

Weaving a clinical academic career: illuminating the method and pattern to follow

DI BONA, Laura <<http://orcid.org/0000-0002-5659-4368>>, FIELD, Becky <<http://orcid.org/0000-0003-3502-2691>>, READ, Jennifer, JONES, Natalie, FOWLER-DAVIS, Sally <<http://orcid.org/0000-0002-3870-9272>>, CUDD, Peter and EVANS, Laura

Available from Sheffield Hallam University Research Archive (SHURA) at:

<http://shura.shu.ac.uk/21741/>

This document is the author deposited version. You are advised to consult the publisher's version if you wish to cite from it.

Published version

DI BONA, Laura, FIELD, Becky, READ, Jennifer, JONES, Natalie, FOWLER-DAVIS, Sally, CUDD, Peter and EVANS, Laura (2018). Weaving a clinical academic career: illuminating the method and pattern to follow. *British Journal of Occupational Therapy*, 030802261878425. (In Press)

Copyright and re-use policy

See <http://shura.shu.ac.uk/information.html>

Weaving a clinical academic career

Full title: Weaving a clinical academic career: illuminating the method and pattern to follow.

Short title: Weaving a clinical academic career.

Authors:

1. Laura Di Bona, Engagement Manager / Occupational Therapist, Sheffield Health and Social Care NHS Foundation Trust; Honorary Research Fellow, School of Health and Related Research, University of Sheffield.
2. Becky Field, Research Associate and Occupational Therapist, School of Health and Related Research, University of Sheffield.
3. Jennifer Read, Research Associate and Occupational Therapist, School of Health and Related Research, University of Sheffield.
4. Natalie Jones, Head Occupational Therapist, Sheffield Teaching Hospitals NHS Foundation Trust; Research Impact Fellow, NIHR CLAHRC Yorkshire and Humber.
5. Dr Sally Fowler Davis, Clinical Academic, Health and Wellbeing, Sheffield Hallam University.
6. Dr Peter Cudd, Senior Research Associate, School of Health and Related Research, University of Sheffield.
7. Laura Evans, Head of Primary Care and Interface Services, Sheffield Teaching Hospitals NHS Foundation Trust.

Corresponding author: Laura Di Bona, Engagement Manager / Occupational Therapist Sheffield Health and Social Care NHS Foundation Trust & Honorary Research Fellow, School of Health and Related Research, University of Sheffield

Email: l.dibona@sheffield.ac.uk / laura.dibona@shsc.nhs.uk

Post: Sheffield Health and Social Care NHS Foundation Trust, Fulwood House, Old Fulwood Road, Sheffield, S10 3TH

Weaving a clinical academic career

Tel: 0114 2718283 / 07817 949704

Abstract

The benefits of developing occupational therapists as clinical academics are well recognised. They include improved health care outcomes and experiences for service users, efficiencies for organisations and increased prominence of occupational therapy within healthcare. Yet occupational therapists describe uncertainty about how best to navigate clinical academic career pathways. We suggest occupational therapists can increase their research aspirations, confidence and capacity by following a four step method, weaving together clinical, academic and personal development. We outline our view of clinical academic development as a process with flexibility to incorporate occupational therapists' diversity of interests and circumstances. By demystifying and illuminating the process of clinical academic development we believe occupational therapists may be able to weave more clinical academic development opportunities into their careers and increase the profession's research capacity.

Key Areas: Professional Development, Research Methods and Methodology, Education

Keywords: Research, Clinical academic, Professional Development

Clinical academic development within occupational therapy

Engaging clinicians in research is beneficial for health service users, organisations and their staff (Harding et al., 2016). For service users and providers, it has been evidenced that allied health professional involvement in research impacts positively on health outcomes, satisfaction with care and organisational efficiency (Harding et al., 2016). For clinicians, opportunities to engage in research have been linked to personal development, improved job satisfaction, increased research capacity and evidence based practice (Van Oostveen et al., 2017; Wenke et al., 2017). Nowadays,

Weaving a clinical academic career

evidence based practice is an expectation, any professions not supporting research engagement or increasing their research capacity are at risk of being marginalised (Pain et al., 2015). In recognition of the importance of engaging clinicians in research, schemes now exist in several countries, such as those in Canada, Australia and the United Kingdom, to enable health professionals to develop clinical research skills (Canadian Institute of Health Research, 2018; National Health and Medical Research Council, 2018; National Health Service Education for Scotland, 2018; National Institute of Health Research (NIHR), 2016).

