

NGED Forum

The 2006 NGED Forum was held at the Novotel Palm Cove Resort, Queensland, from 14th to 16th June 2006. The forum program included talks addressing the current questions, issues and techniques in the field of developmental biology, epigenetics, animal science and developmental physiology, and round table discussions about cross-disciplinary interaction and the potential for collaborations. Professor Phil Avner from the Institut Pasteur, France, gave a research talk as well as an overview of the European Epigenetics Network, whilst the chairs of the different network working groups summarised the objectives of their programs and gave a brief update of their achievements in 2005. These talks were followed by presentations from NGED program award winners and by panel discussions summarising the exciting aspects of the forum and the top priorities for the NGED in the years to come.



The 74 delegates attending the forum enjoyed the collegial and friendly environment of this informal meeting, which provided a unique opportunity for early career researchers and senior investigators from different fields and research disciplines to interact and network. The NGED Steering Group wishes to thank all speakers and delegates for their contributions and feedback and for the great suggestions and comments to improve and strengthen the Network further. A summary of the 2006 forum feedback is attached to this newsletter.

This year's forum saw two breakfast sessions organised by the recently established Early Career Researchers Committee, which were described by its attendees as 'invaluable': two very informative and interactive meetings – rewarding for both ECRs and mentors alike. Graeme Polglase, NGED ECR Committee, has summarised the ECR breakfast meetings below:

ECR Update – NGED Forum

At the recent NGED forum at Palm Cove, Queensland, two breakfast meetings were held for the early career researchers of the network. The first meeting was a series of speakers at different aspects of their career, giving very informative and unique advice on how they reached their current position. Different aspects of scientific career paths were given by early postdoctoral fellows, NH&MRC postdoctoral and RD Wright fellowship holders, senior institutional scientists, and laboratory heads. It was an excellent opportunity for all ECRs to really appreciate and understand what is required to succeed in science, and what is important in the eyes of reviewing committees at all steps of the scientific career paths. All speakers gave unique insights into their journey to establish themselves as scientists and each provided inspiration and motivation to all ECRs present, although the future is always a daunting proposition.



The 2nd of the breakfasts was a mentor meeting held with senior laboratory heads of the NGED, answering preset and specific questions from the ECRs. This forum was seen as an excellent opportunity to get some quality time with senior members of the NGED, and indeed, of the Australian Scientific community. The topics covered ranged from specific advice about publications, scientific societies, students, grant and fellowship writing, to the more personal questions regarding family life, children, and finding the right balance in life.



The topics covered and the advice given will appear shortly on the NGED ECR website, as well as recommendations and future directions uncovered at the conference. The two breakfast meetings were highly successful, and the NGED ECR Committee would like to extend our sincerest thanks to all the speakers and mentors who devoted their valuable time to assisting ECRs within the Network, and also all the ECRs who attended the early breakfast meetings, and participated in the discussions so readily and enthusiastically.

Australian Academy of Science – Travel Support



Scientific visits to the United States of America, Canada and Mexico in FY2007–2008
This program is now open. Closing dates for application is 14 July 2006.

The Australian Academy of Science invites applications from professional scientists, including early career researchers, to visit the United States of America, Canada and Mexico between 1 July 2007 and 30 June 2008 to collaborate with researchers in those countries. Proposals in any field of natural science, basic and applied, including mathematics and engineering science, will be considered. Australian citizens and permanent residents currently residing in Australia are invited to apply. Support will not be given when the primary purpose of the visit is to attend a conference. Applicants must hold a PhD degree or equivalent **at the time of application**. They should propose a collaborative research project, or a specific activity, which has been developed in consultation with host scientists in those countries. Under this scheme, applicants can request travel support to access international leading-edge small to medium research facilities and equipment. Support will not be provided for costs associated with the use of these facilities. [Click here for more information.](#)

Communication


The NGED consists of 63 laboratories from the fields of developmental biology and developmental physiology. At present there are 63 members and approximately 500 affiliate members in the Network. Whilst all member profiles are available on our website, we would like to introduce you to individual laboratories in our newsletters over the next few months. We hope that this will bring the Network closer together and inform members of the areas of expertise within the NGED to promote interchange and collaboration.

