

SEAFOOD STORIES



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July 2011 Edition

Research • Education • Commercialisation • Impact • People • Food for Life

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ABOUT SUBMISSIONS

The Australian Seafood Cooperative Research Centre welcomes contributions to this e-zine or any ideas for future articles. Seafood Stories is distributed quarterly to Seafood CRC company members and participants and associate stakeholders. This publication is sent via email and is also available to download from the Seafood CRC website.

All reasonable care has been taken by the editor and contributor in preparing components of this e-zine that represent, or that could be construed to represent advice. Neither the Seafood CRC nor any of its company members and participants, officers or contributors accepts and liability resulting from the interpretation or use of the information set out in this publication. Information contained within this publication is also subject to change without notice.

"Through research along the entire seafood value chain, from wild harvest to aquaculture production, to the consumer, the Australian Seafood CRC assists the seafood industry to profitably deliver safe, high-quality, nutritious Australian seafood products to premium markets, domestically and overseas."



Australian Government
Fisheries Research and Development Corporation

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News from the MD's Desk

DR LEN STEPHENS OUR MANAGING DIRECTOR LOOKS TO THE FUTURE OF THE SEAFOOD CRC AND BIDS FAREWELL TO DEPARTING STAFF MEMBERS.

Important Decisions are Approaching

There are only three years remaining for the Seafood CRC in its current form. Decisions made during the next twelve months will determine whether the Seafood CRC continues past June 2014.

One approach to continuing the CRC would be to apply to the Australian Government CRC program for additional funds. This would require some of the existing participants to continue their current cash and in-kind commitments. Work on this rebid would need to begin soon if we wish to ensure funding during 2013.

Rather than continuing in its current form, an alternative would be for elements of the CRC to continue on a commercial or not-for-profit basis. For example, activities in China and market development may be self funded by some industry sectors in coming years. There are also parts of the CRC that could be transferred to Fisheries Research and Development Corporation, Seafood Services Australia or other industry

organisations.

These issues and many others will be on the table for discussion during the "CRC Legacy" discussion at our annual Participants' Forum on 11/12 July this year.

The Participants' Forum will also be the first time you will be able to see a summary of most of the science behind the CRC. Senior researchers for most of our research provider participants will be presenting their results.


I encourage all CRC Participant Representatives to attend the forum, to hear about advances in science in the industry and to have your say about what the future holds for the CRC.

Goodbye and Good Luck

On a personal note, we will soon be losing the services of two CRC staff. Fortunately we will only be losing the efficiency and enthusiasm of Alison Connelly for 12 months while she takes maternity leave with her second child. We have all come to depend very much on Alison. We wish her



well for the next twelve months and look forward to her return.

Bob Fleming will be leaving the Seafood CRC for good in July. After two years working with many seafood processors across Australia, Bob is about to re-enter the commercial world by establishing his own consultancy business. I am pleased the CRC was able to bring Bob to Australia because he has many skills of use to the industry and I wish him well in his new venture. 

Graham's Program 1 Blog

DR GRAHAM MAIR, OUR PROGRAM 1 PRODUCT INNOVATION MANAGER, BECOMES OUR VERY OWN FOREIGN CORRESPONDENT AS HE SHARES HIS THOUGHTS ON THE YEAR SO FAR AND REPORTS ON PROGRAM 1 FROM AN AIRPORT IN BUENOS AIRES, ARGENTINA.



Program 1 – Thinking of our Legacies

Having just returned from a longer than anticipated trip to South America (stranded in Argentina for 4 days, got home via Cape Town and Kuala Lumpur!) to take in the World Aquaculture 2011 conference in Natal, Brazil I thought I would provide some extracts from my trip report to make up my blog for this issue, focusing on observations that have some relevance to the CRC.

The Conference

The prime reason to attend the conference was to participate in the World Aquaculture Society's (WAS) Board meeting (see page 26).

But at these conferences I look for significant advances in research areas that are likely to take aquaculture development in a significantly new direction. The bulk of the CRC's investment in aquaculture production related research is focused on nearshore and coastal onshore

aquaculture, both forms where growth is constrained by environment focused regulation and thus shortages of sites. There were a number of conference sessions focused on issues that address this constraint.

Recirculating Aquaculture Systems (RAS)

There was a paper on the use of recirc systems in Chilean salmon farming which was relevant to our recently approved innovation initiative to analyse the cost benefit of land based salmon farming. Currently Chile is using RAS only for raising smolt and the study compared RAS with the alternative flow through systems. It now makes economic sense to use RAS in place of flow through and the industry is steadily switching over. Interestingly, there was a good presentation from a company (Agrimarine-Canadian) that is commercializing innovative solid walled sea based RAS systems. Could this be an option for the future of our salmon industry?

Open Ocean Aquaculture

A number of engineering solutions have been developed for open ocean cages (mostly submerged) and it was reported that market demand for open ocean net pens is growing. However, key bottlenecks to industry sector expansion remain, including integration with existing and historical commercial fishing interests, acceptance of the use of marine area commons for private exploitation, proof of profitability sufficient to attract capital investment and work force education. An Australian, Neil Sims of Kona Blue Water Farms, LLC, is one of the leading innovators

in this area in the Americas. Kona Blue produce over 500 tons a year of Kingfish (*S. rivoliana*) in submerged, open ocean cages. The company is now piloting a new concept which is about to evaluate the potential of drifter net-pens that can be entrained in regional ocean eddies. These would have the major advantage of addressing regulatory constraints for moored structures.

There was a very interesting presentation that showed fish could be training to respond to sound stimuli and that this trained response was only retained for weeks and thus fish required to be retrained. Whilst a fascinating idea, and if it worked well, a revolutionary concept for stock enhancement/ranching, field trials in a freshwater reservoir demonstrated that retraining of stocked fish also trained wild fish and the system essentially operated as a novel harvesting method for wild catch. Might this approach work for Barramundi?

An Ecosystems Approach to Aquaculture

A session on the concept of an ecosystems or ecological approach to aquaculture examined what appears to be a growing discipline "that combines the social-ecological wisdom of aquafarming peoples with the science knowledge of aquatic ecosystems to provide economic, environmental and social profit from seafoods to the world". As with integrated multi-trophic aquaculture, there would not appear to be a great deal of researcher or industry interest in this concept in Australia at present. Visit the website for more information <http://ecologicalaquaculture.org>.

Kylie Giles (Fisheries Research and Development Corporation) presented on IMTA in Australia (or rather the current lack of it) and recently supported research initiatives.

BioFloc (Low Water Exchange) Aquaculture

The vast majority of presentations focused on case specific issues for specific floc systems and for specific species (most commonly *L. vannamei*). It is evident that optimisation of floc systems will be engaging many researchers for many years to come as the researchable issues are virtually limitless. However, the strong attendance at the sessions on the last afternoon of the conference, indicated a strong interest in the topic.

There were a number of other sessions that have some relevance to our aquaculture participants:

Cobia

There was an entire session devoted to Cobia aquaculture. The overall message from this session was that most of the biological constraints to Cobia aquaculture have been overcome and whilst Cobia aquaculture is expanding globally (i.e. in geographic reach) production growth is constrained by a number of issues. Including inconsistency of supply, inadequate market development and regulatory controls. The consensus was that Cobia may still be destined to become the "tropical salmon" and that the development of culture systems has now reached the point that commercial investment is warranted (for production in both cages and ponds) provided that adequate market development is conducted. The extensive effort to develop pond farming of Cobia in Brazil has stalled due to business constraints unrelated to the performance of the fish in pilot scale systems. As a benchmark for the CRC's Cobia project and its emphasis on securing seed supply, fingerlings in Taiwan are currently costing US\$0.75-1.00.