In England, for example, the NIHR and NHS England promote a clinical academic career pathway defining clinical academics as “clinically active health researchers” working in both healthcare and academia, with accompanying guides for “aspiring clinical academics” (Carrick-Sen et al., 2016; NIHR, 2016). Despite these developments in funding, opportunity and guidance, aspiring clinical academics continue to describe challenges to their career development. These include financial sacrifice, as fellowships are highly competitive to obtain and non-existent in some countries, job insecurities associated with academia and a lack of both support and infrastructure for roles that bridge healthcare and academia (Green et al., 2018; Van Oostveen et al., 2017). Whilst challenges exist for all, it has been suggested that occupational therapists lag behind other professions in terms of research outputs and confidence (Pighills et al., 2013). Many conclude that “becoming a clinical academic” is beyond their reach and have reported lacking role models whose career pathway they can follow and a limited awareness of how to progress as researchers (Gutman, 2009). Occupational therapy research capacity may therefore be enhanced through increasing awareness of processes for developing research skills and expertise.

“Learning to weave a clinical academic career”: following a pattern to make it possible.

Weaving a clinical academic career

We argue that clinical academic development should be demystified and viewed as a process which can be followed in incremental steps, varied according to circumstances and interests. We present an analogy whereby occupational therapists “weave a clinical academic career” developing personal, clinical and academic skills to create, over time, personalised tapestries reflecting their individual clinical academic experiences. See Figure 1.

INSERT FIGURE 1

Our “weaving a clinical academic career analogy” arose from the Collaboration Aiming to Build Occupational Therapy research (CABOT) (Fowler-Davis et al., 2015). In CABOT, occupational therapists from clinical practice and academia worked with health service researchers to develop technology research and build occupational therapy clinical research capacity. This synergy of collaborations inspired the authors to draw on personal experience, expert opinion, international research and grey literature, to consider methods of clinical academic development.

The weaver analogy reflects our understanding that occupational therapists do not “become clinical academics” at a single point in their careers, nor is their development a linear process. Instead it is influenced, enabled and challenged by choices, opportunities, personal and organisational circumstances. To an extent, this contrasts with the scope and confines of the NIHR definition of “a clinical academic” and its accompanying pathway (Carrick-Sen et al., 2016; NIHR, 2016). Instead, we believe, in line with much grey literature (for example, Royal College of Occupational Therapists (RCOT), 2017) that there are many ways to develop clinical academic skills and experience. By demystifying clinical academic development processes and increasing awareness of them, we suggest occupational therapy research aspiration, confidence and capacity will increase. Viewing clinical academic development as a broader process makes it feel more achievable, increases inclusivity and creates opportunities to celebrate the diversity of occupational therapists and their practice. We have used the weaver concept locally to successfully enhance clinical academic occupational therapy development and we believe the concept is of wider relevance.

Learning to weave a clinical academic career: creating a personalised tapestry.

Personalised tapestries are created out of three interconnecting components: (see Figure 2).

1. The weft (horizontal threads) illustrates a four step method of clinical academic development: choosing clinical research, taking research opportunities, developing strategically and weaving clinical and academic threads together.
2. The warp (vertical threads) illustrates clinical, academic and personal skill development required for clinical academic careers. Table 1 details one pattern of skill development, but is not intended to be exhaustive or prescriptive. Further development patterns and lists of essential clinical academic skills are described in other literature (for example, NIHR, 2016; Slade et al., 2018).
3. The shuttle reflects challenges and enablers to clinical academic development. Known enablers include working within organisations with research infrastructure, dedicated work time for research, managerial support, access to mentoring and education (Slade et al., 2018). Conversely, known challenges include limited awareness of how to progress as a researcher, lack of time, funding, support, research infrastructure, knowledge and skills (Van Oostveen et al., 2017; White et al., 2013). Proactively seeking out known enablers can help therapists overcome the inevitable challenges.

INSERT FIGURE 2 AND TABLE 1

The four step method:

1. *Choose clinical research.* Occupational therapists working in clinical roles develop an interest in clinical research, usually preceded by two factors. Firstly, a critical reflection on their practice

Weaving a clinical academic career

which leads to a questioning approach about its limited evidence base and a curiosity about how practice could be improved (Preston et al., 2018). Secondly, a belief in the evidence that research leads to improved service user outcomes and experiences (Boaz et al., 2015; Harding et al., 2016). Development at this, and all stages, can be facilitated by working within research active organisations and receiving encouragement from others (Pain et al., 2015; Pighills et al., 2013).

