrate understanding for lecturer/ teacher as audience. Apply to a similar context the knowledge developed. Follow prompts on ESC issues.	Use some discipline-specific language and prescribed genre to demonstrate understanding from a stated perspective and for a specified audience. Apply to different contexts the knowledge developed. Specify ESC issues.	Use discipline-specific language and genres to demonstrate scholarly understanding for a specified audience. Apply the knowledge developed to diverse contexts. Specify ESC issues in initiating, conducting and communicating.	Use discipline-specific language and genres to address gaps of a self-selected audience. Apply innovatively the knowledge developed to a different context. Probe and specify ESC issues in each relevant context.	Use appropriate language and genre to extend the knowledge of a range of audiences. Apply innovatively the knowledge developed to multiple contexts. Probe and specify ESC issues that emerge broadly.

... spiral through the facets, adding degrees of rigour and discernment as they dig and delve.

Research Skill Development (RSD), a conceptual framework for Primary school to PhD, developed by John Willison and Kerry O'Regan ©, October, 2006/November, 2012. Facets based on: ANZIIL (2004) Standards & Bloom's et al (1956) Taxonomy.

** Framing researchable questions often requires a high degree of guidance and modelling for students and, initially, may need to be scaffolded as an outcome of the researching process (Facet E, Levels 1-3). After development, more students are able to initiate research (Facet A, Levels 4 & 5)**. The perpendicular font reflects the drivers and emotions of research. Framework, resources, learning modules and references available at http://www.rsd.edu.au. For info: john.willison@adelaide.edu.au

Summary
2014 will be a busy year

- Adopting Constitution that reflects the Vision of PIURN;
- Enabling effective communication between members coordinated by the Secretariat. Need help from stakeholders.
- Undertake Initiative I (Identifying Strengths) and Initiative II (Building Capacity). Need help from stakeholders.
- Building collaborative teams to apply for funding in areas of need for the Pacific Islands.

Possible Logos

- *pi*
- *urn*

Pacific Island Universities Research Network Logo