During the conference I met Marcell Boaventura, the new Clean Seas Tuna hatchery manager who has had

considerable experience of Cobia hatcheries and we need to access this expertise in support of the new Cobia project recently initiated with Department of Employment Economic Development and Industry and Australian Prawn Farmers Association.

Alternative Foodstuffs

The best recent update on this was provided by our own Geoff Allan at the GOAL meeting in Kuala Lumpur last year.

Publishing in Aquaculture

There was an excellent session on Scientific Publication in Aquaculture, with superb informative presentations from Cristiane Barranguet (Elsevier) on the Scopus database for analysing science publications data (by country, institute and individual) and Barry Costa-Pierce (section editor for Aquaculture) entitled "why I rejected your paper". A similar session should be considered for future Australian seafood conferences.

Genetics

There was an excellent overview by George Chamberlain of the keynote presentations during last year's Global Outlook for Aquaculture Leadership symposium in Malaysia. In particular he highlighted comments from Robins MacIntosh (executive from CP foods, Thailand) in which he outlined how domestication and genetic improvement has been the driver for the stellar growth in prawn farming in Thailand since 2001 with yields as high as 50,000 tonnes now possible. His presentation makes a powerful case for the important role and the relative economic benefits arising from genetic improvement in aquaculture. The genetics session itself contained a mixed bag of presentations and included some CRC work on Barramundi. An overview of successes, challenges and future prospects for genetics and fish breeding by Ingrid Olesen (Nofima) highlighted for me that time is now ripe for a review of issues and options specifically for commercialisation of fish breeding programs.

Tuna and Yellowtail

A presentation from the European SELFDOTT project indicated that

rearing and maturing in captivity did not have any significant effect on vitellogenin processes in Atlantic Bluefin Tuna (ABT). Greek researchers reported on the use of methodology for identifying the microbial communities present in hatcheries reared bonito and ABT larvae reared in hatcheries. This method could be applied to our Southern Bluefin Tuna larvae. In a follow up to work originally presented at our tuna propagation workshop in 2009, Dan Benetti's group (University of Miami) is now spawning Blackfin tuna which, as a smaller, faster growing and earlier maturing species, could be a new model for work on Bluefin Tunas.

Sustainable Aquaculture and Certification

There was no improved clarity on the global status of the various sustainability certification standards under development. The number of standards (mostly specific to species or species groups) continues to grow as does the number of retailing organizations requesting some kind of standard for seafood they buy. An update was presented on the Cobia and Kingfish World Wildlife Fund dialogue to develop sustainability standards. It struck me again, that whilst there is representation from members of the Australian seafood industry in the development of some of the certification initiatives, there remains no coordinated approach to awareness and monitoring of standards development. Could this not be a role for any future spin off or legacy company of the Seafood CRC?

Other News

We will shortly be saying goodbye to two CRC staff, Alison and Bob. I've really appreciated Alison's efficient and no nonsense approach to her role and I hope she'll be back once she's got the new family members settled. I'll also miss Bob's laconic presence and commercial savvy around the place and his occasional company on the golf course. He's also the only person in the office with any interest in my pontifications on the latest state of UK soccer games.

Graham 

Jayne's Program 2 Blog

JAYNE GALLAGHER, OUR PROGRAM 2 PRODUCT AND MARKET DEVELOPMENT MANAGER, TAKES A BREAK FROM HER BUSY SCHEDULE TO UPDATE YOU THE EXCITING PROJECTS IN PROGRAM 2.

Jayne Gallagher and Grey Group representative Sylvia Sui at the recent China Market Project briefing in Adelaide.



Since the last edition of Seafood Stories we have been busy at CRC HQ organizing meetings and seminars with industry and researchers to discuss the research outcomes from Program 2 projects. These have provided a fabulous opportunity for participants to ask questions and bounce ideas off each other as we start to crystallize our thoughts about how best to extend and utilise the results to benefit our end users.

Some Highlights:

The **Consumer Research Master Classes**, conducted by the University of the Sunshine Coast, are being held around the country and there are still places available, for anyone interested in how the comprehensive research results (gathered from over 13,000 consumers) could be applied to their business. For more information about the classes or to register contact Emily Mantilla at emily.mantilla@seafoodcrc.com.

China Market Project briefings were held in Adelaide and Hobart for CRC participants interested in our market research activities in China. While these briefings focused on our Abalone Council Australia -Australian Wild Abalone market development research program in China, they also provided opportunities for other CRC participants to meet senior people from our China based research partner, Grey Group, and start to explore other opportunities associated with the rapidly changing China seafood market. A brief report on these briefings is also provided later on in this magazine, page 10. In a further development, the CRC Board recently agreed to establish a representative office in Shanghai to facilitate and support collaborative market development research initiatives. Discussions are continuing with CRC participants interested in pursuing

these opportunities. For more information and to discuss how you can become more involved in our China initiatives, contact me on 0438 336712.

SafeFish recently held a meeting of technical experts in Canberra to try to prioritise the list of technical issues associated with seafood trade and market access for our participants. In addition to providing a rapid technical response capacity to address any disruptions to trade, SafeFish has a role to monitor the international and domestic regulatory environment and to develop technical briefs on emerging technical issues that might cause future trade disruptions. Working with the Seafood Market Access Forum, SafeFish prepares the technical briefs to underpin Australia's international trade negotiation positions and to inform policy and regulatory decision making. The recent Codex meeting held in Norway had a number of issues on the agenda with the potential to negatively impact on Australian seafood businesses. For more information on SafeFish activities and to get a copy of the SafeFish work program contact Cath McLeod at SARDI on cath.mcleod@sa.gov.au.

I am looking forward to our annual **Participants' Forum** in July and in particular our **Science Day** where a smorgasboard of research activity will be presented spanning both research programs. The discussion on the CRC extension plan is especially important as we move into the final three years of the CRC. We need the input and ideas from everyone involved in the CRC so I am looking forward to some robust discussions about how best to use our research results to achieve the audacious goals we set ourselves when we started the CRC in 2007. See you there!

Jayne 

A Note From Your Seafood Stories Editor

TUNA TAXIDERMY, 'MAKING MAGAZINE' TRAINING AND CHINA TRADE DEALS, ALL JUST PART OF THE JOB FOR THE SEAFOOD CRC'S NEW COMMUNICATIONS AND EVENTS OFFICER.



After a few short months here at the Seafood CRC I am happy to say I now feel like part of the office furniture. That is to say, I have settled in nicely, aided in equal parts by a great team of managers at the Seafood CRC office (I think I have found a kindred 'communications' spirit in Emily Mantilla) and by a fascinating and constantly evolving work load. RAC papers, pass-the-parcel and tuna taxidermy, just another week in the CRC office! The monumental arrival of my first ever business cards has also given me the indication that the MD

and my manager Emily plan on keeping me around for a while yet.

As I am sure you have all noticed, the magazine has had a bit of an overhaul in design and layout, however we are still bringing you all the latest news and updates from the Seafood CRC including research updates, information on CRC Master Classes and education programs, updates from our Program Managers and student profiles. If you have anything you would like included in our publication, please don't hesitate to contact me.

The new magazine design and layout is the result of some extra training I have undertaken recently to develop my 'magazine making' skills. I am passionate about communications and have made it a priority to continue my education in this area, even though I am not at university any more. Working on *Seafood Stories* is an outstanding opportunity for me to hone my skills and provides a great outlet for my creative side. Next I plan to tackle the world of web page design to compliment my role of web master here at the CRC. I think I may be in danger of turning into a computer nerd...