As the information will be based on your NGED member profile, it is important to keep your [profile](#) up to date:

1. Copy the details of your profile into a word document and apply the necessary changes using the 'track changes' function.
2. Email the details to [Helli](#) for the web update.

Who is who? *Introducing NGED Laboratories...*

	<p>Rob Richards Laboratory <i>(click on the name to view the full member profile)</i> University of Adelaide, School of Molecular and Biomedical Science, Discipline of Genetics Email: robert.richards@adelaide.edu.au / Phone: 08 8303 7541</p>
<p>Research interests</p>	<ul style="list-style-type: none"> • The molecular basis for <i>dynamic mutations</i> - normal and disease causing roles for repeat sequences • Comparative molecular analysis of chromosomal fragile sites and their roles in human disease • The role of human genes in disease - the molecular pathway from genotype to phenotype • Identification and application of genetic markers in the management of human disease
<p>Facilities/ techniques</p>	<ul style="list-style-type: none"> • Animal models of human genetic disease • Drosophila facility • Zebrafish facility • Microarray facility • Real time quantitative PCR

	<p>Mary Wlodek Laboratory <i>(click on the name to view the full member profile)</i> University of Melbourne, Department of Physiology</p> <p>Email: m.wlodek@unimelb.edu.au / Phone: 03 8344 8801</p>
<p>Research interests</p>	<p>Perturbations of the environment in early life, including both the prenatal and postnatal environments, alter growth and functional development and have a major impact on life long health and disease risk. Our laboratory has made novel and significant contributions to understanding the importance of both prenatal placental and postnatal lactational environments in the programming of perinatal growth restriction and catch up growth following placental restriction.</p> <p>Reduced placental blood flow is a major cause of fetal growth restriction and is implicated in programming adult disease. We are the first to demonstrate that placental compromise in rats also adversely affects breast development, milk quality and supply, which further impair growth during lactation. This is followed by accelerated growth after weaning, programming more adverse outcomes. The consequences of the perinatal growth restriction on adult hypertension, diabetes and obesity are also being explored.</p> <p>Defining the underlying mechanisms responsible will provide insight into early life interventions that may lessen these adverse consequences for longer-term health. Identification of critical periods after birth, rather than before, would offer a greater likelihood that practical public health interventions can be developed to improve adult health in this emerging field.</p>
<p>Facilities/ techniques</p>	<ul style="list-style-type: none"> • Real time PCR • Placental restriction surgery to induce fetal growth restriction • Rat telemetry and tail-cuff blood pressure • Intra-arterial glucose tolerance testing and catheter surgery • Embryo transfer techniques • Cross-foster techniques to identify relative importance of prenatal and postnatal environments • Measurement of postnatal milk volume • Histology • Unbiased sterology to determine nephron number • In vitro mammary cell culture • Hormone, metabolite and electrolyte measurements

Upcoming Events



The **5th Australian Developmental Biology Workshop** will be held in Victor Harbor, SA, on 29 November 2006 - 3 December 2006. The aim of this Workshop is to promote the discipline and study of Developmental Biology by providing students and scientists actively working, or seeking to work, in the field with an opportunity to advance their knowledge and critical skills. An intimate and highly personalised meeting, the Workshop will present unparalleled opportunities for networking and future collaboration. Proudly supported by the NGED, the Workshop will consist of in-depth plenary talks by high profile international and national speakers, and round-table discussions of experimental strategies, model systems, and career issues for Developmental Biologists. International speakers at this year's workshop include Dr Utpal Banerjee (University of California Los Angeles), Dr Elizabeth Robertson (Wellcome Trust Center for Human Genetics), and Dr Gail Martin (University of California San Francisco). For further information please visit the [workshop website](#).

