Seafood Industry Partners’ Project (SIPP) 2009: Connecting Early Career Researchers with the Australian Seafood Industry Through Meaningful Coaching Partnerships

Emily Mantilla

Project No. 2009/735
Emily Mantilla, Seafood CRC Program Manager for Education and Training welcomes SIPP 2009 participants to the Seafood CRC participants’ dinner

Copyright Australian Seafood CRC 2010.

This work is copyright. Except as permitted under the Copyright Act 1968 (Cth), no part of this publication may be reproduced by any process, electronic or otherwise, without the specific written permission of the copyright owners. Neither may information be stored electronically in any form whatsoever without such permission.

The Australian Seafood CRC is established and supported under the Australian Government’s Cooperative Research Centres Programme. Other investors in the CRC are the Fisheries Research and Development Corporation, Seafood CRC company members, and supporting participants.

Important Notice
Although the Australian Seafood CRC has taken all reasonable care in preparing this report, neither the Seafood CRC nor its officers accept any liability from the interpretation or use of the information set out in this document. Information contained in this document is subject to change.

Front Cover Image – Seafood CRC students and post doctoral research scientists on the SIPP 2009 field trip. Photo: Lindsey Woolley
# Table of Contents

Non-Technical Summary ........................................................................................................4

Acknowledgements ..............................................................................................................6

1. Introduction ......................................................................................................................7

1.1 What is SIPP? .............................................................................................................. 7

1.2 Need .............................................................................................................................. 7

1.3 Objectives .................................................................................................................... 8

2. Methods .............................................................................................................................9

3. Results .............................................................................................................................13

3.1 Feedback statistics ....................................................................................................... 13

3.2 Feedback comments – Strength of SIPP 2009 ............................................................... 13

3.3 Feedback comments – Suggestions for improvement of future SIPP retreats ............... 14

4. Discussion .........................................................................................................................16

5. Benefits and Adoption .....................................................................................................17

6. Further Development .......................................................................................................17

7. Planned Outcomes ...........................................................................................................18

8. Conclusion .........................................................................................................................19
Non-Technical Summary

2009/735 - Seafood Industry Partners’ Project (SIPP) 2009: Connecting Early Career Researchers with the Australian Seafood Industry Through Meaningful Coaching Partnerships

PRINCIPAL INVESTIGATOR: Emily Mantilla

ADDRESS: Australian Seafood CRC, Box 26, Mark Oliphant Building, Science Park, Laffer Drive, Bedford Park, SA 5042

OBJECTIVES:

• Develop and implement a mentoring program.
• Articulate roles, responsibilities and expectations of mentors and mentees.
• Develop training for mentors
• Pair PhDs, MScs, Post Doctoral Research Scientists (PDRS) and emerging career scientists with a mentor during their candidature.
• Provide additional opportunities for connection between all mentors and all mentees.
• Develop criteria for assessment.

NON TECHNICAL SUMMARY:

OUTCOMES ACHIEVED TO DATE

• 15 PhD students, 6 PDRSs and 2 emerging career scientists participated in SIPP 2009.
• 5 industry mentors actively participated in SIPP 2009.
• 18 PhDs, 1 MSc, 3 PDRSs and 1 emerging career scientist have been successfully paired with an industry mentor.
• 2009 student review conducted
• Two training courses conducted
• Mentoring training conducted
• Field trip with two training elements conducted
• Eight student presentations given as part of the CRC mini-science forum

Continued next page………
OUTCOMES ACHIEVED TO DATE

- Two student presentations given as part of the CRC participants’ dinner
- Presentation skills workbook
- Mentoring training workbook and pocket card

KEYWORDS: SIPP, mentoring, coaching, training
Acknowledgements

The author would like to gratefully acknowledge the support of all industry mentors for their commitment to the program and to the next generation of the Australian seafood industry.

Thank you to Bob Fleming, Seafood CRC’s Commercial Seafood Processing Manager, Stuart Eddie and Chef Steve Cooling for organising the field trip for the SIPP 2009 retreat at the South Australian Food Centre.

Thank you to Clean Seas Tuna for the donation of the Yellowtail Kingfish for the cooking demonstrations.

Thank you to Professor Tom Ross and Professor Mark Tamplin, Theme Leaders for Higher Education for conducting the student review session.

