

Doctoral Training Partnerships (DTP) leadership conference – Discussion themes

On 6th September 2018, the MRC hosted the 2nd DTP leadership conference, bringing together academic and administrative leads of the 15 current DTPs. Broad aims of the day included: sharing successes and challenges of the current DTP award; best practice and wider implications of the DTP; supporting careers outside of academia; providing a networking opportunity; MRC's expectations and monitoring the impact of the DTP model.

Professor Jeremy Tavaré (Chair of MRC's Non-Clinical Training and Career Development Panel and member of MRC's Training and Careers Group) chaired the day. Several DTP academic leads were asked to provide a short presentation to the workshop attendees, to highlight interesting and diverse approaches within the DTP model and generate discussion between DTPs regarding best practice. Breakout sessions focussed on successes and challenges of the current DTP award, widening participation within DTPs, supporting careers outside academia, DTP reporting and next steps for the DTP model.

Below we have summarised the themes of discussion that emerged throughout the day.

Selection processes

While selection processes varied by research organisation (RO), all DTPs agreed that recruitment processes should be student-focussed and that routes of potential unconscious bias within selection systems should be identified and steps taken to eliminate these where possible. This sparked a range of discussions about use of blinded applications, increasing diversity of interviewer backgrounds and implementing 2-stage interviews (traditional style and action-based interview).

Widening participation

There was an overall commitment from all DTPs about the importance of attracting diverse individuals into DTPs, both in terms of background and experience. In the first instance, ensuring that DTP vacancies are advertised through appropriate channels, accessible by a range of individuals was imperative. The language and style of vacancies/project proposals should also be considered to ensure a balanced process and avoid preferentially attracting individuals from research intensive ROs or enabling proposals from particular lab groups/supervisors to appear more attractive. It was noted that potential DTP student supervisors could be provided with guidance/training by their DTP to enable consistency between project proposals to allow more even advertisement/recruitment across groups and individuals.

On the topic of widening participation in DTPs, methods to engage underrepresented groups were discussed. Encouraging current DTP students to become involved with public engagement, to attract the next generation, and organising outreach activities like summer schools to provide alternative routes for gaining lab/research experience, were suggested by the DTPs. These activities could help potential PhD students to obtain exposure to scientific research and gain experience which could increase their competitiveness for future applications, as well as providing current PhD studies with developmental opportunities.

Training (including interdisciplinary)

There was a strong agreement across DTPs that training assessment and development should be student-led and was a driver for an engaged and interactive cohort. Support was shown for linking training plans in with career options to provide an understanding of the importance for varied training, as well as providing students with wider oversight and exposure to non-academic careers. This ensures that the DTPs are preparing PhD students for all eventualities and providing them with the training and experiences that non-academic employers require. Across all DTPs there was agreement of core areas of required training that

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reflected the changing landscape of research. This included (but was not limited to) topics such as: resilience training; mental health first aid; statistics; computer coding; leadership and commercialisation.

Most DTPs have increased the number of students from interdisciplinary backgrounds, have introduced/expanded training topics and observed more collaborative project proposals and supervisory teams within their DTPs. A potential concern raised by some DTPs was how to preserve the cohort element of training if there is such a diverse and interdisciplinary cohort. Achieving the balance of generic cohort-wide training and providing appropriate support on an individual basis was discussed and the administrative strain that this can cause.

Cohort building

All DTPs agreed that cohort building was essential within and across cohort years, as well as across DTP ROs if applicable. Activity types varied across DTPs, with many focused on student-organised activities and involvement. Several initiatives encouraged student support, such as a buddy system, online portal/forum and reporting back use of flexible supplement awards to the wider cohort. All DTPs agreed that supervisor training/awareness was essential to ensure that students have time to engage with these activities (see next theme: Student progression and support). Considering the next DTP competition, it was highlighted that the MRC applicant guidance should specify expectations for cohort building specifically regarding how such activities should be funded.