2. *Take research opportunities.* Therapists usually start gaining clinical academic skills and experience through opportunities that are widely advertised or perceived as easily available. Postgraduate study, taking on roles incorporating research, attending conferences, joining practice development initiatives, presenting to small groups and writing up dissertations findings for publication are common early steps in clinical academic development. Managers are key facilitators to this, via offering opportunities, supporting and resourcing people to access them (Di Bona et al., 2017; Pighills et al., 2013). At this stage, therapists may not have a long term research goal and development activities may seem distinct from clinical roles. However, engaging in such opportunities develops not only foundational academic skills but also personal skills such as risk taking, assertiveness and self-motivation (Cooke, 2005; Slade et al., 2018).

3. *Develop strategically.* Taking further steps in clinical academic development is challenging. Clinicians report that developing in the dual role of clinician and academic is incredibly difficult, especially for those with family caring and financial responsibilities (Green et al., 2018; Van Oostveen et al., 2017). It seems a strategic approach is required, therapists must first consider their clinical academic goals, second develop awareness of the skills, knowledge and experience required to reach them, third reflect on their individual gaps in relation to these requirements, then plan towards filling them, ideally integrating opportunities to do so within their roles. This strategic development can be facilitated by networking with both peers and people working in more established clinical academic roles who know about clinical academic requirements and

Weaving a clinical academic career

opportunities (Green et al., 2018; Van Oostveen et al., 2017). Also, mentoring and support to assist with personal reflection, applying for opportunities and learning from inevitable rejections (Pain et al., 2015; Slade et al., 2018)). Mentoring may be best coming from outside a person's profession or organisation where clinical academic roles are more established (Van Oostveen et al., 2017; White et al., 2013). Peer support is often widely available informally through social media and, in England at least, regional groups (for example, Sheffield Occupational Therapy Clinical Academics, 2018) and more formal networks, such as the Council for Allied Health Professions Research (2018).

Strategic development to fill gaps in clinical academic portfolios will be goal directed and highly personalised. Common opportunities taken include local and national committee membership, research positions, postgraduate research, academic publications, conference presentations, academic reviewing and funding applications. Personal development often occurs in parallel as an increase in applications for more competitive opportunities usually results in an increase in rejections, therefore therapists often increase their tenacity, grow self- awareness and build the resilience required for clinical academic activity.

4. *Weave clinical and academic threads together.* Reaching a point at which clinical and academic roles are fully integrated usually requires therapists to become entrepreneurial, develop strategic thinking and collaborate nationally or internationally. Clinical academic leadership requires advanced, specialist, clinical and academic knowledge and skills. At this stage, when clinical and research activities have become woven together with a shared focus, therapists will usually be working cross organisationally and inter-professionally (White et al., 2013). Organisational support appears crucial to enabling clinical academic development at this level and ensuring the positive health outcomes associated with research active health organisations are realised (Harding et al., 2016; Slade et al., 2018).

Conclusion

Internationally, opportunities for occupational therapy clinical academic development are increasing and that is to be celebrated. However, therapists still report many challenges, a lack of confidence and uncertainty about how to navigate to clinical academic careers. In response, we present the weaver analogy, viewing clinical academic development as a process, with a method and pattern to follow. This analogy demystifies clinical academic development and considers it more inclusively than much of the existing literature, allowing for diversity of circumstance and specialism. We believe using this broader definition of clinical academic development can increase research aspiration, confidence and capacity for occupational therapists and the organisations they work in. We welcome further comment and debate on the resonance of this analogy for others. Demystifying and illuminating the process of clinical academic development is necessary to enable more occupational therapists to weave opportunities into their careers and increase the profession's research capacity.

Research Ethics: This study did not meet the NHS Health Research Authority definition of research, therefore ethical approval was not required (<http://www.hra-decisiontools.org.uk/research/>). Six occupational therapists discussed their experiences of clinical academic development, judging them against existing literature, no intervention, randomisation or vulnerable participants were involved. The stated opinions have been described in order to generate debate.