Thank you to the Seafood CRC Post Doctoral Research Scientists and early career scientists Dr Cath McLeod, Dr Josephine Nocillado, Dr Melony Sellars, Dr Shane Powell and Dr Bennan Chen for presenting in the “If I only knew then, what I know now” workshop for students.

Thank you to Roy Palmer, Theme Leader for Industry Training for help in matching mentees with industry mentors.

L to R – Chef Steve Cooling and food technologist Stuart Eddie perform a seafood cooking demonstration as part of the field trip to the SA Food Centre. Photo: Lindsey Woolley
1. Introduction

1.1 What is SIPP?

The Seafood CRC’s Education and Training Program has a strong end-user focus and needs to ensure “industry ready” graduates enter the Australian seafood industry at the completion of their candidature. The desire to develop the capabilities of both young researchers and industry participants is a strong and major driving force in the Seafood CRC.

As such, research students and early career scientists (which include Post Doctoral Research Scientists – PDRS and others as identified by the CRC’s Research Program Managers) will be part of a program that enhances their pathways into further seafood research or industry careers. This program is called the Seafood Industry Partners Project (or SIPP).

As part of their involvement with SIPP, higher-degree students and early career scientists will be co-supervised and mentored (or managed in the case of the PDRS) by industry members called “project partners” (industry mentors).

SIPP will ensure research students and early career scientists gain industry and marketplace experience as well as CRC industry participants benefiting from CRC research and training. This will strengthen mechanisms for the broader CRC community to adopt CRC innovations and to develop a skill-based culture within industry.

The CRC’s SIPP program will also ensure that through strong linkages, with all aspects of industry, there will be opportunities for researchers to gain practical knowledge of the seafood industry first hand and to develop new skills, including business and marketing that will improve their prospects of subsequent employment. SIPP will also aim to build stronger networks across all sectors. Incentives, mentoring/coaching training and practical support will encourage candidates to complete their qualifications on time and be in a better position to take up employment in the industry.

The participation of industry members as mentors will address opportunities for improving skills of industry people with a view to contributing to the growth of industry participant organisations. It will also create a culture of collaborative research.

The Seafood CRC SIPP program was developed by extensive consultation through the CRC bid process with industry partners. This was detailed at the final interview for the “bid” process and was considered to be an excellent initiative. Final endorsement of the initiative was achieved from DIISR in 2007.

1.2 Need

Disconnection between research and industry is a common issue of concern and it is considered that this lack of disconnect leads to lack of communication about research needs from industry and poor adoption of CRC research outcomes. Consultation with industry has also resulted in the need for more industry ready
graduates. Industry wants graduates who have a deeper understanding and connection with the Australian seafood industry and understand more thoroughly the nature and the challenges industry face in all facets of their business.

In addition, there is a need to improve communication and cooperation between industry and research providers and vice versa. The need to develop this is highlighted by the necessity for industry to become more innovative and to understand the importance of R&D to maintain a leading and competitive edge.

The CRC SIPP program will assist in improving that process by enabling opportunities for industry and researchers to understand each other’s views, challenges and promote better communication on ideas and projects.

1.3 Objectives

- Develop and implement a mentoring program.
- Articulate the roles, responsibilities and expectations of mentors and mentees
- Develop training for mentors.
- Pair PhDs, PDRSs and emerging career scientists with a mentor during their candidature.
- Provide additional opportunities for connection between all mentors and all mentees.
- Develop criteria for assessment.

Industry mentor Maria Jedensjo from Clean Seas Tuna works with PhD students Zhenhua Ma and Lindsey Woolley on a group exercise during the student review session.
2. Methods

The process of connecting students with mentors was assisted by the fact that many students already had mentors as identified during the student project application process. Those that did not have mentors nominated, including PDRSs and emerging career scientists were contacted by the Theme Leader for Industry Training to assist in finding a suitable mentor. Where possible, the CRC attempted to match mentees with graduates from the National Seafood Leadership Program and the Rural Leadership Program. It was considered beneficial to use graduates from this program as many different industries had already recognised the participants as future industry leaders. Another benefit of using past graduates of the program is that the participants would have already had some training on interacting with people, conflict management and leadership.