Recently, I had the opportunity to use my communications background and Asian language studies to help out with the China Market Project (Program 2). Working with Jayne

Gallagher on this project, focusing on opening up a new market in China for premium grade Australian wild abalone, has been a wonderful learning experience for me as a communications and international business graduate. Under Jayne's direction I am now working on weekly 'China Market Project Bulletins' and a monthly newsletter for all abalone stakeholders. Please see page 10 for more information on this project.

Finally, organising the **2011 Seafood CRC Participants' Forum** in my role as the Events Officer, has been another wonderful learning experience for me as I have been involved in organising everything from dinner menus to an advertising campaign. The Forum is being held in Adelaide on the 11th and 12th of July and I encourage you all to register and attend as this is a great seafood industry networking opportunity. We will also be showcasing the best science to come out of CRC research and discussing the CRC's legacy. What do you want us to leave behind as a legacy? It is not too late to register, you can call me on 1300 732 213 to register or to receive more information.

I hope you enjoy reading this edition of *Seafood Stories* as much as I have enjoyed putting it together. Until next time, take care,

Chelsey 

Emily's Education and Extension Extravaganza

EMILY MANTILLA, OUR PROGRAM MANAGER FOR EDUCATION AND COMMUNICATION, SHARES HER THOUGHTS ON THE VALUE OF EDUCATION AND INTRODUCES THE SEAFOOD CRC'S EXTENSION HIGHWAY.

Emily's Philosophical Thought for the Month – Knowledge is Power

As I get older and maybe just a little bit wiser (or maybe I'm fast approaching a mid-life crisis, can't work out which one it is) I've been thinking about what it means to be successful, to accomplish what you set out to do and what it means to be a leader.

I've come to the realisation that if I want to be successful in my life – as an individual, in my career and in my outlook on life - education is the key to help me get. I also need to lead by example - to motivate others to follow in the same footsteps.

Without knowledge and without challenging yourself to think new thoughts, ideas or to see things from a new perspective or to learn from others, how does anyone expect to grow as a person, as a company or as an industry group?

I've made the commitment in 2011 to give myself more education and more knowledge. Will you join me in this commitment too?

We are over half way through 2011 and there are still lots of opportunities for you all to get involved in our education and training courses, or maybe it is time to do that university, TAFE or short course that you have been thinking about doing for ages.

So what's stopping you? 99.9% of the time it will be you!

Seafood Management Development Program

When I get letters from people that have participated in this course that say these sorts of things:

"I was extremely pleased with the course and what I got out of the sessions. I think many seafood people have missed an opportunity to have their minds expanded. I have begun implementing a few of the strategies from this course and will continue my education through the suggested further reading".

"I would encourage people with a vision (even if slightly blurred) and passion to participate in this course to help them to clarify the vision, and build a path to the development of their businesses and the industry as a whole"

"Sophisticated and detailed course material, empathetically presented for all levels of prior experience. Instantly relevant and applicable. An education experience at it's very best."

It sure gives me a little warm and fuzzy and makes the CRC team very pleased that we are hitting the mark with our training opportunities in management development. So I now ask myself the big question? Why have you not been part of this FREE and life-changing opportunity yet?!

Lucky for you I have good news because it is not too late, we will be holding an Adelaide class on 8th – 11th



September inclusive where we will cover four main topics:

1. Creative Thinking and Strategic Decision Making (Rob Dew)
2. Value Innovation and Viability Screening (Evan Douglas)
3. Marketing (Su Mon Wong)
4. People Management and Leadership (John Whiteoak)

If you can't get to Adelaide in September, don't fret because if you can get 20 CRC members/CRC employees who want to take part, the CRC can look at running the entire course in-house for you.

We also have another three modules that if participants are interested, we can deliver to you as 1-2 day in-house workshops. These are Communication

EDUCATION, TRAINING, COMMUNICATIONS & EXTENSION

Skills (with Aub Warren),
Understanding Financial Statements
(with Evan Douglas) and How to
Analyse Your Business and Write a
Business Plan (with Noel Lindsay).
Contact me for more information.

This is your last chance to do this
course as funding ceases in 2011!

Consumer Research Master Class – Connect with Your Customer, Discover Opportunities

What do you get when you take
13,000+ Australian seafood
consumers and you take them
through a series of intensive steps
to extract as much information
as you can on the purchasing and
consumption patterns they make
when it comes to seafood? Well I
will tell you – you get an ENORMOUS
amount of information that you can
use to rethink your marketing and
business strategies!

The friendly team at the CRC and
the University of the Sunshine Coast
have developed an easy to consume
(pardon the pun) way in which you
can take this knowledge and use it for
the benefit of your own business.

Registrations are open for the
Consumer Research Master Class
series being held nationally in 2011
(class locations left are Sydney, Cairns,
Hobart and the Gold Coast). Cost
to attend is \$50 for members and
\$100 for non-CRC members which
includes refreshments. So not a lot
to fork out (excuse the pun again!!)
but the benefits you will receive will
be out of this world. Contact me for
more information and to get yourself
registered.

Extension Plan – Moving Ahead

At the April 2011 Board meeting I
am pleased to report that the CRC
Directors approved the format and
process of the CRC's extension
plan called "The Seafood Extension
Highway" but now we have a big job
ahead of us to develop a whole suite
of extension projects into concepts for
approval.

At the CRC Participants' Forum on the
12th of July, Len and I will be taking
participants through the extension
plan and will have a yarn with you
all about the continual stream of
research results, products and
services of the CRC that will need
extension. This is, of course, expected
by CRC participants but also by DIISR
and it is crucial for the CRC to be able
to leave a lasting legacy from 2014
and beyond. Extension is the vehicle
of choice!

The "Seafood Extension Highway"
details the 12 extension project
concepts to deliver our "Product
Packages" (packets of information
grouped into a common theme/topic)
in consultation with the relevant end-
users.

The current Product Packages
identified are:

- *Aquaculture genetics*
- *Bio-floc (microbial floc production systems for Australian prawn farms)*
- *Oyster and prawn farm business benchmarking*
- *Fisheries management "Future Harvest" (assisted by bioeconomic modelling)*
- *Fisheries stock enhancement*
- *Health benefits of seafood*
- *Consumer and marketing research*
- *Trade and market access*
- *Seafood processing and new consumer*

products

- *New markets to China*
- *Business training for the future*
- *Industry ready graduates and new business leaders*

Where possible, existing resources
will be used to ensure extension is
delivered in the most practical and
cost-effective way. This may be
through Extension Officers already
located in CRC industry associations
who are in a position to drive
extension with their members but
who are also able to assist the CRC
with specific activities. Resources
may also be located within other
organisations, e.g. OceanWatch,
through FRDC and/or Seafood
Services Australia.

OceanWatch employ extension
officers in every state of Australia
and their primary responsibility is
to ensure, through an individualised
approach, research results at a
national level are communicated to
fishers, aquaculturists and seafood
processors for implementation in
businesses. Oceanwatch not only
provide face to face and personal
support to these businesses but
in turn, provide an information
repository hub for fishers,
aquaculturists and seafood processors
– a very important part of the CRC's
legacy plan for its Product Packages!

I hope to see you at the Participants'
Forum later this month where can get
down to the nitty-gritty of extension
at the Seafood CRC and I can tell
you more about it first-hand (I think
that might be called extension of
extension?!!)

