

EDUCATION AND TRAINING PLAN

FLEET members will be provided with high quality training opportunities so that they become well-rounded researchers so they can be successful in whichever field they choose. These training opportunities are targeted at Early Career Researchers (ECRs), including Higher Degree Research (HDR) students and postdoctorate fellows, but may also be offered to senior members if required.

FLEET defines a well-rounded researcher as one that has a high level of the following knowledge and skills:

- Ability to communicate and engage with varied audiences about their research, its meaning and value. Audiences include specialists in their field, industry, government and the community
- Demonstrated high level knowledge of their area of specialisation
- Understanding the value of their research to their field of expertise, the goals of the organisation they work with, and its broader societal implications, for example, for the community, education, equity/diversity, funding, Intellectual Property and policy
- Well-developed professional network to help solve problems and build collaborative research efforts
- Training in a broad range of experimental and theoretical techniques and have a high level of awareness of their skill strengths and weaknesses

- Experience in mentoring and teaching

The following strategic goals have been developed to assist FLEET ECR's to become well-rounded researchers:

2.1 Develop the next generation of science leaders through world-class training & mentoring programs

FLEET will provide training above and beyond what is offered at individual universities, by identifying different types of training available or needed, and circulating these around the nodes. Where possible, these training sessions will be aligned with university requirements and counted as professional development hours. In addition to training at individual nodes, high quality training prior to the Annual Workshop will be provided, taking advantage of all ECRs and students being together in the same place at the same time. Courses offered will include research development (such as grant writing skills), and professional development (such as media training). Training in equity and diversity will also be provided. Training that provides skills for members that will increase their employability will be provided, targeting skills desirable within industry.

All Centre members will be invited to participate as a mentee, mentor or both at their induction into FLEET. Mentorloop is used as a platform to facilitate the FLEET programs as it provides:

- tools for matching mentor to mentee
- training resources for both mentor and mentee to embrace engagement
- evaluation tools to measure the effectiveness of the mentoring program

FLEET will offer four mentoring programs to provide our members with the opportunity to increase their understanding of academia, the industry, learn the skills they need to develop to be successful within the STEM sector and extend their professional network. The programs are:

1. FLEET ECR Mentoring
2. FLEET Industry Mentoring
3. FLEET Academic Mentoring
4. Women in FLEET Mentoring

Targets:

- FLEET will offer a minimum of eight development courses in research or professional development, and one workshop in equity and diversity per year. Training programs will be evaluated where possible to determine their relative value to FLEET goals.

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- FLEET will partner with EQUUS to offer the Ideas Factory, an annual event bringing ECRs together to learn communication skills in pitching and presenting research outcomes, establishing and maintaining collaborations, applying for research funding and grants
- FLEET will leverage the established Summer School program at ANU and the Gordon Godfrey Conference at UNSW, aligning the topic to FLEET research approximately every two years. This will introduce a wider community to FLEET topics, and give ECRs an opportunity to build their knowledge base
- FLEET will continue supporting activities of the Student and ECR working group by:
 - Encouraging participation through regular communication
 - Allocating an annual budget of \$10,000 for the Working Group for activities that aim at:
 - Exchanging research ideas
 - Enhancing scientific skills
 - Expanding professional skills
 - Extending professional and research networks
- All ECRs and HDRs will participate in at least one mentoring program by 2023
- Increased participation of partners, alums and industry representatives as mentors

Additional initiatives to assist staff immediately but also fit within the FLEET Legacy framework, to encourage and prepare Early Career Researchers towards careers outside of academia:

1. Hold “Got PhD, What Next?” panel discussions to explore diverse post-PhD career options in the industry, business, policy and academia, where ECRs and students are exposed to personal stories and experiences to help widen their appreciation of future career options
2. Enable exposure to industry and government events such as the Science meets Parliaments, Science meets Policy Meets Policy Makers and Science meets Business programs organised by Science and Technology Australia and other similar initiatives such as the Australian Science Policy Fellowship Program
3. Enable exposure to role models from FLEET alumni through the “Where are they now?” communication series to explore a diverse range of roles that FLEET graduates and ECRs are currently undertaking in industry, government and other sectors
4. Maintain the FLEET alumni database to follow and understand how FLEET training has helped their career choices and journey.

2.2 Establish Centre Succession planning

Please see Centre Succession Plan

2.3 Facilitate opportunities for research collaboration

Internships of 1-6 months will be offered to PhD students to complete at partner organisations. The Education & Training Committee, together with CIs, will identify potential projects from partners, and determine appropriate HDR students to complete these projects. These can be completed at different stages of the students’ candidature, based on university requirements.

Target:

- PhD students should have the opportunity to complete a 1-6 month internship at partner organisations, either nationally or internationally, prior to the completion of their candidature.

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The FLEET Education & Training Committee will offer a grant scheme whereby members, particularly ECRs, will apply for funding to complete training at other institutions. For example, a researcher desiring training on a specific piece of equipment could identify another group working with that equipment. This will be a competitive process that would also provide the ECR an opportunity to practice their grant writing skills and receive feedback.

Target:

- Two grant rounds per year, offering up to a total of \$20,000 in total, up to \$5,000 per person; whereby members, particularly ECRs, will apply for funding to complete training at other institutions.

2.4 Establish a collaborative culture within the Centre

FLEET will run an annual collaboration survey to identify current collaboration efforts with FLEET partners and external collaborators to help the Centre identify:

- Existing collaborative links within the Centre extended international network
- Future collaborative potentials
- Gaps in the current research capabilities
- Alignment of research interests with collaborators within

the FLEET extended network

A regular series of colloquia will be established where ECRs present their research, live-streamed to all nodes and open to participation from the wider FLEET network. This FLEET-wide colloquia series will give all members an opportunity to interact with FLEET members from other nodes while learning more about the work going on in other laboratories. Outcomes from the annual survey will assist with planning to ensure identified gaps and opportunities are considered.

Target:

- Up to 10 seminars per year will be facilitated

The Education & Training Committee will offer the opportunity for researchers, particularly HDR students, to visit labs at other nodes for 2 - 5 days for the purpose of determining how these labs run and the work being completed. They will participate in the day to day activities in these labs for this purpose. There may be opportunities for ongoing collaboration.

Target:

All completing PhD students should have completed a 2 - 5 day visit to another lab before their thesis submission.

2.5 Facilitate opportunities for career development in the industry

In addition to facilitating opportunities for research collaboration with partner organisations (2.3), FLEET will also support career development in the industry by:

- Capitalising on established programs such as the Australian Postgraduate Research Intern (APR Intern) for internship opportunities with local industry and encouraging industry partners and stakeholders to offer internships through such programs. FLEET students and ECR's are regularly informed of opportunities available via the FLEET opportunities webpage and monthly newsletters
- Engaging with local industry to explore internship arrangements for our students and ECRs, starting with Silanna Semiconductor and industry collaborators we're working with through Linkage projects. FLEET will work to expand its network of local industry partners to develop new opportunities.