Before the SIPP 2009 retreat took place, the program began with the advertisement of the general program structure, highlights and the opportunities available to create enthusiasm and momentum to the SIPP program. All potential participants were emailed on a regular basis informing them how SIPP was progressing. It also allowed the collection of names for those interested in a formal mentoring role.

An on-line networking site on NING called SIPP was also created at http://sippcrc.ning.com. 20 SIPP participants are currently taking part.

For the program to be successful, as well as maximising personal development opportunities, it was considered essential that the selected industry mentors were put through a day of training about the roles and responsibilities of being a mentor. Investigations revealed that the University of Adelaide contracts a trainer by the name of Tim James from BigFeat Coaching for their business mentoring projects. The Program Manager then worked with Mr James to develop a half day training course and workbook.

During the mentoring training, the students, the PDRSs and the emerging career scientists (with their mentors) worked through the development of a memorandum of understanding and a mentoring plan of interaction. The CRC expected that the interaction plan would include some level of work between the mentor’s organisation and the laboratory (this forms the basis of a lab/farm exchange). This memorandum of understanding and plan was then lodged with the CRC and is to be used for reporting against during the yearly student review with Professor Tom Ross and Professor Mark Tamplin, the CRC’s Theme Leaders for Higher Education.

In 2009, the two day SIPP retreat for students, PDRSs, emerging career scientists and their industry mentors was conducted as part of the 2009 October AGM/Mini-Science Forum. This two day retreat consisted of:

- **Welcome Dinner** – An opportunity for the SIPP participants to meet with each other and CRC staff. This event was combined with the Seafood CRC Entrepreneurs’ dinner and allowed SIPP participants to hear the graduates present their business plans.
- **2009 Student Reviews** – An opportunity for students to raise any concerns about their candidature and for the higher education team to develop activities to improve the CRC student experience.
• If I Only Knew Then What I Know Now Workshop - CRC PDRSs shared their tips for a successful PhD. Topics included –

- **What is a PhD? Understanding what is expected from all the stakeholders and still getting where you want to go.** This discussion involved the consideration of the expectations of academia which administers the process and the qualification and the meaning of ‘significant and/or novel contribution’. It also explored how the environment is changing for the PhD process and the careers that graduates enter. The different types of PhDs – from very academic to more applied etc. was also workshopped.

- **After the PhD…. What comes next?** This topic discussed job opportunities for PhD graduates and the skills developed during a PhD and where it could take the students. It also addressed what employers want and briefly discussed how to go about starting one’s own business.

- **Getting through the mechanics of the PhD Process.** This discussion looked at how to get up to speed with literature and how to stay current. It also explored how to prepare a literature review and how to manage references (searching skills, databases, reference management software). It also looked at data analysis and data storage (data analysis/statistical software) and the academic integrity of data storage. This topic also briefly touched on intellectual property issues. Another element was the presentation of the thesis and the different formats it can take as well as how to declare contributions. Lastly, the focus was on the examination process and why it takes the form it takes as well as understanding the process and preparing the thesis to satisfy those expectations.

- **Tips for managing yourself and the process strategically.** This session looked at how to define the problem and knowing where research meets the road - including understanding the relevance of the research, who will be interested in the results, where academic/scientific advances can be made or where practical advances can be made. Students also looked at defining their scientific and career goals so as to manage the thesis to complement those goals. The session also looked at experimental design (planning for results that match research outcomes, the value of learning new techniques, new technologies etc.) as well as measuring progress (the importance of writing a good research plan and frequently assessing where students are at). The session also looked at how to work effectively within an industry environment and topics discussed included understanding a business and developing productive relationships. Lastly the students learnt about effective communication and how to work better with their thesis supervisors and mentor. The importance of communication to establish agreed objectives so as to avoid conflict later as well as the various benefits (and disadvantages) of writing papers as they go was also explored.

- **Managing your own psychology during the process! How to get - and stay – motivated.** This topic explored how to deal with stress and high workloads and how to achieve a better work/life balance. It also discussed how to deal with loneliness and how to create academic and personal support networks. Another topic covered was how to deal with criticism, and rejection of ideas, submissions, etc. and how to appropriately acknowledge and respond to reviewer and examiners comments. This session also covered how to effectively get through tiresome tasks such as the literature review as well as managing interrelationships – from family and friends, peers, supervisors, other colleagues etc.

