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**The Career Development of Early- and Mid-Career Researchers in Dementia Should be a
Global Priority: A Call for Action**

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EDITORIAL

Improving research capacity is key to better understand dementia globally (Gonzalez et al., 2014) and it depends on the investment made on the career development of the early- and mid-career researchers (EMCR) of today (Klinkenberg et al., 2019). High levels of uncertainty with regards to employment (Notman & Woolston, 2020) and the strong competition for funding and resources have forced many EMCR to leave this research field (Marjanovic et al., 2015). In order to provide equitable and good quality care for the diverse population of people living with dementia in every country (Brayne & Miller, 2017), there needs to be more investment in research capacity building. This is particularly vital in low- and middle-income countries (LMIC) where nearly 70% of people with dementia live (Alzheimer's Disease International, 2015). EMCR in such settings have experienced severe cuts on funding and academic posts over the past decades (de Oliveira Andrade, 2019).

This Editorial aims to bring the attention of research and academic institutions, governments, funding agencies, and senior experts in the field of dementia, to the urgent need for, and importance of, investing time and resources on career development of EMCR in dementia. There are several definitions and requirements used to classify EMCR (Browning et al., 2017). We consider EMCR as being those individuals who have up to 10 years of research upon completing their PhD, with allowance for those who had career breaks (e.g. maternity leave). We are aware of the numerous career challenges faced by EMCR across all sectors (de Oliveira Andrade, 2019; Notman & Woolston, 2020). However we think it is particularly important to highlight these issues within the dementia research community given the urgency of bridging the gaps in care and prevention practices related to dementia globally.

Key issues currently affecting EMCR in the dementia research field

Post-doctoral positions often have less than two years of duration and EMCR need to carry out multiple post-doctoral positions at different institutions, in different countries, or are forced to leave the dementia research field, to continue to be employed. The type of research undertaken can also impact opportunities. For instance, EMCR engaged in basic or laboratory-based dementia research may face difficulties attaining fellowships or other grants due to a recent push in the direction of research focussed on impact, translation, and implementation. However, the time taken for medical research benefits to be observed in wider society can be around 17 years (Morris et al., 2011). Demonstrating research impact during the EMCR stage may therefore be particularly challenging. Those involved in observational studies or trials may also have limited opportunity to demonstrate impact through scientific publications due to a mismatch between the duration of time taken to conduct this research and the limited time of a postdoctoral position.

The majority of fellowship schemes targeting EMCR are also short-term (maximum of two years). EMCR may not be eligible to apply for specific project grant funding if their contract is shorter than the specified project funding period [see e.g. Alzheimer's Research UK eligibility criteria (Alzheimer's Research UK, 2019)]. In addition, in countries like The Netherlands, EMCR can have a temporary (fixed) contract only for a period of maximum four consecutive years at the same institution due to the so-called flex-wet ('flex-law'). This has made it even more difficult for EMCR career progression as the universities which had the funding to employ people on longer contracts were forced to make these researchers redundant. Such type of labour legislation is extremely discouraging for EMCR and should be urgently changed. In 2016, the Australian NHMRC-ARC Dementia Research Development Fellowships Scheme provided four-year salary and project funding for Australian EMCR less than five years post PhD. Whilst this was a positive step to grow dementia research capacity within Australia, the availability of such

targeted schemes around the world is limited, and this scheme itself was a one-off call and has now been discontinued. Moreover, EMCR who enter into teaching positions immediately are often allocated heavy teaching loads with minimal research time available. Some dementia specific funding schemes are only available to EMCR within the early years post PhD award. This leads EMCR in teaching roles to having smaller window of opportunity for funding when compared to EMCR in research-exclusive roles.

The future of EMCR is highly dependent on successful funding applications. Obtaining a major, external grant or fellowship is commonly a 'non-written pre-requisite' to securing a permanent work position (Alzheimer's Society UK, n/d). For example, of the biomedical research fellows that have been funded by the Alzheimer's Society UK over the last 20 years, 70% have remained active in dementia research and 60% now hold tenured positions in universities and research institutes. These grants are almost solely evaluated based on research achievements such as number of publications, impact factors and international mobility which can vary wildly within the dementia research field, and rarely consider other achievements such as teaching and community outreach.

