

CPD

# Celebrating 20 years of the UK Dermatology Clinical Trials Network. Part 2: education, training and capacity building

Carron P. Layfield and Hywel C. Williams, On behalf of the UK Dermatology Clinical Trials Network

Centre of Evidence Based Dermatology, Lifespan and Population Health Sciences, School of Medicine, University of Nottingham, Nottingham, UK

doi:10.1111/ced.15132

## Summary

In Part 1 of this 2-part review of the 20th anniversary of the UK Dermatology Clinical Trials Network (UK DCTN), we described its role in developing and supporting clinical trial proposals, elaborating on structure, process and clinical trials activity. This review describes the diverse educational and training activities that the UK DCTN supports. Although not primarily set up as an educational organization, an education and training function emerged organically as the network grew. Education and training also embodies the democratization principle that drove the formation of the UK DCTN, allowing participation from a much wider group of individuals than just senior academics. Far from being a sideline, education and training has now become a major component of the UK DCTN that evolves constantly through changing training curricula and trial methodology developments. Formal UK DCTN training opportunities started in 2007 with competitively awarded annual fellowships for dermatology trainees, followed by similar schemes for general practitioners, Staff and Associate Specialist clinicians and dermatology nurses. These were followed in 2013 by larger groups of trainees who work up specific trial proposals with senior mentors. Finally, a virtual journal club emerged during the pandemic in 2020 in order to reach trainees with little access to academic training. Focused activities with dermatological nurses and patients/carers also take place. Such activities require considerable organization and volunteerism from the co-ordinating centre and former fellows. Education and training has become an essential component for capacity building to develop clinical trials and succession planning for the UK DCTN.

## Background

Education and training is a critically important facet of the UK Dermatology Clinical Trials Network (UK DCTN) in order to develop critical appraisal and clinical trial designs skills that are needed to sustain the network with the aim of improving patient care. This

review describes the evolution of the education and training activities of the UK DCTN.

## UK Dermatology Clinical Trials Network fellowships

Specialist registrar (SpR) fellowships for dermatology trainees started in 2007 based on the suggestion of a trainee, Debbie Shipley, following her experience in the PATCH studies. The award structure was co-developed with our inaugural Fellows (Jonathan Batchelor and John Ingram), providing a formal mechanism to become involved in developing UK DCTN trials. The highest scoring application is designated the Neil Cox award in

*Correspondence:* Dr Carron Layfield, Centre of Evidence Based Dermatology, Lifespan and Population Health Sciences, School of Medicine, University of Nottingham, Nottingham, UK  
E-mail: carron.layfield@nottingham.ac.uk

*Conflict of interest:* HW is Chair and CL is Network Manager of the UK DCTN.

Accepted for publication 9 February 2022

recognition of the late Dr Neil Cox,<sup>1</sup> who played a key part in developing the UK DCTN PATCH studies.<sup>2,3</sup> In 2009, the UK DCTN Nursing Prize was introduced, which later became the Nurse Fellowship. As part of our inclusivity drive, a Fellowship for Staff and Associate Specialist (SAS) clinicians was launched in 2010, followed by a General Practitioner (GP) Fellowship in 2012, owing to growing collaboration with primary care. More recent developments have included broadening the Nurse award into a Nurse/Pharmacist Fellowship and the evolution of the SAS offering to the Certificate of Eligibility for Specialist Registration (CESR) pathway.<sup>4</sup>

The five competitively awarded UK DCTN Fellowships (two SpR, one GP, one CESR and one nurse/pharmacist) are offered annually, with funds covering travel and fellowship meetings.<sup>5</sup> Local training supervisor support is a requirement. Table 1 lists the range of core activities undertaken. The commitment is 1 day/month over 2 years. Year 1 focuses on critical appraisal skills and trial design and Year 2 applies those skills to UK DCTN projects. To date, 65 such Fellowships have been awarded (Appendix 1). Many alumni have since assumed significant leadership roles in network activities and in promoting evidence-based dermatology.