Until next time,

Emily 

China Market Project Update



Over the past nine months the Abalone Council of Australia (ACA) and the Seafood CRC have been working on behalf of abalone divers, processors, quota holders, suppliers and exporters to make the China market project a success and to educate future generations of Chinese people about Australian abalone.

China Market Project Update Meeting Summary

The Seafood CRC and ACA brought their China team together for a series of meetings held in Adelaide and Hobart to update stakeholders about the project to date. Thanks to all those who attended these meetings and for all the great questions we received.

An invitation was sent out to all abalone stakeholders across Australia and the meetings were attended by over 50 interested abalone quota holders, divers, producers and stakeholders from all over the country.

The meetings kicked off in Adelaide where the CEO of Grey Group Asia Pacific, Mr Nirvik Singh and Ms Sylvia Sui, made a special appearance at the Adelaide meetings, demonstrating his company's commitment to this project and belief in Australian Wild Abalone's (AWA) potential to succeed in the mass affluent Chinese market.

During these informal meetings the China team introduced our Chinese marketing associates, the Grey Group, and gave a warts and all summary of the project's history and progress to date. In an abalone shell, we have a swag of top-end Chinese restaurants (over 60 in all) and Michelin Star Chefs on board and loving the AWA product.

The Grey Group has been using social media like Facebook and Twitter (a hugely popular communication medium in China) to build a buzz around the AWA project and to begin educating mass affluent Chinese consumers about Australia's beautiful wild abalone.

If you would like to become involved in this project as a sample supplier, would like a copy of the supplier code of conduct or want any more information on becoming a supplier, please contact Dean Lisson at deanlisson@tassie.net.au.

Yours Sincerely,

The China Team

Dean, Jayne, George, Sylvia, Naveen and Chelsey

Achievements so far;

Over 60 Flagship Restaurants Recruited and growing

There are over 60 restaurants that are sampling, using and ordering AWA product, including restaurants in luxury hotel restaurant chains.

Distributers for AWA in China

Shanghai Penguin Trading Company and more recently Hong Hai (Chinese distributor) have signed onto the code of conduct, to ensure legal distribution of AWA product into China.

Development of an AWA Industry Mark

Designed to create value in a premium market and to use by suppliers and processors as a co-branding tool. The logo has been registered as an industry mark in Australia.

Educating China about Australian Wild Abalone

The China team has been educating chefs and purchasers about premium grade Australian abalone and has developed training modules for product care and handling as well as lots of cuisine development.

Establishment of a Seafood CRC Registered Office in China

Mr George Chung is the project's AWA representative in Shanghai. George will help the AWA in addressing the 'service gap' (after sales service), liaising with Chinese distributors and establishing and maintaining relationships in China.

Wanted!

THE SEAFOOD CRC IS CURRENTLY SEARCHING FOR TWO TALENTED INDIVIDUALS TO JOIN OUR TEAM. ARE YOU THE PERSON WE ARE LOOKING FOR?

Wanted: Economist- Part Time

Following the departure of Domenico Dentoni to Europe, the CRC is once again without an economist to do our project evaluations and to help revise our full CRC economic impact assessment.

For the right person this is an exciting opportunity to get close to the centre of all CRC activity.

If you know someone who can do this and can operate in Adelaide, please encourage them to apply .

If you are interested in either of these positions, would like to recommend someone for the job, have any questions or need more information, please contact the Seafood CRC's Managing Director,
Dr Len Stephens at
len.stephens@seafood-crc.com





Wanted: Seafood Retail Research Advisor

The Seafood CRC is looking for an adviser to work with CRC staff in planning and delivery of projects in conjunction with the domestic seafood retail and food service sectors.

The tasks are varied and include planning and coordination of marketing development, project design and evaluation, communication of project results, establishment of people networks, and liaison with stakeholders.

The position would be on a part time, contract basis and location is negotiable.

Required skills:

-  Senior management experience in the Australian food retail industry.
-  Skill in building teams involving scientists and commercial end-users of research.
-  Well developed communication skills, including oral presentations and report writing.
-  Ability to plan and manage projects across a range of organisations.
-  Extensive personal networks in the industry.

Goodbye and Good Luck to Bob and Alison

Bob Fleming, our former commercial processing manager, says his farewells to the Seafood CRC

Goodbye everyone – for the moment anyway.

I am leaving the Seafood CRC family at the end of July to dive into the murky waters of self-employment for the first time in my life, so I am experiencing keen anticipation and abject fear in equal measures at the moment.

The last two and a half years have been rewarding and frustrating. Any relocation process is stressful, but one where you also move into a completely new employment sector as well is doubly so.

The complexity (and politics!) of Australian seafood – across both industry and research providers, present a very steep learning curve for any new arrival, and one that will likely not be completely understood by anyone in short order. To those I have upset with my lack of knowledge or less than subtle approach (so I may have been told), my apologies.

The challenges to current and future industry profitability are significant whilst at the same time many positions are entrenched in past glories.

Confronting such issues as driving out inefficiencies, improving the supply chain, and servicing ever more demanding national and international clients requires vision, collaboration, and (in many cases) hard cash. None



“I am leaving the Seafood CRC family to dive into the murky waters of self-employment for the first time in my life.”

of this is easy as change, by its nature, challenges the status quo.

The CRC is the only entity with a mandate to attempt significant change – for the very first time. Research outputs that clearly deliver bottom line industry progress may only be demonstrable far in the future. It is pleasing that some of the research activities undertaken in my area are starting to be utilised by industry.

Findings from consumer research are being trialed and collaborative, multi-species processing centres are being

put forward.


I would like to thank all my CRC colleagues and those people I have been lucky enough to meet with all around this amazing country for their hospitality and openness.

Some of our discussions have been fractious at times, but I am convinced, that at heart, there is a core of passionate, dedicated “seafood people” in Australia that want to help grow and improve the industry in the years ahead.

Whilst I absolutely enjoy processing each and every Milestone Report I receive, I have missed the daily operational buzz of commerce, so I’m heading back into the world of deadlines, product costings, and profit and loss.

I hope to remain in seafood (using as much of the CRC research outputs as possible without breaking any confidentiality agreements of course) and as such, I look forward to meeting many of you again in the near future.

Yours,

Bob 

Alison Connelly, the dedicated administration manager and general organisation extraordinaire, bids farewell to the Seafood CRC -but hopefully not forever!

I just wanted to say a quick hello (and goodbye) as I will be proceeding on extended leave at the end of this month to take on another wonderful chapter of motherhood.

My husband, daughter and I are expecting a little boy in late July and we are bursting with excitement.

So just in case I don't return to the

Seafood CRC this time next year, I'd like to say thank you all for all the great interaction I've had with many of you over the past two years.

I loved answering the main Seafood CRC telephone as it gave me the chance to catch up with many of you on a regular basis. I've also met so many lovely people at various Seafood CRC events and will definitely miss the great buzz of the CRC.

But particularly I will miss the wonderful team I work with in the CRC office. Despite the hard work it's been lots of fun along the way. So all the very best and goodbye for now!

Alison 



From the Seafood CRC Team...

It is with a bit of sadness, but also with much happiness, that Alison will be leaving the CRC for a short while to have her second child. We wish Alison, Mark and Olivia a wonderful time introducing a new member to the Connelly family!