Dementia is a global and multifaceted health issue and so multidisciplinary and international collaborations are necessary to move the field forward and help EMCR broaden their scientific horizons and increase their understanding of different research techniques and approaches (Uitto, 2013). International collaborations are also important for advancing and sharing knowledge across research labs and for helping to bridge any resource (e.g. skills, expertise and financial) and knowledge disparities that exist between high and LMIC. The benefits of international exchange opportunities have already been recognised by academia as many labs look favourably

on international postdoctoral or exchange experience (Herschberg et al., 2018). However, there is limited funding available for postdoctoral researchers to engage in exchange opportunities.

Recommendations

Considering the issues raised above, we propose the following recommendations for research and academic institutions, governments, funding agencies, and senior experts in the field of dementia to improve support for career development of EMCR:

1. Senior academics, professors and research leaders have a key responsibility to improve the circumstances of EMCR through both practical and political support. Practical support includes mentoring, inclusion of EMCR in grants, longer research contracts, creation of academic positions and more generous co-authorship relationships. Political lobbying of government and research funding agencies is also necessary to achieve more innovative structural and funding supports for early career researchers within the dementia research field. These should be a mandatory part of a senior academic role.
2. It is paramount that EMCR are provided with the support from more experienced researchers as mentors through mentoring schemes. These can maximize EMCR potential for success in the dementia field by enhancing productivity, independence, self-efficacy, career satisfaction, networking opportunities, and skill development (leadership, academic writing, and budgeting).
3. Every EMCR should have a research career plan and access to professional development opportunities to enable the transition from EMCR to a senior researcher. This includes offering protected budget for international conference attendance and open-access publications in future grants, as well as having protected (plenary) timeslots for EMCR during conferences.

4. EMCR should have exposure to alternate career paths such as by involving EMCR in intersectoral networks and placements or secondments. This includes establishing collaboration with industry, health systems, governments, or dementia networks (e.g. INTERDEM).
5. EMCR should be provided with more opportunities for exchange, particularly between high and LMIC. This could help EMCR build their professional networks, gain knowledge and expertise beyond their own institute, as well as conduct dementia research of global impact.
6. EMCR should receive training and opportunities to engage in the process of developing guidelines and policies (e.g. international care standards, guidelines, etc.). This will help EMCR to gain valuable knowledge of policy processes and pathways to impact.
7. EMCR should have the opportunity to adopt and practice more senior roles under supervision. This includes, for example, assisting a senior work stream lead in an international consortium with the management tasks, participating in senior meetings or/and having the opportunity to become member of relevant boards of network organisations.
8. The scoring criteria of funding schemes should be re-evaluated to include achievements other than research-specific ones. For example, valuing teaching and supervision, outreach activities, management roles, patient and public involvement activities, etc.
9. The time bound criteria for fellowships should be removed and instead funding agencies should rely on the skills and experience of applicants.
10. Small funding and awards that specifically recognise the contribution of EMCR to dementia research should be available. Such awards help facilitate promising EMCR to act as principal investigators on the projects, build their leadership skills and allow them to obtain necessary training and mentoring in a variety of skills (e.g. Alzheimer's society, Alzheimer Nederland).
11. The involvement of EMCR in large multi-centre and multi-national epidemiological studies and trials should be made mandatory. This can help EMCR build their professional networks and gain knowledge and expertise beyond their own institute.

12. EMCR should be provided with bridge funding to enable career transition between funding programmes.
13. EMCR should have protected time for research. This includes securing sufficient weekly time to develop grant applications, write papers, present at (inter)national conferences, and supervise postgraduate students.
14. There should be enough support for and better promotion of EMCR associations as they can contribute to career development. For instance, the [Dementia Researcher Network](#), Early Detection and Timely Intervention in Dementia ([INTERDEM](#)) and [The World Young Leaders in Dementia \(WYLD\)](#).
15. It is imperative that employment circumstances for EMCR are improved to prevent a “brain drain” from the dementia research field. This includes devising strong employment legislations that can protect EMCR from being at the mercy of short-term contracts, and that can ensure they are supported by their employers for smooth job transitions.

