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| I attended the 7th International Symbiosis Society<br>Congress in Kraków, Poland at the end of July. Held<br>only once every three years, the conference brings<br>together scientists working on symbiotic relationships | Research in 3 minutes         | 5 |
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in all forms of life. I was able to travel to the conference with the support of an AIMS@JCU student award and presented research from my PhD in the *Climate Change* 

and Environmental Impacts session.

Story continued on page 2

#### **About the AIMS@JCU Newsletter:**

This newsletter is produced quarterly and distributed by email to AIMS and JCU staff.

If you'd like to be added to our mailing list, or have a query regarding this newsletter, please contact:

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# **Conference report continued**

#### **Emily Howells**

My talk described the results of a field experiment undertaken during my PhD in collaboration with AIMS scientists (Line Bay, Ray Berkelmans and Madeleine van Oppen). We reciprocally transplanted Acropora millepora colony halves between the warm central GBR (Magnetic Island) and cool southern GBR (Miall Island) which have thermal histories that differ by  $\sim 2^{\circ}$ C. Colony halves retained at native sites remained healthy, whereas transplanted fragments, although healthy over initial months, subsequently bleached and suffered mortality during seasonal temperature extremes. Coral fragments harbouring Symbiodinium type C2 transplanted from the southern to the central GBR bleached during summer and fragments harbouring Symbiodinium type D transplanted from the central to southern GBR bleached during winter. In addition, colony halves in transplant locations had reduced growth rates and either failed to reproduce or spawned out of synch with the native population. Combined, our results indicate that the acclimatisation potential of A. millepora populations may be limited by adaptation to native thermal regimes.



During the conference I learnt a lot about other symbiotic systems from both the research presentations and an interactive workshop on living material. I enjoyed learning how specific types of mycorrhizal fungi alter the physiology of their plant host and how fungal strains from extreme environments are being used to inoculate and successfully produce communities of plants that are resilient to climate change. I also enjoyed talks on the human digestive system which described the importance of establishing a diverse bacterial community in newborn babies to prevent allergies later in life and the bad things that happen to human gut bacteria under a diet of junk food.

Social highlights of the conference were the Wines of the World

AIMS Flickr James Woodford

# **Conference report continued**

**Emily Howells** 

poster session, where participants brought a bottle of wine with them to share from their home country, as well as the conference dinner which was held in a castle with delicious food and honey vodka.



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# **AIMS@JCU News**

Look out for the sparkling new AIMS@JCU website which will be launched in the New Year. This should make browsing our documentation and achievements easier, as well as using our facilities (e.g. the commuter vehicle). Any feedback on the new site will be gratefully received.

We have also joined Facebook, so please 'like' our page (https:// www.facebook.com/AIMSatJCU) and keep up-to-date with our news and events.

The Christmas get-together at the Watermark was a lovely evening, thanks to all those who were able to join us. There was a strong 'alumni' presence and it was great to see that our members are happy to stay involved with AIMS@JCU right to the end of their study and beyond.

We hope you have a fantastic holiday season and we look forward to hearing more members news in the New Year. Thank you to our Research Director, Libby Evans-Illidge for going above and beyond for the AIMS@JCU members this year.

# **2012 AMSA Memberships**

#### Sponsored personally by Joe Baker

Thanks to the ever-generous Joe Baker, another nine AIMS@JCU students were given a year's free membership to the Australian Marine Sciences Association (AMSA).

The students would like to thank Joe again for his support of emerging marine science students and a few have summed up which aspects of this membership have been most useful to them:

## Chiara Pisapia

I am grateful that I was a recipient of 2012 AMSA membership. Being a member allowed me to receive notifications of postgraduate funding opportunity and workshops. Also I had the chance to read important discussions in the AMSA mailing list, which broaden my horizon.

## Daniel Zeh

The first thing I'd like to say about the AMSA membership is an expression of thanks for Joe Baker's generosity. I wasn't familiar with the organisation until the opportunity came to us to join but I was happy to accept membership.

Being a member of AMSA means joining other marine science professionals in meetings and activities. I've explored the AMSA website and found pages intended for students very informative. I haven't done much more than that this year due because I was away from JCU for a number of weeks. I plan to get caught up over the holidays and hope to participate in AMSA in the next year.

### Dennis Heinrich

The greatest benefit for me was the permanent updates on job and postdoc offers that are of potential interest to me as a Marine Biology student. It just helps me to get a better understanding of what I can expect in terms of available positions after I finish my degree. It further provided me with the resources to expand my personal network of contacts within my field of interest, which was further supported by the regular updates about marine related conference.

## Shaun Bochow

I would like to thank Professor Joe Baker for his continuing generosity and support in providing new AIMS@JCU students with

# **2012 AMSA Memberships**

#### continued

membership to the Australian Marine Sciences Association. This service has proved invaluable in keeping up to date with marine science around Australia through the AMSA website and bulletins and providing a medium for networking with other scientists around Australia.