### UK Dermatology Clinical Trials Network Trainee Groups

It soon became clear that the limited number of annual Fellowship awards was not sufficient to meet the demand from dermatology trainees for developing skills in clinical trials. Encouraged by the success of a surgical trainee scheme in the West Midlands,<sup>6</sup> the UK

DCTN explored how such a scheme could work for dermatology, especially with trials that could be completed in a relatively short time. Initially led by Carsten Flohr and UK DCTN alumni John Ingram, Jonathan Batchelor, Rubeta Matin, Abby Macbeth and Emma Pynn, the inaugural UK DCTN trainee cohort started in 2013 (Fig. 1a) with subsequent cohorts in 2015, 2018 (Appendix 2) and 2021 (Appendix 3).

The UK DCTN Trainee Group programme<sup>7</sup> has evolved with time, but the fundamental activity has remained the same; trainees work in small groups under the guidance of experienced UK DCTN mentors (SpR Fellowship alumni and committee members) to work up proposals for a clinical trial. Trainee Groups are given hands-on experience in prioritizing research questions, and they work in small teams with their mentors to develop questions into convincing trial propositions (Table 2). Although there is no expectation on trainees to convert every idea into a funded trial, several groups have generated new study proposals, including the HEALs study of compression to hasten wound healing after surgery for skin cancer on the leg<sup>8</sup> and the COUNT study evaluating nicotinamide for the chemoprevention of keratinocyte skin cancer.<sup>9</sup>

### UK Dermatology Clinical Trials Network Online Journal Club

This initiative was developed in 2020 by a UK DCTN SpR fellow (Fiona Tasker) and others (Appendix 4), to plug a national gap on critical appraisal training during the COVID-19 pandemic. Surveys had indicated that many trainees lacked local opportunities for training in understanding clinical trials and critical appraisal. The online journal club is for and run by

**Table 1** Core activities for UK Dermatology Clinical Trials Network fellowship.

Year	Activities
Year 1	BEES course covering critical appraisal of different study designs, sources of bias in clinical trials, qualitative research, statistics and sample size calculation, systematic reviews and how to practise evidence-based dermatology 3-day visit to the UK DCTN Co-ordinating Centre in Nottingham to learn more about critical appraisal and diverse clinical research projects Join the UK DCTN Steering Committee to hear and vote on outline and full proposals presented that day Series of critical appraisal workshops with UK DCTN Chair, which involve submitting written critical appraisals using a framework that are then discussed online
Year 2 <sup>a</sup>	Maintain membership of the UK DCTN Steering Committee meetings Free attendance at the Annual Evidence Based Update Meeting, at which new trial and systematic review evidence for a specific area in dermatology, such as acne or hair disorders are presented in an interactive format Undertake a relevant research activity, e.g. get involved in a UK DCTN trial development team, join a systematic review team or participate in a methodological project

BEES, Better Evaluation of Evidence and Statistics; UK DCTN, UK Dermatology Clinical Trials Network. <sup>a</sup>General Practitioner Fellows and Certificate of Eligibility for Specialist Registration Fellows can choose to undertake their award over 3 years if preferred.



**Figure 1** (a) UK Dermatology Clinical Trials Network Trainee Group members at the research training day in 2013. (b) Taking part in the UK Dermatology Clinical Trials Network Online Journal Club.

**Table 2** UK Dermatology Clinical Trials Network Trainee Groups programme.

Session	Activities
Training Day 1	Introduction to the UK DCTN Trainee Groups Programme (online, half day) Sessions on key factors involved including identifying, defining and informing a research question
Small group work	Work for 4–6 months in small groups under the guidance of mentors Identify a research question using appropriate sources of evidence (e.g. systematic reviews, PSPs) Develop the research question (define, refine and inform, e.g. Critically Appraised Topics, survey work, audits, PPI) Complete full UK DCTN vignette form
Training Day 2	UK DCTN Trainee Groups Research Study Day (in person, full day) Presentation of study ideas Workshops on how to incorporate feedback Sessions on moving your study forward in the real world including health economics and the importance of multidisciplinary teams
Further activities	Publications and outputs Moving the study forwards into the UK DCTN trial pipeline

UK DCTN, UK Dermatology Clinical Trials Network; PPI, patient and public involvement; PSP, Priority Setting Partnership.

dermatology trainees. Senior UK DCTN members are invited as guests to facilitate training in a safe peer-to-peer learning setting. Material is selected to highlight new findings that could change clinical care, offering an opportunity to reflect on practice, discuss controversies, share insights and to generate ideas for future research studies (Appendix 4, Fig. 1b).