- **Communicating the science and your ideas: Why it’s important to communicate results.** This session introduced the students to different forms and styles of communication as appropriate for different audiences.
(written, oral, to large audiences, small audiences, talking science, talking business etc). Students learnt that during communication they aren’t just talking about their research, but they are, at the same time, selling themselves and their ideas.

- **Mentor Training Program** - The Mentor Training Program was a high energy, focused three hour session on the key elements of mentoring and mentoring skills and was run by a very successful business coach - Tim James of Big Feat Coaching. The benefits for industry mentors included learning the skills for use in mentoring meetings and everyday workplace interactions as well as providing a clear understanding of the role and responsibilities of being a mentor. It also covered enhanced communication techniques and learning how to engage others as well as how to develop rapport and build relationships. The training also provided practical tools and models for use in mentoring and the workplace and how one can work better with others. It also aimed to set meaningful work and personal goals not only for the mentee but for the mentor. The training program also included a session with the mentors and the mentees together where the mentoring agreements were explained and participants were given an opportunity for the group to ask questions and discuss them. The outcome was a number of signed agreements.

- **How To Give A Presentation People Will Remember** - Andrew Inglis from Learning Potential International Pty Ltd (through Flinders University Partners) provided an interactive workshop to increase student, PDRS, emerging scientist and mentor confidence when orally presenting to an audience. Topics explored included:
  - Controlling the fear of public speaking
  - TIP technique (topic, importance and presenter)
  - Learning styles using the VAK system
  - How adults learn and how to apply the principles in a presentation
  - The strategic communication model (a 5 step model for professional communication)
  - Structuring a presentation (introduction, body and conclusion) and how to develop a session plan
  - Practicing an introduction
  - Developing and using visual aids and resources
  - Delivering the presentation (managing nerves and being confident, voice preparation, non-verbal communication etc.)

- **Student Dinner with CRC Participants** - Over dinner, two students had the opportunity to compete in a two minute challenge where they spoke about their work to the audience with no visual aids or props.

- **Mini Science Forum Presentations** – Eight students were given the opportunity to present their work to an audience of CRC staff, research and industry participants about their PhD work. All presentations were filmed on video camera and given to the students for feedback. A mystery audience member was also planted in the audience (who did not come from a seafood, science or industry background) who provided honest feedback and scores to the students.

- **Field Trip to the South Australian Food Centre** - A half day creative forum where SIPP members could end the retreat with something interactive and an
activity away from the classroom. A number of fun activities were developed which included:

- **Tour of the SA Food Centre.** The tour highlighted the butcher, brewery, cheese making, bakery and seafood areas of the training centre.
- **Sensory enlightenment and the role of human senses.** This session involved a short presentation on the role of human senses in the selection of food. SIPP attendees enjoyed an interactive test which allowed them to identify the basics of sweet, salty, sour and bitter tastes. It also allowed the participants to try and detect flavours and flavour odours such as aniseed, lemon and vanilla etc.
- **Culinary creativity.** A practical demonstration in the kitchen using Yellowtail Kingfish. The chef highlighted what a chef looks for when selecting fish, how it is prepared and utilised and students discovered how much of a product is wasted due to consumer preferences and perceptions. A number of dishes were created from sashimi to oven baked kingfish and all hands were in the kitchen.
- **Seafood CRC quiz.** A seafood quiz was held at various times during the field trip with the SIPP attendee who got the most questions right, taking out the prize of a SA Food Centre Goodie Hamper (won by PhD student Polly Hilder).

At the end of the retreat, students, PDRSs, emerging scientists and mentors were surveyed to ensure there is a continuous improvement for the SIPP retreats each year.
3. Results

3.1 Feedback Statistics

Results of the feedback form where participants were able to select from (strongly agree, disagree, neither/nor or not applicable, agree and strongly disagree) to the following questions:

- 71.5% of SIPP participants strongly agreed that SIPP 2009 was a valuable experience for them to feel part of the Seafood CRC. 28.5% said they agreed.

- 36% strongly agreed, 43% said not applicable and 21% disagreed that SIPP was a valuable experience for them to be able to connect with their industry mentor.

- 86% strongly agreed and 14% agreed that SIPP 2009 provided a valuable experience to meet other students, PDRS and industry.