Please visit http://www.amsa.asn.au/ for more details of membership benefits.

## **Research In 3 Minutes**

#### Line Bay

Have you been in a situation where you have a brief moment to explain what your research is about, why it is important and interesting to someone important in your field? Even harder, to someone outside your field, a research end-user or a layperson? Then you will know, that the elevator speech – a succinct and upbeat sound grab of your research that can be delivered between the 10th floor and the lobby - is valuable and essential skill to have.

On the 19th September, AIMS@JCU sponsored the first speedtalking championships at AIMS, which also doubled up to select entrants for the "my thesis in 3 Minutes" JCU competition in late September. Nine entrants battled it out for titles in three categories: PhD Student, Early Career and Established Researcher. The audience, and the three judges (John Gunn CEO AIMS, Wendy Ellery, Media Officer AIMS and Andrew Skeat, General Manager GBRMPA) were treated to inspired and passionate entries about the loss of species from poor water quality, the value of tissue libraries, microbial parties in your belly button....

It was a close call, but in the end Gergely Torda (AIMS@JCU), Karen Weynberg and David Bourne were declared winners and walked away with the honours (and the fabulous prizes sponsored by AIMS@JCU). Most importantly, we all learned a lot about the research going on at AIMS and JCU in an entertaining and relaxed setting.

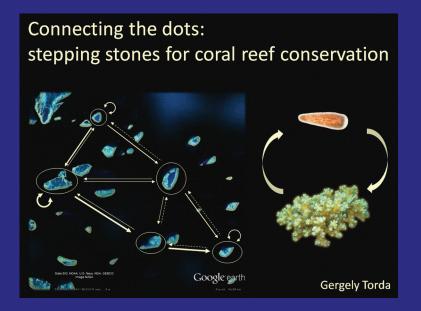
According to Andrew Skeat the speed-talk is perfectly suited for research end-users to gain a quick overview of detailed and complex research. "I gathered more information about new research in the past three hours than the last three months" he

# **Research in 3 Minutes**

continued

said when delivering the closing address.

Congratulations to our talented AIMS@JCU students, Greg Torda with his winning talk "Connecting the dots: stepping stones for coral reef conservation" and Leanne Currey who came runner-up in the JCU postgraduate heat with her talk "I will survive (after release)". They have kindly provided their presentation slides:







# **Research Director Report**

This has been another busy quarter, with recent new members taking our total membership to 150 including a whopping 58 post graduate research students jointly supervised at AIMS and JCU. If you are a jointly supervised student who is not a member of AIMS@JCU – you should consider becoming a member! You don't have to be a recipient of an AIMS@JCU scholarship. Check out our website for information about the benefits.

As always at this time of year, we have been busy working through the plethora of new talent who have applied for AIMS@JCU scholarships. We look forward to announcing the result of this in the New Year, and welcoming the next cohort into the AIMS@JCU family.

We were proud to be finalists in this year's B-HERT awards, which are a national and prestigious award for business-higher education collaboration. The process of preparing the package of information to support our nomination was a very useful reflection on the collective and significant achievements of AIMS@JCU, its outputs and impacts, and of course future directions. I had the pleasure of representing us at the award presentation dinner, at which our Minister Evans officiated. While we did not receive an award on the night, the collaborations which did were extremely worthy and it was pleasing to see AIMS@JCU highlighted as a finalist alongside them.

Speaking of future directions, there has been much discussion about AIMS@JCU helping to develop better regional critical mass in advanced quantitative and modelling skills. We are not seeking to produce a generation of mathematicians – but rather marine scientists who can apply advanced quantitative tools to better synthesise and interpret data and information. To this end, we plan to work with our members to identify suitable post-graduate coursework in this area, both locally and at other Australian institutions, and facilitate/coordinate their participation. The purpose is to enhance their access to appropriate quantitative techniques and tools in AIMS@JCU projects. There will be more about this in the New Year.

I would like to take this opportunity of thanking everyone involved with AIMS@JCU for another action-packed and very productive year. I especially thank our office manager, Lauren Gregory, for keeping the wheels turning smoothly despite the chaos, and our Management Committee and Scientific Advisory Committee for their guidance and governance. Most of all, I thank all of you AIMS Flickr Adrian Flynn

# **Research Director Report**

- the members - who make AIMS@JCU so special - and I very much enjoyed sharing some Christmas cheer at our end-of-year drinks with those who were able to make it.

I wish you all, and your families, a very happy Christmas and a fantastic New Year.



Libby Evans-Illidge Research Director

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Photographs in this publication were submitted by AIMS@JCU members unless otherwise stated.