### Educational activities for dermatology nurses

Recognizing the vital role that specialist dermatology nurses play in delivering skin care, a working group (Appendix 5) of UK DCTN and British Dermatology Nursing Group (BDNG) members was established in 2020 to support learning and development opportunities for dermatology nurses. An initial survey to establish need and preference on how such opportunities are provided<sup>10</sup> has since been followed by a series of educational articles in the BDNG journal *Dermatological Nursing*.<sup>11–13</sup> Online learning sessions covering critical appraisal, demystifying statistics and the use of different research designs to answer different research questions have also been provided.

### Capacity building with patients

Patient and public involvement (PPI) in identifying and prioritizing trial questions and commenting on how they should be done was recognized as an essential part of UK DCTN at its inception in 2002. In order to provide a sense of community and continuity to those patients and carers involved in supporting such research, a formal Patient Panel was established in 2009 at the UK DCTN co-ordinating centre based at the Centre of Evidence Based Dermatology.<sup>14</sup> The panel has grown to a diverse UK-wide group of over 35 patients and carers, who provide key input into UK DCTN studies emerging from the trial development pipeline.<sup>15</sup> Supporting the patient panel with feedback and updates of research activities and broader PPI developments by regular newsletters is key. Face-to-face events with interim online meetings

also provide bespoke training and networking opportunities for panel members. PPI colleagues are also involved as full voting members on the UK DCTN Steering Group and as independent members on the Executive Committee.

### Wider educational engagement

UK DCTN membership is free, and all members receive monthly email updates that highlight opportunities to take part in activities linked to UK DCTN studies. These include development of core outcome sets,<sup>16</sup> participating in priority setting partnerships,<sup>17,18</sup> contributing to clinical surveys about patient numbers and event rates, becoming recruiting centres for funded UK DCTN trials, or joining UK DCTN committees or working groups when vacancies arise. All such opportunities offer valuable informal learning experiences, supplemented by other educational opportunities such as our annual evidence update meetings.<sup>19</sup>

### Conclusion

Much of the UK DCTN education and training work has been shaped and developed using a 'bottom-up' approach by trainees, other clinicians and healthcare professionals and changing curriculum needs.<sup>20</sup> Educational opportunities offered by the network are crucial in developing an informed and trained workforce for clinical dermatology research and are critical to its future sustainability and growth. Many of today's UK DCTN trainees will become future leaders in clinical research. The investment of time and effort given freely by senior mentors from across the UK is considerable, but the payback in terms of better research awareness and new trial proposals for the UK DCTN pipeline is clear. The success of the UK DCTN is due to engagement from its membership who share a common vision to deliver better evidence-based care for dermatology patients.

### Acknowledgement

The UK DCTN thanks the British Association of Dermatologists (BAD) for its sustained support over the last 20 years, and all thanks all of its individual members including patients and those who serve on its committees who give their time freely to support the network. The UK DCTN is a registered UK charity (number 1115745) and is subject to Charity Commission rules. The network infrastructure is funded by the BAD and the University of Nottingham, with contribution in kind and donations from its members. The network also

receives some funding for continuing support and dissemination from successful applications. The network does not accept funding from the pharmaceutical industry or other for-profit organizations.

### Learning points

- Education and training is an essential component of a trials network in order to ensure wide engagement and succession planning.
- A range of education and training activities is needed to suit different colleagues' training needs.
- Demand for fellowships exceeded UK DCTN capacity resulting in the development of UK DCTN Trainee Groups.
- The time demands for organizing and facilitating the teaching and learning activities has been substantial, but so have the rewards such as new ideas for the trial pipeline.
- Regardless of whether or not trainees and other healthcare professionals in receipt of UK DCTN Fellowships become leaders in research, training in critical appraisal and evidence-based practice is likely to benefit patients.

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## Appendix 1

### UK Dermatology Clinical Trials Network Fellows

#### 2021 Fellows

Richard Barlow, Marianne DeBrito, John Frewen, Eleanor Earp and Lloyd Steel (SpR Fellows), Andy Hodder (SAS Fellow), Hannah Wainman (CESR Fellow), Alison Lowe and Christina MacNeil (Nurse Fellows), Simi Sudhakaran, Anna Lalonde and Anjali Pathak (GP Fellows).