Alison is without doubt, the "behind the scenes" lady that makes the CRC tick to perfect time. Alison's attention to detail, her cheerful disposition and her "can do" approach to any task thrown at her will be sorely missed. We would like to thank her for all the little things she has done to make our time at work more enjoyable, including;

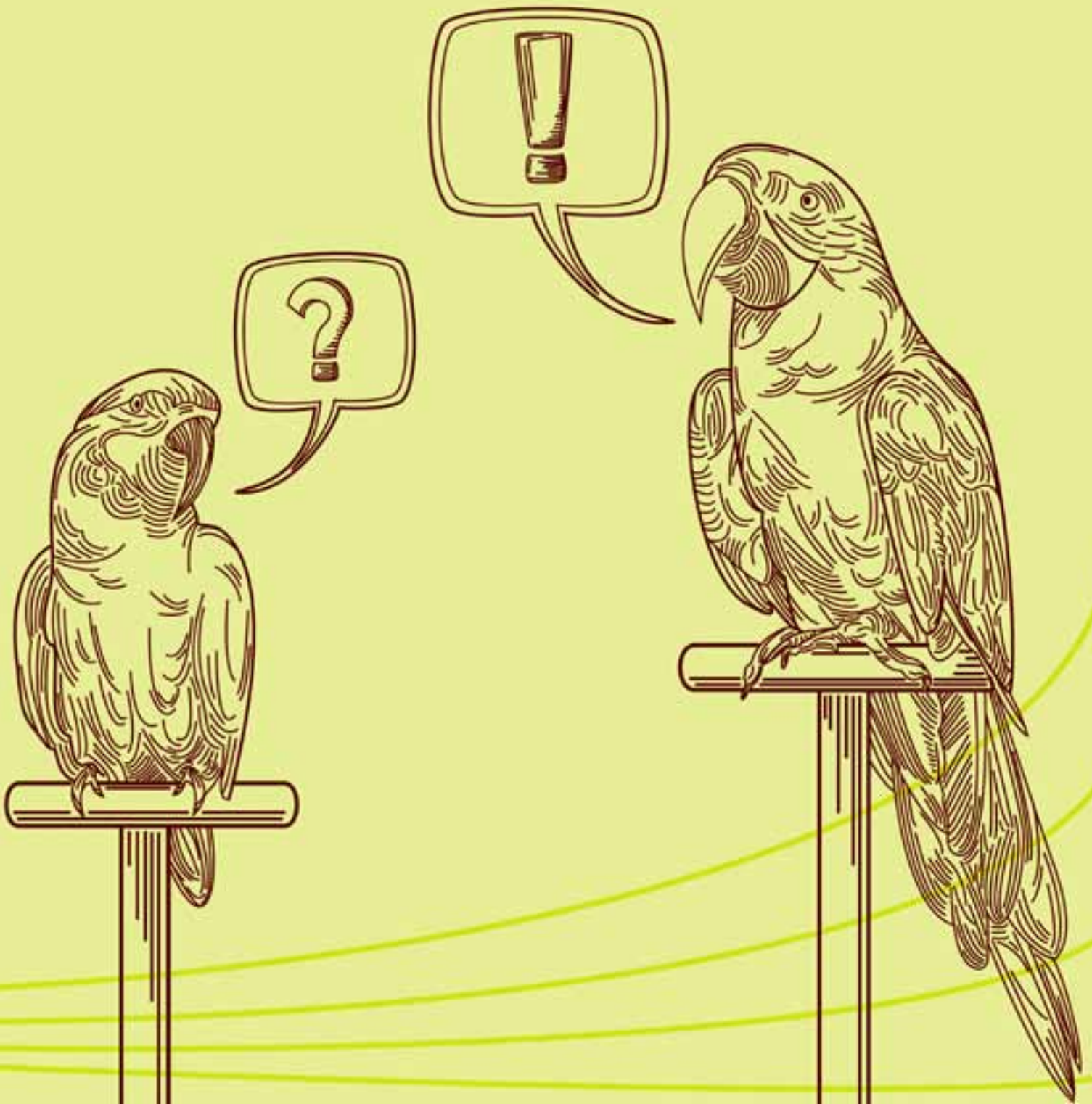
Always ensuring there was a constant supply of chocolate biscuits, introducing the office gals to the wonderful world of shopping coupons, never forgetting anyone's birthday EVER, showing her caring nature to every single one of the CRC staff and Directors (and many times over) during the last 2 years

Goodbye Alison – for a short time anyway – and we look forward to your return!

The CRC staff would like to take this opportunity to wish Bob the best of luck in starting up his own company – never an easy move from the comfort of secure employment! Bob leaves a gap for the CRC due to his vast array of skills in the seafood processing world which he exhibited during his time here with the retail transformation suite of projects and the value-adding work being undertaken with Sardines in Port Lincoln. He was able to bring many new ideas, perspectives and opportunities to the table for CRC participants which were all highly valued. Bob is a highly intelligent and passionate man – two great personality traits that will ensure his new adventures are a great success!

Bob's wry sense of humour will also be missed as will his stories told over the lunch table about his working career in Egypt, the Seychelles, Saudi Arabia and the UK.

Good luck Bob, we wish you well for the future.



Communicating So Teams Can Work **By Aubrey Warren**

AUBREY REMINDS US THAT LOTS OF INFORMATION DOES NOT EQUAL QUALITY COMMUNICATION AND PROVIDES SOME VALUABLE INSIGHT ON IMPROVING COMMUNICATION IN A TEAM ENVIRONMENT.

“The single biggest problem in communication is the illusion that it has taken place”

George Bernard Shaw’s words are a reminder that simply pushing information at people does not mean we have communicated with them. “Information” does not equal “communication”. We are deluged with information: email, intranets, the internet, TV, radio, SMS, advertising ... we’re drowning in the stuff. In fact, much of our effort around communication these days is about filtering it out – preventing it from reaching us.

One of the seductive misconceptions of communication is that if we are talking (or writing) to someone then we are communicating with them. In fact, our listener or reader may or may not even attend to our message (hearing isn’t the same as listening). And even if they do it doesn’t mean they will remember it; and just remembering doesn’t mean they’ll necessarily understand it the way we intended; and even if they do understand and your message makes it all the way through that processing, the reader or listener may or may not act on the message as you’ve intended.

The challenges we face in attempting to get our messages past filters, getting them attended to and retained, understood and acted upon are only magnified when we think about team communication. Because now we move from a one-to-one interaction to a many-to-many environment. Team communication demands an even more disciplined approach to communication because even when there is (apparently) one message being sent, that one message is now being interpreted by people with different

perspectives, interests, concerns, personalities, and agendas.

As dangerous as the illusion of communication taking place is the assumption that getting people together to communicate will solve problems. Often it just creates more! So what can we do to improve team communication and help teams work? Here are some basic but nevertheless challenging suggestions to consider:

1. Establish a shared sense of purpose.

The essence of a team’s work is its shared goal or purpose. That shared purpose serves as the focus and context for the team’s communication. In meetings it’s important for the team’s broad purpose to be kept in focus.

2. Ask questions.

Questions of inquiry not only communicate respect and humility, but also help clarify shared understandings and correct wrong assumptions. They also celebrate learning and reinforce the practices of accountability and feedback.

3. Listen to understand.

That means allowing people time to think before speaking, not finishing their sentences, not “topping their story”. It means building on what


they’ve said. It’s a decision and a discipline.

4. Respect different communication styles.

We generally communicate in ways that feel right for us (assertive or responsive, dominant or submissive, direct or indirect, etc.). But those ways don’t make sense for everyone and their approaches don’t always feel natural to us. Different isn’t wrong. Difference offers insight.

5. Expect contributions from everyone.

That means providing a safe and accepting environment in which challenges to ideas are seen as building up, not tearing down contributions. (See the first four points as a guide to building a safe environment.) Not everyone will contribute equally in the number of words or ideas, but everyone needs to contribute.