The **2006 Annual Meeting of the Matrix Biology Society of Australia and New Zealand (MBSANZ)** will be held as part of the 3rd Australian Health & Medical Research Congress (AH&MRC), to be held at the Melbourne Convention Centre from 28th November to 1st December 2006. This is a unique opportunity to experience the friendly atmosphere of an MBSANZ meeting and at the same time hear about emerging technologies, basic science and translational research within a larger meeting with outstanding Plenary Speakers including John Bergeron, Richard Flavell, Rudolf Jaenisch and Joe Nevins. International speakers invited to MBSANZ sessions include Gill Murphy (Cambridge), Francesco Ramirez (Hospital for Special Surgery, NY), Tim Hardingham (University of Manchester) and Ross Garrett (OsteoScreen). The NGED has provided \$2000 sponsorship to help support our sessions at the Congress and on behalf of the MBSANZ I would like to thank the NGED for their support. Our society will present the Barry Preston, New Investigator and Dennis Lowther awards as usual and we will have a separate Conference Dinner for society members and guests. We look forward to seeing you all there. Please visit the [AH&MRC Web site](#) for more information about the Congress or contact [Shireen Lamande](#), Vice-President MBSANZ.

Events Calendar

2006 Aug 20-23	Annual Conference of the Endocrine Society of Australia and Society for Reproductive Biology Place: Jupiters Convention Centre Gold Coast, Queensland For details please contact Sarah Robertson .
2006 Aug 23-25	Downunder Embryo Symposium Place: Jupiters Convention Centre, Gold Coast, Queensland For details please contact Chris O'Neill .
2006 Sept 1-3	21st Australian Insect Molecular Biology Conference Place: Alpine Ash Mountain Retreat, Toolangi, Victoria For details please contact Lynn Jones .
2006 November	30th Annual Meeting of the Matrix Biology Society of Australia and New Zealand Place: Melbourne Convention Centre, Victoria For details please contact Greg Harper .
2006 Nov 29 - Dec 3 	5th Australian Developmental Biology Workshop Place: Whalers Inn Resort, Victor Harbor, SA For details please contact Rob Saint .
2007 July 12-17	7th IBRO World Congress of Neuroscience Place: Melbourne Convention Centre, Melbourne, VIC For details please contact Sandra Rees
2007 November 6-10 	5th International Congress of the Developmental Origins of Health and Disease (DOHaD) Place: Perth, WA For details please contact John Newnham or Tim Moss

NGED Programs

The Network has introduced a number of programs to support the interaction amongst Network Members and with other researchers and research organisations from Australia and overseas. Award rules and application forms are available on the [NGED website](#). The table below provides a brief description of the programs and the application closing dates for 2006.

Closing Dates	Programs
31.07.06	NGED Conference Support Awards The purpose of the NGED Conference Support Program is to assist conference organisers to provide high profile meetings in the areas of developmental biology / developmental physiology. Preference will be given to international conferences held in Australia with an emphasis on promoting multidisciplinary interactions in order to provide the greatest benefit to NGED members from different scientific backgrounds.
31.07.06 for travel in Aug-Oct 2006	NGED Conference Participation Awards The purpose of the NGED Conference Participation Award is to provide young scientists with an opportunity to present their work at a scientific forum, which they otherwise may not have been able to. Preference will be given to the Network's PhD students and early career researchers. Awards will not normally exceed \$500 (for meetings in Australia) or \$1,000 (for overseas meetings).
31.07.06	NGED Laboratory Interchange Award The NGED Laboratory Interchange Award is available to assist NGED students, early career scientists and other members of the Network to visit other NGED laboratories to work on collaborative interdisciplinary projects, learn specialised techniques or access specialised equipment.
Ongoing	NGED Cross-Disciplinary Workshop Attendance Award To facilitate research interactions and research training activities, which cross discipline boundaries, the Cross-Disciplinary Workshop Attendance Award will assist NGED students, early career scientists and other members of the Network to attend cross-disciplinary workshops (i.e. a physiology student attending a developmental biology workshop).
31.07.06	NGED Focus Group Award The purpose of this award is to support 'Focus Group/Think Tank Meetings' that lie within the objectives of the Network (i.e. strategic planning across the fields, Centre of Excellence planning, or establishment of collaborations between NGED groups that cross disciplinary boundaries).