- 43% strongly agreed, 50% agreed and 7% said neither/nor that SIPP 2009 provided an opportunity to expand their knowledge about the Australian seafood industry.

- 50% strongly agreed, 36% agreed and 14% said neither/nor that SIPP offered excellent workshops and activities that were useful.

3.2 Feedback Comments – Strengths of SIPP 2009

Specific comments when asked what where the strengths of SIPP 2009 retreat were:

- Getting to meet with other students working in the same field and (to) know what they do. Listening to other PhD student’s presentations.

- Getting to interact with all industry components involved in all aspects of aquaculture. Had the opportunity to present my work and get exposure. ‘Effective presentation’ workshop was great. Meeting the other PhD students was great.

- Being able to meet other industry and business professionals in a business environment. Presenting our work, again in a business environment, which strengthens our skills as young scientists.

- Very well organised. Activities suited to the need.

- Interactive field trip in related industry (different part of industry). Interaction with CRC staff and stake holders (industry)
• It was so fantastic to be introduced to the other PhD students involved in the Seafood CRC. It was absolutely fantastic to be able to be given the opportunity to meet people in the industry involved in the areas to do with my project and also other academics from other universities. To be able to have their input on my project from a different area or from other experiences has been invaluable.

• Presentation skill training. Although I didn’t do it (orally present), I did learn a lot.

• Bringing together participants from all over Australia.

• I was unfortunately not able to attend the second day so my comments refer to the dinner on Monday and the day on Tuesday. The venue and food were excellent and it was a good opportunity to catch up with higher level FRDC, CRC, UTas folk such as Mair, Hone, Tamplin etc. Good opportunity for PhD students to share stories and realise they are not alone and that all the night work and weekend work is part of the process. Good opportunity to find out about the different projects going on in the CRC. I liked that it was small and semi-casual.

• Meeting industry partners/ opportunity to speak about work.

• It provided a positive environment for meeting with a range of SCRC participants. All the workshops were well organised, providing useful advice to students. Looking forward to the next retreat in coming years.

• Good to meet other students – provided a great network/support base. Overall really excellent, glad you’re planning one for next year. It had a really comfortable/ welcoming feeling.

• For me it was the professionalism of the CRC, meeting the other students, starting a network, realising the opportunities the CRC can give me, realising the potential I have, understanding the significant impact all our work/research can have.

3.3 Feedback Comments –Suggestions for Improvement of Future SIPP Retreats

• Make it a regular event!!!

• Maybe could have had a session explaining more what sort of things we would expect from our mentors. Suggestions on how to utilise them (mentors effectively).

• Perhaps allow for more time after presentations for more questions and discussions.

• Great experience already!!!!

• Some direct industry involvement for the students – a few talks on their current R & D priorities.
• The workshop on presentation skills was a great idea but needed to be focused on presenting science to a range of audiences. We're not likely to be training anyone (NB - This participant missed the point of the training – it was to learn how to give an effective presentation, not for them to learn how to train people in presentation skills)

• More workshop which I think we can learn more (sic)

• Have it for longer!!!!!!!!!!!!

• Make the effective presentation workshop shorter. I felt it went for a bit too long. Otherwise I thought the workshop was very beneficial.

• Have the retreat in Cairns next year!!!! ☺ A few presentations from industry partners would be interesting.

• More team work with all the guests!

L to R - Seafood CRC PhD students Miriam Fluckiger, Rachel Tonkin (with Karin McNaughton from New Zealand) Erin Bubner and Jenna Bowyer. Photo: Lindsey Woolley
4. Discussion

It was pleasing to discover that SIPP held the most benefit for the PhD students and was crucial for making them feel that they are part of the Seafood CRC cohort. With students scattered throughout Australia, with many isolated from other CRC students, results show it was a very positive experience for students to take part. This reiterates that it is important to continue to provide the $1000 mentoring costs per year for students to ensure traction with future SIPP events and their mentors.

It was disappointing that SIPP 2009 had a very poor participation rate from industry mentors. For the students, PDRS and emerging career scientists that had their industry mentors attend, they strongly agreed SIPP 2009 was a useful opportunity to connect with them and begin the mentoring process. For the students, PDRS and emerging scientists who did not have their mentors attend, the aim of SIPP was somewhat off target as the purpose of SIPP is not only to deliver training programs but provide opportunities for face to face contact with mentors. The experience for these people would have been far more valuable if their mentors were able to attend.

