



Mentoring @ACEMS

MENTORING@ACEMS

ACEMS defines mentoring as ...

A process that involves a more experienced or more knowledgeable person helping to guide a less experienced or less knowledgeable person in their learning and development to formulate and achieve their goals. Mentoring occurs on an ongoing basis and may have either a formal or informal structure.

ACEMS members have access to a wide range of mentoring events via their home nodes and the various professional societies and related organisations. Members are encouraged to participate in these events as well as the activities offered through ACEMS.

ACEMS facilitates a range of mentoring activities for its members, through individual meetings, cross-node visits, online forums, workshops and conferences, and Centre-scale retreats. ACEMS members interact with other members from different nodes to discuss research talks, research posters and mentoring talks at the three ACEMS annual retreats (student, postdoc and main), at ACEMS workshops and conferences.

ACEMS plans to enrich and expand the existing mentoring activities.

The ACEMS Mentoring Plan has four main aims:

1. To engender a community of academic and non-academic support amongst its members;
2. To facilitate discussion and advice about broad professional issues;
3. To develop skills in areas such as leadership, public speaking and communication; and
4. To encourage a life-long awareness of, and participation in, mentoring.

Seven-Step Mentoring Plan for 2017

The 2017 Mentoring Plan comprises seven activities.

1. Create an ACEMS Alumni Program

The ACEMS Alumni will comprise ACEMS members who have left ACEMS.

2. Formalise ACEMS individual-level mentoring Programs

Individual-level mentoring between pairs or small groups of ACEMS members has been taking place since the inception of ACEMS and has been strongly encouraged by the Executive Committee. These activities are now being consolidated into two formal mentoring programs, namely a Next-Level-Up Mentoring Program and a Cross-Node Mentoring Program.

3. Organise mentoring events at ACEMS workshops and retreat

Postgraduate and ECR workshops are held regularly and provide excellent forums for targeted mentoring activities. Mentoring events will be scheduled for the upcoming ACEMS Retreat.

4. Establish the ACEMS Mentoring Seminar Series

This seminar series will be delivered across all of the ACEMS nodes and will include a mix of professional development topics delivered by experts and practical research tutorials delivered by ACEMS researchers.

5. **Encourage an informal online mentoring forum**

Informal mentoring is already occurring via the ACEMS Slack App. Informal mentor will continue to be encouraged and a mentoring channel on Slack will be created. The possibilities of expanding or moving this to the ACEMS website will be investigated.

6. **Identify national and international engagement opportunities**

This facilitation will be targeted at HDR students and ECRs.

7. **Establish a mentoring program for ACEMS Professional staff.**

This program will be discussed and developed in collaboration with the Professional staff during 2017.

1. ACEMS Alumni Program

The aims of the Alumni Program are to learn about the professional pathways of mathematical science researchers, provide support to the members where appropriate, create a source of potential presenters for events, and encourage Alumni to participate in mentoring activities and possibly placements for current ACEMS members.

A series of highlighted stories about our Alumni will be created. These can be used to inform students and teachers, undergraduate students, other postgraduate students and the community about pathways for mathematicians and statisticians.

2. ACEMS individual-level mentoring Programs

These Programs will be on an “opt-in” basis in the first instance, with mentors and mentees able to choose their partners according to research or professional development interests.

Next-Level-Up Mentoring Program

Next-Level-Up mentoring is a popular approach in organisations¹. The aim of the Next-Level-Up Program are to provide access to informal individual and small-group level mentoring within nodes, and to provide an opportunity for all ACEMS members to be mentors and mentees. Next-Level-Up refers to each group of ACEMS members mentoring the next level of more junior staff. Hence RHD students may mentor Vacation Research students or undergraduates who work with the Centre, and at the same time be mentored by Postdocs and/or more senior staff.

Cross-Node Mentoring Program

The aim of this Program is to encourage cross-node, cross-disciplinary and cross-seniority discussions about professional development and research support topics. ACEMS members will be invited to join a Mentoring Pool, from which individuals and small groups can form informal mentoring partnerships. These will be registered and supported through activities such as provision for cross-node travel, access to mentoring resources, etc. The way in which the mentoring takes place, and the frequency of contact, will be left to the individuals in the first instance, although general guidelines and ideas will be discussed as part of the ACEMS Mentoring Seminar Series (see below).

3. Mentoring events at ACEMS workshops and retreat

This will be a continuation of the type of events held at previous postgraduate and postdoctoral workshops and the ACEMS retreat.