Consent: All occupational therapists provided verbal consent for their participation in the discussions. All then provided written consent for their discussions to be incorporated into a published article.

Weaving a clinical academic career

Declaration of conflicting interests: The authors declare no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding: The National Institute for Health Research Collaboration for Leadership in Applied Health Research and Care Yorkshire and Humber (www.clahrc-yh.nihr.ac.uk) funded the CABOT project (ref: NIHR/CABOT) which led to this opinion piece being completed. This opinion piece did not receive any direct funding.

Contributorship: Laura Di Bona and Laura Evans facilitated the occupational therapists' discussions. Laura Di Bona, Laura Evans, Peter Cudd, Natalie Jones and Sally Fowler Davis were responsible for initial development of this opinion piece. Laura Di Bona, Becky Field, Jennifer Read, Natalie Jones and Sally Fowler Davis wrote initial drafts. All authors searched and contributed relevant literature, reviewed and edited the manuscript and approved the final version.

Acknowledgements: This paper presents independent opinion partly enabled by the National Institute for Health Research Collaboration for Leadership in Applied Health Research and Care Yorkshire and Humber (www.clahrc-yh.nihr.ac.uk). The views and opinions expressed are those of the authors, and not necessarily those of the NHS, the NIHR or the Department of Health and Social Care. We are grateful to Deborah Barnett of Sheffield Teaching Hospitals NHS Foundation Trust for sharing her opinions with us as part of initial discussions leading to the development of this piece.

References

- Boaz A, Hanney S, Jones T et al. (2015) Does the engagement of clinicians and organisations in research improve healthcare performance: a three-stage review. *BMJ open*, 5(12): e009415.
- Canadian Institutes of Health Research (2018) Canadian institute of health research. Available at: <http://www.cihr-irsc.gc.ca/e/193.html> (accessed 15 March 2018)
- Carrick-Sen D, Richardson A, Moore A et al. (2016) Transforming healthcare through clinical academic roles in nursing, midwifery and allied health professions: A practical resource for healthcare provider organisations. Report, The Association of UK University Hospitals, UK, London. Available at: <https://www.medschools.ac.uk/media/2325/aukuh-transforming-healthcare.pdf> (accessed 12 March 2018).
- Cooke J (2005) A framework to evaluate research capacity building in health care. *BMC Family Practice*, 6 (44) <https://doi.org/10.1186/1471-2296-6-44>
- Council for Allied Health Professions Research (2018) Caphr. Available at: <http://cahpr.csp.org.uk/> (accessed 15 March 2018).
- Di Bona L, Wenborn J, Field B et al. (2017) Enablers and challenges to occupational therapists' research engagement: A qualitative study. *British journal of occupational therapy* 80(11): 642-650.
- Fowler-Davis S, Evans L & Cudd P (2015) Locating assistive technology research in a clinical setting: an occupational perspective. *Advancing Assistive Technology and eAccessibility for People with Disabilities and the Aging Population*. <http://shura.shu.ac.uk/id/eprint/10508> (accessed 6th May 2018)
- Green RH, Evans V, MacLeod et al. (2018) A qualitative study of the perspectives of key stakeholders on the delivery of clinical academic training in the East Midlands. *Journal of the Royal Society of Medicine Open* 9(2) 1–23 DOI: 10.1177/2054270417741843
- Gutman, SA (2009) Why haven't we generated sufficient evidence? Part I: Barriers to applied research. *American Journal of Occupational Therapy* 63(3): 235–237.
- Harding K, Lynch L, Porter J & Taylor, NF (2016) Organisational benefits of a strong research culture in a health service: a systematic review *Australian Health Review* 41(1) 45-53
<https://doi.org/10.1071/AH15180>

Weaving a clinical academic career

National Health and Medical Research Council (2018) Australian government, National health and medical research council. Available at: <https://www.nhmrc.gov.au/> (accessed 15 March 2018)

National Health Service Education for Scotland (2018). Clinical Academic Research Careers. Available at: <http://www.nes.scot.nhs.uk/education-and-training/by-discipline/nursing-and-midwifery/managers-and-educators/clinical-academic-research-careers.aspx> (accessed 22nd May 2018)

National Institute of Health Research (2016) Building a Research Career. A guide for aspiring clinical academics (excluding doctors and dentists) and their managers. Available at: <https://www.imperial.ac.uk/media/imperial-college/medicine/study/postgraduate/cato/NIHR-booklet.pdf> (accessed 24 January 2018).