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References

Aging & Mental Health (2021). Access: <https://doi.org/10.1080/13607863.2021.1875193>

Alzheimer's Disease International. (2015). *The Global Impact of Dementia: An analysis of prevalence, incidence, cost and trends updates*. <https://www.alz.co.uk/research/world-report-2015>

Alzheimer's Research UK. (2019). *Alzheimer's Research UK Response Mode Grants General Eligibility Criteria*. <https://www.alzheimersresearchuk.org/wp-content/uploads/2019/11/ARUK-Grant-Scheme-Eligibility-Document-October-2019.pdf>

Alzheimer's Society UK. (n/d). *Alumni*.

<https://www.alzheimers.org.uk/research/researchers/early-career-researchers/alumni>

Brayne, C., & Miller, B. (2017). Dementia and aging populations—A global priority for contextualized research and health policy. *PLOS Medicine*, *14*(3), e1002275.

<https://doi.org/10.1371/journal.pmed.1002275>

Browning, L., Thompson, K., & Dawson, D. (2017). From early career researcher to research leader: Survival of the fittest? *Journal of Higher Education Policy and Management*, *39*(4), 361–377. <https://doi.org/10.1080/1360080X.2017.1330814>

de Oliveira Andrade, R. (2019). Brazil's budget cuts threaten more than 80,000 science scholarships. *Nature*, *572*(7771), 575–576. <https://doi.org/10.1038/d41586-019-02484-w>

Gonzalez, F. J., Gaona, C., Quintero, M., Chavez, C. A., Selga, J., & Maestre, G. E. (2014). Building capacity for dementia care in Latin America and the Caribbean. *Dementia & Neuropsychologia*, *8*(4), 310–316. <https://doi.org/10.1590/S1980-57642014DN84000002>

Herschberg, C., Benschop, Y., & van den Brink, M. (2018). Selecting early-career researchers:

The influence of discourses of internationalisation and excellence on formal and applied

Aging & Mental Health (2021). Access: <https://doi.org/10.1080/13607863.2021.1875193>

selection criteria in academia. *Higher Education*, 76(5), 807–825.

<https://doi.org/10.1007/s10734-018-0237-2>

Klinkenberg, I. P. M., de Oliveira, D., Verhey, F. R. J., Orrell, M., & de Vugt, M. E. (2019).

INTERDEM Academy: A training and career development initiative vital to capacity building of early stage psychosocial dementia researchers in Europe. *Aging & Mental Health*, 23(8), 929–931. <https://doi.org/10.1080/13607863.2018.1442415>

Marjanovic, S., Robin, E., Lichten, C. A., Harte, E., MacLure, C., Parks, S., Horvath, V., Côté, G.,

Roberge, G., & Rashid, M. (2015). *A Review of the Dementia Research Landscape and Workforce Capacity in the United Kingdom*. Rand Corporation.

https://www.rand.org/pubs/research_reports/RR1186.html

Morris, Z. S., Wooding, S., & Grant, J. (2011). The answer is 17 years, what is the question:

Understanding time lags in translational research. *Journal of the Royal Society of Medicine*, 104(12), 510–520. <https://doi.org/10.1258/jrsm.2011.110180>

Notman, N., & Woolston, C. (2020). Fifteen to one: How many applications it can take to land a

single academic job offer. *Nature: Career News*.

<https://www.nature.com/articles/d41586-020-02224-5#ref-CR1>

Uitto, J. (2013). The Benefits of International Postdoctoral Research Fellowships: A Personal

Perspective. *Journal of Investigative Dermatology*, 133(10), 2301–2302.

<https://doi.org/10.1038/jid.2013.306>