For the PDRS and emerging career scientists it was pleasing to see them also offering some informal mentoring roles through their interaction with the students during SIPP and during the workshop “If I only knew then what I know now” workshop.

According to the survey, the most popular activity was the field trip. This activity provided participants with an understanding that their research forms a much bigger role towards CRC outcomes, forms a valuable contribution towards industry R&D priorities and to make the connection that they actually work in the food industry and their research contributes to a product. Sadly, no industry mentors attended the field trip.

The training workshops were also highly regarded and survey results show they were useful and most importantly, relevant.
5. Benefits and Adoption

A number of benefits have arisen as part of SIPP 2009:

**Short term benefits:** Student and young scientist cohort, specific training courses and training resources developed.

**Medium term benefits:** Increased leadership and general skills of students, post doctoral research scientists, emerging career scientists and industry personnel.

**Long term benefits:** More graduates having a connection with the seafood industry and understanding how their research contributes to industry benefits and the food industry. The Australian seafood industry has a greater understanding of the benefits of CRC research and hence, the benefit is an improved adoption rate of technology and new information.

6. Further Development

Plans for SIPP 2010 can be further developed in line with feedback received from participants. Further developments that will be made for SIPP 2010 include:

- Despite the offer for the CRC to pay accommodation, many industry mentors and some emerging scientists still did not attend. SIPP 2010 may need to consider budgeting for airfares as well to ensure the attendance rate increases.
- The CRC needs to avoid appointing a large number of industry mentors all from one company. As in the case of Clean Seas Tuna at SIPP 2009, not all mentors could attend due to work commitments and if they did all attend, the company would be understaffed for two days.
- Survey the participants to determine what future training courses would be beneficial and implement their ideas
- Offer the mentoring training again for those who missed the course and expand on the tools and skills used in mentoring as well as providing more practical exercise with the mentees and their mentors (will only be viable if more industry mentors attend the program). Inclusion of a session explaining more what sort of things mentees would expect from their mentors with ideas on how mentors can be utilised for personal development should be implemented.
- Implement an opportunity for industry to be involved in a specific workshop which outlines current R & D priorities.
- Follow up with mentees and their mentors to gauge level of interaction and promote relationship outside of SIPP activities.
- Promote usage and membership of the on-line NING networking site.
7. Planned Outcomes

Public Benefit Outcomes

- Student graduates, PDRSs and early career scientists with global knowledge of the seafood industry and specific sectors
- Link graduating students with positions in the seafood industry or universities
- Retention of graduated students remaining in the seafood industry

Private Benefit Outcomes

- Ability for students, PDRSs and early career scientists to effectively communicate with industry about R&D enabling industry to value benefit
- Confidence and communication skills promoting industry ready graduates
- Industry mentors and mentees gain new skills
- Annual written account of mentor activity
- Training courses delivered

Linkages with CRC Milestone Outcomes

This project fits within strategy 1 of the A,B, Sea theme business plan and is specific to the following milestones:

- Initial students recruited, inducted and paired with appropriate industry mentors (Milestones 3.1.2 and 3.6.1)
- Students gain PhDs and selected students embark on career pathways in seafood (Milestones 3.1.3 and 3.6.2)

These outcomes relate to developing and coordinating a comprehensive PhD, Masters and Honours program with a strong industry context across all CRC themes.

Chef Steve Cooling puts on his final touches to one of the Yellowtail Kingfish dishes during the SIPP field trip. Photo: Lindsey Woolley
8. Conclusion

In conclusion, SIPP 2009 was a success for student training and encouraging a student and young scientist cohort but was not so successful in encouraging participation from industry. Active industry mentor participation will continue to be a challenge as mentors juggle work commitments and personal development opportunities. The Seafood CRC will look at new strategies to address these issues and implement them for SIPP 2010.

L to R – PhD student Felicity Brake, industry mentor Dr Pauline Mooney, Seafood CRC Post Doc Dr Cath McLeod, PhD student Tom Madigan and Seafood CRC Post Docs Dr Mohan Raj and Dr Muhammed Ashraf participate in the ‘If I only knew then what I know now’ workshop