Pain T, Plummer D, Pighills A et al. (2015) Comparison of research experience and support needs of rural versus regional allied health professionals. *Australian Journal of Rural Health*, 23(5): 277-285.

Pighills AC, Plummer D, Harvey D et al. (2013) Positioning occupational therapy as a discipline on the research continuum: Results of a cross-sectional survey of research experience. *Australian Occupational Therapy Journal*, 60(4): 241-251.

Preston J, Galloway M, Wilson R et al., (2018). Occupational therapists and paramedics form a mutually beneficial alliance to reduce the pressure on hospitals: A practice analysis. *British Journal of Occupational Therapy* epub ahead of print: DOI: 10.1177/0308022618757412

Royal College of Occupational Therapists (2017) Chance, opportunity and the winding paths to clinical academia. Available at: <https://baotcot.wordpress.com/2017/01/18/chance-opportunity-and-the-winding-paths-to-clinical-academia/> (accessed 15 March 2018).

Sheffield Occupational Therapy Clinical Academics (2018) SOTCA. Available at: <http://www.catch.org.uk/current-project/sotca/> (accessed 15 March 2018)

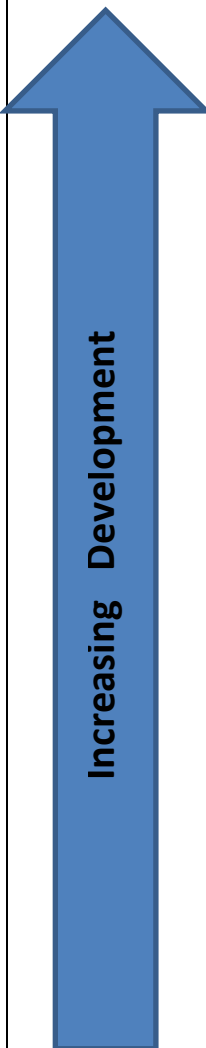
Slade SC, Philip K & Morris ME (2018) Frameworks for embedding a research culture in allied health practice: a rapid review. *Health Research Policy and Systems*, 16 (29) <https://doi.org/10.1186/s12961-018-0304-2>

Van Oostveen CJ, Goedhart NS, Francke AL & Vermeulen H (2017) Combining clinical practice and academic work in nursing: A qualitative study about perceived importance, facilitators and barriers regarding clinical academic careers for nurses in university hospitals. *Journal of Clinical Nursing*, 26 (23-24):4973-4984. doi: 10.1111/jocn.13996. Epub 2017 Oct 164973-4984

Wenke RJ, Ward EC, Hickman I et al. (2017) Allied health research positions: a qualitative evaluation of their impact. *Health research policy and systems*, 15(1): 6

White E, Hampson H, Gardiner L et al. (2013) A review of occupational therapy research and development activity in Scotland, Northern Ireland and Wales. *British Journal of Occupational Therapy*, 76(1): 2-8

TABLE 1 Personal, clinical and academic skill development



Development	Personal skills	Clinical skills	Academic skills
	Demonstrating leadership	Providing clinical leadership	Leading research programmes
	Building collaborations	Facilitating organisational change	Building a research profile
	Being entrepreneurial	Demonstrating cross-disciplinary leadership	Chairing committees
	Building resilience	Providing professional leadership	Managing research funding
	Being tenacious	Delivering clinical teaching	Completing a PhD
	Working strategically	Reviewing and developing services	Supervising others' research
	Demonstrating a growth mindset	Providing expert practice	Delivering post graduate teaching and mentoring
	Being self-aware	Engaging staff and service users in change	Reviewing for peer review academic journals
	Networking with others	Taking on managerial roles	Leading evaluation and audits
	Taking risks	Carrying out service improvement activities	Volunteering for committee membership
	Being flexible	Implementing evidence based practice	Bid writing
	Using organisational skills	Gaining specialist clinical knowledge	Submitting publications to peer review journals
	Demonstrating assertiveness skills	Clinical supervising of others	Presenting at conferences
	Advocating for research	Getting involved in practice development	Gaining research experience
	Being self-motivated	Engaging in reflective practice	Studying at postgraduate level

Figure 1: Learning to weave a clinical academic career: uploaded separately

Figure 2: Weaving a clinical academic career: uploaded separately