Student progression and support

Ways to monitor student progression, especially considering the increase in multidisciplinary and locational spread of supervisors, was a topic of much discussion. It was noted that this is not a DTP-specific concern, but an RO-wide issue. Several DTPs have started to develop new routes for student monitoring, enabling oversight across the DTP leadership team and the infrastructure to manage any potential conflicts as early as possible. It was clear from discussions throughout the day that it is important to create and support a cultural shift in doctoral training towards the student-focussed DTP cohort model. One potential concern about this is the relationship and engagement of supervisors. Supervisor training has been made mandatory at some DTP ROs to ensure that DTP procedures are explained, and expectations set before student allocations. It is imperative for this training to occur early in the process, to highlight the expectations of MRC PhD student training, which are set out in the [RCUK Statement of Expectations for Postgraduate Training](#).

It was also noted that there appears to be a focus of 'student monitoring' within doctoral training rather than equal monitoring of students and supervisors. This again is an RO-wide issue and not specific to the DTP model. It was suggested by several the DTPs that should a supervisor not meet the expected level of support and performance, restrictions and embargos could be imposed on that individual. For example, restricting or barring eligibility for new PhD student supervision until improvements are demonstrated.

There was also discussion about how best to identify potential supervisor-student issues and/or relationship breakdowns as early as possible. Ideas included promoting an open-door policy for the DTP leadership team/director to ensure that students have an alternative, impartial route for advice and queries and also implementing confidential progress meetings.

Industrial collaborations and experience

The importance of providing students with the opportunity to participate in placements and gain industrial experience was a recurring theme throughout the day. As part of the cultural shift described, it is important to ensure that students and supervisors are aware of the advantages of participating in placements and internships. There are a number of opportunities currently available to MRC DTP PhD students, including conversion to an industrial Collaborative Award in Science and Engineering (iCASE) studentship, integration

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of an industrial placement, and a range of internships options (for example, [Research council policy internships](#), [AMS policy internships](#) and opportunities through [The Royal Institution \[Ri\]](#)). To encourage conversion of MRC DTP students to an iCASE studentship, many of the DTPs agreed that clearer guidance and expectations about this process would be helpful.

One of the challenges that DTPs have faced in relation to industrial collaborations is how to develop new relationships with industry partners and setting expectations of such a collaborative project. This could be due to the diverse expectations of focus and outputs from both parties. The importance of establishing clear expectations and creating an open relationship with industry was highlighted by a number of attendees. One route which has been successful is to approach potential partners as early as possible in the process, to ensure that both parties can input to the relationship. Concerns were raised about how to encourage supervisors to get involved with industrial collaborations (by educating them on the benefits of such relationships) and whether the MRC should include industry targets within the DTP award.

Flexible supplement

DTPs currently receive an additional flexible supplement to support unique training opportunities for MRC-funded PhD students. The process, management and allocation of this flexible supplement award is at the discretion of the DTP. It was highlighted by several DTPs that clearer guidance is desired regarding the supported use of this supplement. The MRC has since provided DTPs with updated guidance for the [flexible supplement](#). Other discussions around the flexible supplement included the idea of getting successful students to report back to the wider student cohort to demonstrate potential uses of this supplement and the sharing of knowledge, as well as if the supplement could be used for circumstances that cannot currently be managed within the institute guidelines, for example interruption of studies due to health and wellbeing issues.

Non-academic careers

The importance of student training and development beyond academia was emphasised through most of the days' themes. Exposure to a range of career options appeared to be becoming more common, particularly through case studies specific to the DTPs. One concern was being able to reach out to alumni, which can be made more difficult due to the complexities of career tracking (including the recent implications of GDPR). Through this discussion, it was also noted that LinkedIn training and support is essential for students' career development, whether they pursue an academic or non-academic career path. Some DTPs are already offering such training.

Output from the DTP model

Throughout the day, attendees were encouraged to think about the ways in which the DTP model could influence wider benefits and changes within DTPs, ROs and through their staff and students. Such outputs could be used to evaluate any differences between traditional doctoral training and the DTP model. Potential metrics to consider included (but was not limited to): a more robust recruitment process (and increased transparency); changes to postgraduate research locally; peer support and mentoring; wider careers paths; new collaborations that may lead to novel work and grant applications; cohort vibe and wellbeing advantage (via student perception); quantification of/improvement in skills; public engagement; support and experience for ECR supervisors; co-supervisor culture.

The next DTP competition

The current DTP awards support student cohorts starting between Autumn 2016 and Autumn 2020. A new competition for DTPs to support students from 2021 onwards will be announced in 2019/20. Themes emerging from the day (as outlined above) and best practice gathered across the current DTPs will be considered in the guidance for the next call.