Team communication is vital to our individual and collective effectiveness. Harnessing the power of team communication requires awareness, attention and discipline. But doing so moves communication from illusion to reality. 

INTRODUCING OUR EXPERT-AUBREY WARREN

Aubrey Warren is the Director of Pacific Training and Development (www.pacific.qld.edu.au). He is Australia’s Situational Leadership® master trainer, an accredited coach with Growth Coaching International and a lecturer in business communicating in the Queensland University of Technology graduate program. He delivers team, communication, coaching and leadership program around Australia, including our very own Seafood CRC Management Development Program.



Fish Immunology Workshop Wows Young Scientist

VICTORIA VALDENEGRO VEGA, A PASSIONATE AND TALENTED YOUNG SCIENTIST AND SEAFOOD CRC PHD STUDENT, SHARES HER EXPERIENCE FROM HER RECENT TRIP TO THE NETHERLANDS FOR THE ANNUAL FISH IMMUNOLOGY WORKSHOP.

The Seafood CRC Travel Grant that I was awarded allowed me to participate in the Fish Immunology Workshop 2011 at Wageningen University, The Netherlands from April 17 to the 21, 2011.

One of the general objectives of the workshop was to provide advanced theoretical and practical knowledge on the fish immune system.

In particular, topics that were discussed included antibodies, innate immune receptors, the use of animals in experimental research, fish vaccination and adjuvants used in immunisation.

This workshop has been organised annually for more than ten years. The program included presentations by world renowned experts in fish immunology such as Chris Secombes, from the University of Aberdeen, and Jan Rombout from the CBI, University of Wageningen, who specialises in vaccination and mucosal immunity, including parasitic diseases.

I had the chance to talk to both of them and other people in the field such as Guiseppe Scapigliati, from the University of Tucsia and president of the International Society for Fish and Shellfish Immunology.

We discussed some aspects of my PhD project and I received some very interesting feedback.

Additionally, I communicated my research achievements and plans to the attendants of the workshop through a poster presentation session.

Every workshop participant had to explain in a few minutes their research, and some interesting discussions arose from these presentations.

However, the most important opportunity this workshop offered were two sessions of hands-on practicals in humoral responses and assays in innate immunity, which provided advanced knowledge on the immune system of fish.

I learned methods such as oxidative burst assay, nitric oxide, assay, phagocytosis assay, myeloperoxidase staining and the use of magnetic activated cell sorter, which provided me with new tools for research.

These new techniques will primarily be shared with fellow research students at the University of Tasmania. It may also be transmitted to undergraduate students as

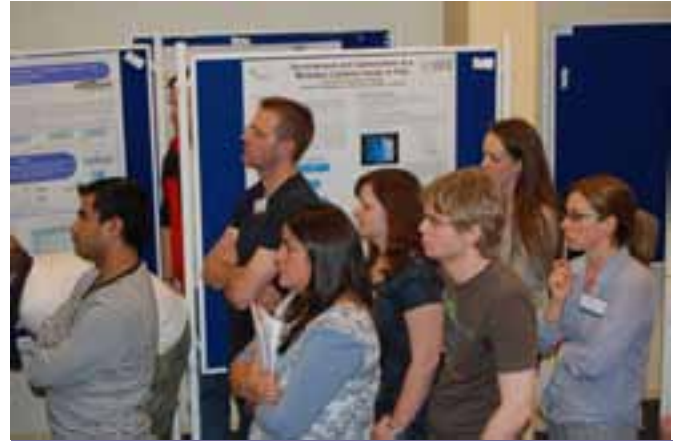
“I would like to thank the Seafood CRC as their travel grant allowed me to attend this great training opportunity and network with other people working in the field.

As a Seafood CRC student I believe these types of training opportunities represent great advantages for present and future postgraduate students.”

RESEARCH TRAVEL GRANT



Victoria attended the Fish Immunology Workshop with other like-minded young scientists.



Victoria (front, centre) attended lectures by leading scientists at the workshop in the Netherlands


part of a practical provided by the research group. Additionally, the techniques can be shared with other collaborators in Australia. The new skills learned at the workshop will be applied directly into my PhD project.

The main focus of my PhD project is to study the use of the mucosal immunoglobulin (Ig) response of Atlantic Salmon as a means to

design an experimental vaccine against *Neoparamoeba perurans*, the causative agent of amoebic gill disease, the main disease affecting the salmon industry in Tasmania).

This could decrease considerably the production costs for the industry, by reducing the required fresh water treatments.

I would like to thank the Seafood CRC as their travel grant allowed me to attend this great training opportunity and network with other people working in the field.

As a Seafood CRC student I believe these types of training opportunities represent great advantages for present and future postgraduate students. 



Victoria presenting her research poster at the Fish Immunology Workshop

SEAFOOD CRC STUDENTS

Meet Our Students



Eric Perez

Bachelor of Commerce (Industrial Relations and Human Resources Management)

Bachelor of Arts (Behavioural Science)

CRC Masters by Research

To begin I would like to thank the Seafood CRC for providing me with an opportunity to further my research in ways to benefit both wild harvest fishers and fisheries management. I have worked for many not-for-profit organisations and I firmly believe in the importance of the impact of primary industries on the health and prosperity of Australians.

I completed a Bachelor of Commerce at Griffith University (industrial relations and human resource management) and a Bachelor of Behavioural Science (psychology) almost 11 years ago. I have also worked in the public sector (Local, State and Federal government) and in the not-for-profit sector (agriculture and tourism).

I currently work for the Queensland Seafood Industry Association (QSIA) in many areas including fisheries management, climate change, fisheries research and industry development. I have a particular interest in the field of industry development, which is the focus of my current research. My research project is titled, "Strategic Planning Practices used by Australian Wild Harvest Fishers." For me, the interest in wild harvest fisheries is the capacity for individual operators to make a living, irrespective of the size of their operation. In particular, smaller fishing operations and how they use planning within their businesses.

I had always hoped to complete some post-graduate studies; Having secured Seafood CRC Masters funding I can now take on a piece of study that will contribute something to the industry's policy arena.

More specifically, I hope to develop a questionnaire and a set of face-to-face interviews. My hope is that my paper will provide some insights into how wild harvest fishers plan within their businesses and what this might mean for how other organisations (such industry peak bodies and fisheries management) can assist in business planning.

My current major project is delivering climate change messages and implications to the Australian seafood industry. If you are interested, please visit www.climatechangeifishing.com.au.

I plan to stay within the Australian seafood industry; it's a big industry with a multitude of issues and I hope to develop my skills to provide the best advocacy outcomes for my industry.



Lily Chan

Bachelor of Science (Hons)

Bachelor of Nutrition and Dietetics

Bachelor of Pharmacy

CRC PhD Student

Hi, my name is Lilly. There are two main components of my Seafood CRC PhD research project in conjunction with Simplot Australia: (1) Conduct compositional analyses on fish and fish products to be used in a randomised controlled trial and (2) the randomised controlled trial itself.

Fish and fish products compositional analyses. At the start of 2010, we selected a variety of fish and fish products to be supplied as study food in our trial. This included fresh, canned and frozen processed products. We analysed these products for their nutritional composition so that we knew what nutrients trial participants are receiving. Fortunately, another Seafood CRC project led by Mr David Padula of SARDI was also looking at expanding the compositional database of Australian seafood at the same time. That was really timely as I was able to learn how to deal with issues around food composition analyses and I am truly grateful for David's help. With the results from the analyses, we proceeded to the next stage of the project. Also, thanks to Simplot Australia for supplying the fish products.