#### Past Fellows

*Past UK DCTN Specialist Registrar Fellows.* Jonathan Batchelor, John Ingram, Emma Pynn, Fiona Craig, Abby Macbeth, Kave Shams, Rosalind Simpson, Donna Torley, Rubeta Matin, Suyin Ong, Fiona Meredith, Rachel Abbott, Adrian Yong, Susannah George, Esther Burden-Teh, Prativa Jayaskera, Alana Durack, Alison Sears, Antonia Lloyd Lavery, Alia Ahmed, Lea Solmon, Aaron Wernham, Jason Thomson, Douglas Maslin, Sharleen Hill, David Veitch, Alistair Brown, Bayanne Olabi and Fiona Tasker.

*Past UK DCTN Staff and Associate Specialist Fellows.* Alison Godwin, Penny Thomson, Areti Makrygeorgou, Sangeeta Punjabi, Susan Hatfield, Urvi Popli, Nadine Marrouche and Zoi Tsianou.

*Past UK DCTN Nurse Fellows.* Fiona Cowdell, Gemma Minifie, Angela Steen, Liza Mitchell, Kelly Amor, Susan Tyler-Murphy, Melanie Westmoreland, Charlotte Walker, Kathy Radley, Tessa Garland and Nicola Lancaster.

*Past UK DCTN General Practitioner Fellows.* Vishnu Madhok, Fiona Collier, Emma LeRoux, Sarah Worboys and Mitesh Patel.

## Appendix 2

### Past UK Dermatology Clinical Trials Network Trainee Groups and Mentors

#### 2018 cohort

Angela Alani, Ronan Brennan, Louise Macdonald, Laura Burfield, Inge Kreuser-Genis, Victoria Wray, Lorne Mitchell, Conor Broderick, Padma Mohandas, David Veitch, Heather Whitehouse, Charlotte Gollins, Sabrina Khan, Navreet Paul, Beebee Meeajun, Aardash Shah, Kushboo Sinha, Alistair Brown, Livia Soriano, Lloyd Steele, Lucy Webber, Fangyi Xie and Stela Ziaj (group members). Claudia DeGiovanni, Abby Macbeth, Rachel Abbott, Jonathan Batchelor, Augustin Martin-Clavijo, Rakesh Patalay, Rubeta Matin, Alana Durack, John Ingram, Emma Pynn and Prativa Jayaskera (group mentors).

#### 2015 cohort

Wehdad Abdelrahman, Ajoy Bardhan, Kar-Hung Kuet, Vincent Li, Christos Tziotzios, Dr Nisha Arujuna, Ravinder Atkar, Parastoo Babekinejad, Dawn Caruana, Seio Pei Tan, Zoe Venables, Sue Ann Chan, Georgina Fremlin, Natasha Harper, Stamatina Verykiou, Aaron Wernham, Janet Dua, Kara Heelan, Bernard Ho, Ruth Jones, Lea Solmon and Justyn Thomas (group members). Abby Macbeth, Kim Thomas, Jonathan Batchelor, Susannah George, Joanne Chalmers, Rubeta Matin, Rachel Abbott, John Ingram and Carsten Flohr (group mentors).

#### 2013 cohort

Alexa Shipman, Tee Wei Sam, Weronika Szciecinska, Jairabanu Mohd Kass, Minh Lam, Alia Ahmed, Simona Ungureanu, Saibal Sanyal, Esther Burden-Teh, Chioma Ajaegbu, Laura Savage, Katherine Warburton, Alison Honan, Mohammed Ghazavi, Rachel Montgomery, Emma Craythorne, Allan Matthews, James Powell, Layla Hannah-Bashara, Catriona Maybury, Alana Durack, Noor Almaani, Prativa Jayaskera, Jemma Collins, Gabriella Petrov, Kun Sen Chen and Pooja Trehan (group members). Abby Macbeth, Joanne Chalmers, Rosalind Simpson, Jonathan Batchelor, John Ingram, Kave Shams, Donna Torley, Rubeta

Matin, Kim Thomas, Carsten Flohr and Emma Pynn (group mentors).