Reports and summaries of the funding provided by the NGED under the above schemes can be accessed on the [NGED website](#).

ATTACHMENT

2006 NGED Forum Feedback

1. What was good about the NGED Forum?

Venue & organisation:

1. Excellent organisation and great venue (no glitches, good food, warm climate, very comfortable/collegial environment)
2. The meeting size made the meeting informal.
3. The attendance was fully funded.
4. Location: away from capital city.
5. The assignment to different tables on the different days prevented people sitting in cliques and encouraged networking ('social engineering').

Forum program:

6. The ECR breakfast meetings were invaluable (very informative and interactive; rewarding for both ECRs and mentors alike)
7. The opportunity for ECRs to meet senior investigators in a small forum provided a unique opportunity to discuss relevant issues with them (senior researchers attending the forum were very approachable and friendly).
8. The opportunity for early career and senior researchers to meet other researchers from different fields / research disciplines (networking, cross-disciplinary interaction). Exposure to research areas not normally represented at standard conferences.
9. Poster sessions were great for looking at points of possible collaboration.
10. Interesting talks on day 1 (but maybe a little too long?).
11. Round table discussions were a real eye opener to some issues in other research fields (e.g. in animal production science).
12. Awareness of the role & scope of the Network.

2. What could be improved?

Venue:

1. Provide better Internet access at next Forum.
2. The PA system at the venue was pretty bad.
3. The weather & the beer ☺

Forum program:

4. A large number of delegates would prefer more research-oriented talks to provide a better overview of the skills and techniques represented by NGED laboratories (research specific talks found to be more useful and likely to foster collaboration).
5. Avoidance of acronyms in talks (explaining specialist terms for those not familiar with the field)
6. The ECR sessions could start a little later (not at 7 am).
7. Provide more time for round table discussions (carry out exercises together)
8. The first day was very long. Program should be spread out more evenly over 2 days.
9. Provide brief description of each speaker's research interest on the program to make it easier for new comers to pin down the people they want to talk with.
10. Provide an outline of the projects delegates are involved in, in a handout / spreadsheet and email it out to all before the meeting.
11. Invite ECR input in the planning of the day program of the Forum.
12. Coming a bit more prepared for the round table discussions to get out something a little more solid (round table discussions may need a little more direction).
13. Have small focus groups to develop collaborations, so it happens.
14. Include talks on new technologies used in physiology and developmental biology.
15. The development of a clear understanding of the long-term benefits to Australia of the NGED (e.g. 'National Centre for Phenotype Analysis').
16. A lot of people in the Network work on development in animals, but there are not many members from the area of plant development.
17. Sometimes the gap between the NGED disciplines seems too large.

Poster Session:

18. A longer poster session to provide more time to speak with people about their research one-on-one.
19. More direction on what the posters should include. Poster abstracts could be submitted and made available to delegates for perusal before hand.
20. Bigger room for poster sessions.

Socialising:

21. Dinner could be more open to socialising/interacting (Ate quickly / no music). Limited opportunities with a sit down meal.
22. Organise outings to have social interactions without sitting in a room. That's where most ideas and 'getting to know' happens.
23. More spare time to talk to people.

NGED Website:

24. Provide information about fellowship on NGED website
25. Provide information about unique/special techniques offered by NGED labs on website to promote lab exchange opportunities.

3. What were the immediate benefits you had from attending the meeting?

1. Meeting new people and learning about other research areas/ideas (gaining an understanding of other disciplines)
2. Building relationships / establishing links with other groups.
3. Several delegates reported that discussions at the forum would result in new collaborative experiments.
4. Putting faces to names.
5. Some delegates met new researchers who have reagents & expertise relevant to solving technical problems in their lab.
6. Hearing other people's experience with regards to career development was uplifting / motivating (young investigators left the forum with a better understanding of what they need to do in the future to promote their career in research).
7. Mentor advice provided invaluable information on career path and fellowship application writing.
8. The idea of a focus group for such things as methylation analysis and ChIP-on-chip analysis