Randomised controlled trial. We compared the effects and acceptability of two diets in women of child-bearing age. One was a diet that was higher in fish and the other diet being a typical Australian diet, generally lower in fish and higher in meat. We supplied our participants with either four fish meals or four meat meals each week. We spent around six months planning the trial and obtaining ethics approval in June 2010 and recruited around 30 women who completed the 8-week trial by Christmas 2010. After a break over Christmas, we managed to recruit another 10 women reaching our target sample size of 40. I owe a lot to my trial participants as the majority of them are very busy people with full-time work or study, families and young children. In order to fit me in with their schedule, some even chose 6.30am appointments!

For the rest of this year, I will be analysing the data collected and interpreting the results. Hopefully I will be able to translate our research into practice and make some recommendations on dietary intake.

I have thoroughly enjoyed my first half of my PhD candidature. I am very fortunate to have Professor Lynne Cobiac, Associate Professor Michelle Miller and Professor Campbell Thompson as my supervisors and they have certainly provided me with both academic and moral support when needed.

Education and Training Program Receives Great Report Card

THE SEAFOOD CRC'S EDUCATION AND TRAINING PROGRAM CAUSED A BUZZ AT THE RECENT AUSTRALIAN COOPERATIVE RESEARCH CENTRE ASSOCIATION ANNUAL CONFERENCE HELD IN BRISBANE. MARK OLIVER, OUR DEDICATED THEME LEADER FOR HIGH SCHOOL AND VOCATIONAL TRAINING, IS 'CHUFFED' TO BRING YOU NEWS OF THE E&T PROGRAM'S SUCCESS.

It's no secret that all CRC's have an education and training program, but there are some that have gone the extra mile in terms of service to the industry, diversity and student management.

The Seafood CRC E&T (education and training) team were chuffed to find that they were put into this category.

This was evidenced when a member of the Seafood CRC E&T team was asked to present an overview of their E&T program to all of the other CRC's at the annual conference for Australian Cooperative Research Centres, held in Brisbane from the 17th to the 19th of May this year.

Mark Oliver, the Seafood CRC's High School and Vocational Education and Training Theme Leader presented an overview of the Seafood CRC's E&T program in the form of a comprehensive presentation and fielded many questions around their program items.

What was evident during the session was that the Seafood CRC offers one of the widest and most dynamic education and training programs of all

the CRCs in Australia.

Mr Oliver said, "to have the interactions with other E&T theme leaders and program managers galvanised our commitment to our program as well as noting a suite of handy tips and hints along the way."

"The Seafood CRC offers one of the widest and most dynamic education and training programs of all the CRCs in Australia."

One area that sparked a lot of interest was the Seafood CRC's Vocational Training Program.

The program has many initiatives that differentiates it from other CRC programs, however the qualities of one particular initiative caused quite a stir with the other CRC E&T program leaders and theme leaders.


This project, "The Seafood CRC Skills Audit and Articulation into the National Seafood Industry Training Package" was discussed at length.

The project acknowledges the plethora of skills that have developed or finetuned as part of the Seafood CRC's programs and from this, seeks

to develop a skills based register of current and future Seafood CRC research funding and projects.

These documented skills can then be mapped and/or articulated into the national vocational training standard, namely the Seafood Industry Training Package.

The ultimate aim is to develop a new suite of units for the package that have directly resulted from CRC research and subsequent commercialisation.

It was agreed amongst all participants that it was an extremely innovative way of a CRC to leave a skills based legacy for industry. 



Maria 'Meats' Her Marketing Potential

MARIA MITRIS, OPERATIONS MANAGER OF PACIFIC REEF FISHERIES, IS PASSIONATE ABOUT THE SEAFOOD INDUSTRY AND UNDERSTANDING HER CONSUMERS. THE MONASH MEAT EXECUTIVE PROGRAM HAS INSPIRED MARIA IN HER ROLE AS A MARKETER AND PRODUCER OF AUSTRALIAN SEAFOOD. MARIA SHARES HER EXPERIENCE FROM THE PROGRAM WITH US.

It was a pleasure to be involved in the Monash Meat Executive Program at the Mount Eliza Business School, which ran from the 31st October to the 5th of November, 2010.

I was fortunate to be granted an industry bursary by the Seafood CRC recognising my role in prawn aquaculture and the development of farmed Cobia, a species new to aquaculture with excellent potential.

The course provided a personal development opportunity with a unique blend of skill enhancement, industry forum and practical learning experiences.

I learnt a great deal from the program, particularly in the area of professional development. Dr Melinda Ruth outlined how we all think differently, which is important to understand when working with teams and how it is important to recognise the affect different personality traits have on an individual's ability to make decisions.

The Myer Briggs Type Indicator (MBIT) was the method we used to decode personality traits. The MBIT teaches you to carefully consider the criteria and then choose a leadership style that will best suit the teams approach

“The course provided a personal development opportunity with a unique blend of skill enhancement, industry forum and practical learning experiences.”

and accordingly the chances of reaching a successful outcome are improved.

Dr Ruth went on to say that people will usually look for an obvious solution. The key is to investigate the systems and processes already in place to determine if they can be

improved before looking further.

We then continued the theme of working well in teams by discussing methods of skill enhancement to generate the flow of ideas in an organisation. Again, this session was hugely beneficial to my professional role as Operations Manager of Pacific Reef Fisheries.

During the course of the industry forum, it became evident that product differentiation was major key to success in a crowded and competitive seafood market. It became clear to me that our consumers have issues relating to, obesity, oils, genetics, health etc so we need to seriously consider ways to market products that satisfy these issues and meet consumer's needs.

Personally, a key learning I took away from this program was that 'differentiation is the key' to success and should start by looking at the big picture, where we sit as a



Maria (pictured here) has produced a whole new marketing campaign for Pacific Reef Fisheries, using skills gained at the executive program

“The knowledge I gained from the Executive Program has already helped me in my role and was a great learning opportunity.”

company in that scenario and how we differentiate our product to best suit consumers needs.

Ms Serena Zipf, director of Rocky Point Prawn Farm was quite inspiring, addressing the importance of correctly positioning your product in the market place to take advantage of the perceived difference or added value your product offers. It was evident that her persistence and discipline in the market has paid off.

Professor David Hughs talked about international experiences and how companies overseas are operating. Focusing on how consumers are the ones we should be producing for and on developing products we have into products consumers actually want. I was inspired by his comments on several international success stories as a result of the focus on points of differentiation.

As a result of the program I am developing the story behind our

business, accentuating the attention to detail around post harvest handling, the wholly owned Australian business aspect and the dedicated team we have developed to bring what is a quality, healthy, safe and great tasting product to the consumer.

I have commissioned the production of a corporate DVD which is now distributed widely through industry customers, government bodies and schools, outlining the benefits our product brings to the (dinner) table. The story also highlights our packaging, which clearly shows where our product comes from.

This ‘product differentiation’ form of marketing is the way forward for Pacific Reef Fisheries and we are now marketing ourselves and our products in an effort to differentiate our great product in Australia and overseas. The knowledge I gained from the Executive Program has already helped me in my role and was a great learning opportunity. 

A magnificent sunrise at the Pacific Reef prawn farm, Gold Coast, Australia.



SUCCESSFUL STUDENTS

CRC Makes a Splash at World Aquaculture Conference

One of our CRC PhD students, Jenna Bowyer (Flinders University) took out the best student abstract travel award, in the face of stiff competition, at the recent World Aquaculture conference held in Brazil (June 6th to the 10th, 2011).