¹ <http://mentoring-works.com/wp-content/uploads/2014/04/Taking-Mentoring-to-the-Next-Level-in-Organisations.pdf>

4. The ACEMS Mentoring Seminar Series

This seminar series will be delivered once a month between February to November each year via videoconference, enabling all ACEMS members to participate. Based on feedback from RHD students and ECRs in ACEMS, the list of seminars is as follows:

- Seminar 1. Let's talk about equity, diversity and harassment in ACEMS.
- Seminar 2. Building a positive mentoring working relationship, what is mentoring, etc and what to do when things are not working well.
- Seminar 3. Building an academic career and profile, including discussion on balancing work and other activities, balancing lecturing and research, publishing, grants, collaboration, professional societies and other topics raised in the seminar.
- Seminar 4. Hands-on tutorial on a topic related to an ACEMS research theme.
- Seminar 5. Moving on from ACEMS, including discussion about life inside and outside academia, applying for jobs, the difference between academic and non-academic CVs, Interviews: what to expect, how not to disappoint, how to excel and other topics raised in the seminar.
- Seminar 6. Giving a presentation, including discussion about differences between seminars, lectures, conference presentations, corporate presentations, community presentations, and tips for all of these.
- Seminar 7. Hands-on tutorial on a topic related to an ACEMS research theme.
- Seminar 8. How to do mathematical and statistical consulting: the first interview; budgets, timelines and reporting; contracts and intellectual property; doing the work.
- Seminar 9. Writing for different audiences, including academic papers, reports for industry, media reports and writing grant applications.
- Seminar 10. Hands-on tutorial on a topic related to an ACEMS research theme.

5. An informal online mentoring forum

Informal online mentoring allows the posting of questions and contributing answers, mechanisms for developing offline mentoring partnerships (see the Next-Level-Up program above), and dissemination of more structured mentoring material, links to external mentoring activities, and so on.

This is already happening via the ACEMS Slack social media account (. On this app there are several channels of discussion where ACEMS members are collaborating and mentoring one another on a daily basis across various topics.

Some of these topics or channels include the following:

| | | |
|----------------|---------------|------------------|
| #industry_opps | #postdocs | #student_retreat |
| #acems_events | #researchlife | #julia |
| #outreach | #simulation | #r |
| #mentoring | | |

As the ACEMS Website and Reportal are developed further, a mentoring forum may be added as well as a link to the ACEMS Slack Account - <https://acemathstats.slack.com/>

6. National and international engagement opportunities

Opportunities to visit and present at other research institutions in Australia and overseas, and to visit interested industries and businesses, can substantially enrich a young researcher's professional life. This component of the Mentoring Program will focus on expanding these opportunities. It will take advantage of individual linkages of CIs and AIs outside of ACEMS, the ACEMS Alumni (see above), and institutional ACEMS partnerships with research organisations and businesses. It will also take advantage of other activities such as the AMSI Intern Program.

7. A Mentoring Program for ACEMS professional staff

Professional staff are an integral and important part of ACEMS. A Mentoring Program for Professional staff will be developed in 2017, to facilitate interaction across nodes to increase learning and skills, expansion of networks, improvement of workplaces and development of career pathways.

Appendix 1

Mentoring currently already available at the ACEMS Nodes

All Australian Universities offer specialist mentoring and networking programs. The Mentoring programs that are currently available at each ACEMS Node can be found on the links below:

Mentoring @ University of Queensland

<https://www.uq.edu.au/hupp/attachments/personnel/MentoringGuidelines.pdf>

<https://bel.uq.edu.au/bel-career-mentoring-program>

Mentoring @ Monash University

<http://www.monash.edu/about/leadership/mentoring>

Mentoring @ University of NSW

<https://student.unsw.edu.au/peermentoring>

<https://www.business.unsw.edu.au/students/student-opportunities/build-your-career/mentoring-and-networking>

Mentoring @ UTS

<https://www.uts.edu.au/partners-and-community/working-uts/recruit/mentoring>

Mentoring @ QUT

<https://qutvirtual4.qut.edu.au/group/staff/student-support/careers/professional-dev/career-mentor-scheme>

Mentoring @ Adelaide University

<http://www.sciences.adelaide.edu.au/current-students/firstyear/mentoring/>

Mentoring @ Melbourne University

<http://careers.unimelb.edu.au/students/jobs-and-opportunities/internships-work-experience-and-mentoring/mentoring-programs>