## Appendix 3

### Current 2021 UK Dermatology Clinical Trials Network Trainee Groups and Mentors

Group	Medical dermatology	Paediatric dermatology	Skin surgery
Research question	Do patients over 18 with anogenital psoriasis have improved outcomes in health-related quality of life with an addition of psychological intervention alongside standard medical therapy?	Are teleconsultations as clinically effective and acceptable to patients/clinicians as face-to-face consultations for the follow-up management of paediatric eczema?	Is secondary intention healing equivalent/superior to full thickness skin graft for wounds of keratinocyte skin cancers excisions on the scalp?
Trainees	Dijon Millette Priya Patel Christiana Stavrou Aarthu Uthayakumar	Manrup Hunjan Aoife Daly Anusuya Kawsar Natalie King	Iqra Ashraf Richard Barlow Dushyanth Gnanappiragasam William Hunt
Mentors	Rosalind Simpson Alison Sears Alia Ahmed	Sarah McCusker Lea Solmon Susannah George Esther Burden-Teh	Jasmine Mann Aaron Wernham Rachel Abbott Claudia Degiovanni
Supra-numerary mentors <sup>a</sup>	Lucy Bradshaw Rubeta Matin		

<sup>a</sup>Advising all groups.

## Appendix 4

### UK Dermatology Clinical Trials Network Online Journal Club Faculty

Fiona Tasker, Alistair Brown, Bayanne Olabi, Alison Sears, Lisa Kirby, Veronica Melchionda, Eleanor Earp, Lloyd Steele, Alia Ahmed and Sharleen Hill.

## Appendix 5

### UK Dermatology Clinical Trials Network and British Dermatology Nursing Group Working Group members

Carron Layfield, Margaret McPhee, Fiona Cowdell, Kathy Radley, Melanie Westmoreland, Alison Lowe and Rubeta Matin.

#### CPD questions

##### Question 1

Which of the following statements about the UK Dermatology Clinical Trials Network (UK DCTN) Fellowships is true?

- (a) They are awarded only to dermatology trainees.
- (b) They are awarded only to dermatology trainees and dermatology nurses.
- (c) They are awarded every 3 years.
- (d) They are only available to those training in England.
- (e) They are awarded to a range of trainees including those training in dermatology, general practice, pharmacy and nursing.

##### Question 2

Which of the following statements about the UK Dermatology Clinical Trials Network (UK DCTN) Trainee Groups is true?

- (a) They are required to put in a funding application for a national clinical trial.
- (b) They are supported by senior mentors to identify and develop a potential trial proposal.
- (c) They are required to pass a test in medical statistics.
- (d) They form on an annual basis.
- (e) They have an exclusive focus on surgical trials.

##### Question 3

Which of the following statements about the UK Dermatology Clinical Trials Network (UK DCTN) Journal Club is true?

- (a) It is an online journal club run by dermatology trainees for dermatology trainees.
- (b) It is a website that conducts surveys for the UK DCTN.

- (c) It focuses on basic science research.
- (d) It teaches participants how to conduct sample size estimations.
- (e) It is managed by paid subscriptions.

##### Question 4

Which of the following statements about patient and public involvement in the UK Dermatology Clinical Trials Network (UK DCTN) is true?

- (a) It is something that is currently missing from UK DCTN work.
- (b) It was only developed very late in the UK DCTN.
- (c) It excludes carers of people with skin diseases.
- (d) It only means asking patients for their views on whether a study question is important.
- (e) It exists throughout all of the UK DCTN processes, and is supported by a range of training and educational opportunities.

##### Question 5

Which of the following statements about the role of Dermatology nurses in the UK Dermatology Clinical Trials Network (UK DCTN) is true?

- (a) They are excluded from UK DCTN training opportunities.
- (b) They are only called in to recruit into UK DCTN studies.
- (c) They are valued members of the dermatology team who are able to partake in a range of UK DCTN education and training opportunities.
- (d) They have little to contribute to clinical trial design
- (e) They are expected to run nurse-only training sessions.

#### Instructions for answering questions

This learning activity is freely available online at <http://www.wileyhealthlearning.com/ced>

Users are encouraged to

- Read the article in print or online, paying particular attention to the learning points and any author conflict of interest disclosures.
- Reflect on the article.
- Register or login online at <http://www.wileyhealthlearning.com/ced> and answer the CPD questions.

- Complete the required evaluation component of the activity.

Once the test is passed, you will receive a certificate and the learning activity can be added to your RCP CPD diary as a self-certified entry.

This activity will be available for CPD credit for 2 years following its publication date. At that time, it will be reviewed and potentially updated and extended for an additional period.