Jenna is also in the frame for the best presentation award, yet to be announced. Jenna gave an excellent and well received presentation on "The influence of water temperature on fish oil substitution in Yellowtail Kingfish *Seriola lalandi*" which showed that the fish performed well on the substitutes with the exception of canola oil.

There were relatively few Australian participants at the conference due to the high cost of getting to Brazil but another of our PhD students Andrew Foote (Flinders and CSIRO) presented "Can triploid shrimp handle the pressure?" (they can to some extent).

The CRC was also represented through Kathy Schuller (Flinders) who gave a presentation from one of her CRC student's honours project related to expression of anti-oxidant genes (linked to Jenna's work).

Graham Mair also gave a paper on the Seafood CRC and some of the work of the Flinders' honours students on

Yellowtail Kingfish genetics.

Graham has written a more detailed summary of some of the main issues dealt with at the conference which is available from his program blog on page 4.

For more information please contact Dr Graham Mair at graham.mair@seafoodcrc.com.



Jenna Bowyer collects her WAS award for best abstract, in Natal, Brazil.

Congratulations to our first CRC PhD student to submit their thesis!

Huge kudos goes out to Kelli Anderson, one of our University of the Sunshine Coast students who on the 22nd June submitted her thesis, "Understanding the molecular basis for improved egg quality in maiden and repeat spawning Atlantic Salmon (*Salmo salar*) maintained at elevated temperature" under the guidance and stewardship of her primary supervisor Professor Abigail Elizur.

Kelli has already pumped out a significant number of research papers and has a few more up her sleeve to produce and they should all be accepted for publication in the up and coming months of 2011.

Kelli is keen to pursue a Post Doctoral Research Scientist position and we wish her all the success in her next adventures.



Kelli Anderson from the University of the Sunshine Coast is the first Seafood CRC student to complete her PhD.



Cooperative Research Promises to Deliver Great Benefit to the Sea Cucumber Fishery

THE NORTHERN TERRITORY GOVERNMENT'S DARWIN AQUACULTURE CENTRE (DAC) AND THE SEAFOOD CRC ARE WORKING TO ADDRESS KEY COMMERCIAL CONSTRAINTS TO ACHIEVING SEA CUCUMBER RANCHING AND ULTIMATELY STOCK ENHANCEMENT OF THE WILD FISHERY.

Tasmanian Seafoods' head scientist, Will Bowman, has been based at the DAC for the past five years and in that time has set up a small scale sea cucumber commercial hatchery on site and a nursery facility at an earthen pond-based farm just a few minutes down the road.

Broodstock are sourced from the wild and flown to the facility in light planes, sometimes are far as Groote Eylandt in East Arnhem, some 800km away.

The species targeted for ranching is the Sandfish *Holothuria scabra*, which fetches the highest price of all Sea Cucumber species in China. Tasmanian Seafoods has been involved in the

Territory's Sea Cucumber wild fishery for over 20 years.

Interestingly, harvesting of the Sandfish species goes back to at least the mid 1600-1700s when the Macassans took annual trips each wet season from Sulawesi to the north of Australia to collect the Sea Cucumbers. It was then exported from Sulawesi to China. Aboriginal people were employed to collect and cure the Sandfish and were paid in knives, food and tobacco - establishing Australia's first export industry.

The DAC has been contracted by the CRC to research and develop Sandfish hatchery and nursery production methods that are more reliable and

efficient, while Tasmanian Seafoods are focusing on technological developments of all stages of production, including pilot ranching trials and pond-based growout trials. The first year of research by the DAC focused on larval production and establishing benchmarks for hatchery runs that can be used as baseline data to measure future hatchery performances against.

After the first season of experiments, the research group agreed that further work was needed to better control spawning and extend the spawning season beyond the wet season.

As a result, a CRC PhD scholarship

was secured for Tasmanian Seafood's technician, Luke Turner. He will begin his studies through the University of the Sunshine Coast in late June.

During the next spawning the season DAC work will focus on settlement, in particular identifying suitable settlement queues and developing suitable systems and diets for early juveniles.

Tasmanian Seafoods have established an agreement with the community of Umbakumba on Groote Eylandt to look at the economic viability of ranching and development opportunities for local people in the area.

The first release of 10 000 juveniles occurred in June 2011 off Groote Eylandt. Their growth will be monitored over the following 12 months during regular stock surveys.

Meanwhile, the DAC has its own ranching site off South Goulburn Island in partnership with the Warruwi community. This project is part of an international project with the Philippines and Vietnam, funded by Australian Centre for International Agriculture & Research and WorldFish, to develop Sea Cucumber ranching as a low technology activity that may offer a suitable supplementary

livelihood for coastal dwellers.

The trial at Goulburn Island will also see the first release of juveniles in June 2011. Both ranching trials have been conducted using similar methodologies so that the data can be pooled and a better understanding of what makes a good ranching site can be gained.

Tasmanian Seafoods have recently undertaken a community training activity to show locals how to process Sea Cucumber. They are now assisting the Umbakumba community to construct their own processing facility in preparation for the day they will grow and harvest their own seafood products.

So much has been achieved in the first year of the project. This is despite the setback from cyclones, record rainfalls in 2011 and the challenging logistics of working in extremely remote field sites.

But this is an exciting venture that treads new ground for tropical aquaculture, has its beginnings in centuries past and promises renewed links between Aboriginal people and commercial partners.

For more information contact Ann Fleming on 08 8924 4268.



Will Bowman holding a farmed Sea Cucumber from the Darwin Aquaculture Centre.

The DAC has been contracted by the CRC to research and develop Sea Cucumber hatchery and nursery production methods that are more reliable and efficient, while Tasmanian Seafoods are focusing on technological developments of all stages of production, including pilot ranching trials and pond-based growout trials.


Graham Mair Completes WAS Board Term

OUR PROGRAM 1 MANAGER DR GRAHAM MAIR COMPLETES HIS TERM AS A BOARD MEMBER OF THE WORLD AQUACULTURE SOCIETY.

At the recent World Aquaculture conference held in Natal, Brazil (June 6-10), our erstwhile Program Manager for Production Innovation, Graham Mair, completed a four year stint with the Board of the World Aquaculture Society, initially as President of the Society's Asian Pacific Chapter and then three years as an elected member of the Board.

During his time on the Board, Graham was the architect of the Society's new strategic plan which was endorsed by the Board in Brazil and will now be operationalised as a management tool for the Board as it guides the development of the Society.

"It was great to be able to apply some of the management skills I've learned during my time with the CRC for the good of the Society and to actually engender a real change in the way the WAS Board operates" Graham said upon his eventual return from Brazil.

Whilst Graham hopes to be involved again with the Society leading up to the World Aquaculture 2014 conference which will be held here in Adelaide he is taking a break for now to focus on the CRC and to complete his MBA. 



Dr Graham Mair receives and award from Jay Parsons for serving on the Board of the World Aquaculture Society.

**THERE ARE SOME EXCITING EVENTS COMING UP,
SO LOCK THESE DATES INTO YOUR DIARY!**

SAVE THE DATE!

**2011 SEAFOOD CRC
PARTICIPANTS' FORUM
11-12 July- Adelaide**

**CRC Board Meetings
11 August- Adelaide**

**Consumer Research Master Classes
26 July- Sydney
16 August- Cairns
26 October- Gold Coast
8 November-Hobart**

**Seafood Management Development Program
8-11 September- Adelaide**



AUSTRALIAN
SEAFOOD
COOPERATIVE
RESEARCH CENTRE

CONTACT US

This is your Seafood CRC contact directory. You can also find our staff contact details and lots of other useful information about CRC staff, programs and events on our website.

www.seafoodcrc.com

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