Ageing Research Reviews 54 (2019) 100934

Contents lists available at ScienceDirect

Ageing Research Reviews

journal homepage: www.elsevier.com/locate/arr

Call for articles on neglected topics

According to the recently released impact factor (IF), Ageing Research Reviews (ARR) confirms and extends its position as the leading journal in the field of aging, gerontology and geriatrics. Indeed the 2018 ARR IF is 10.390, placing ARR among the top journals worldwide.

The editorial leadership of ARR is particularly proud of this achievement and in order to continue this trajectory believes that it is necessary to maintain the highest quality of manuscripts received and to accept the challenge to disseminate knowledge and viewpoints on classical as well as emerging topics relevant for gerontology and geriatrics.

The field of aging and age-related diseases has moved to the forefront of the medical and societal realms in the 21 st Century. This unprecedented attention is promoted by the recent accumulation of data in animal models and humans suggesting that it is feasible to successfully quantify and modify the aging rate and process.

In order to better contextualize the above-mentioned challenge related to quality and topics, a brief summary of published ARR papers between January 2017 and January 2019 is presented. During this period ARR has published 156 papers (73 in 2017 and 83 in 2018). An analysis was performed based on title key words and the published papers were subdivided into major topics, as showed in Table 1.

In addition, **three Special Issues** (27 articles and 3 editorials) were published in 2017:

i) Monogenic accelerated ageing disorders with perturbations to normal DNA and chromosome function, R.M. Brosh Ed.;
ii) Neurovascular ageing – a driving force for neurological dysfunction in stroke and neurodegenerative diseases S. Graham Ed.;
iii) Nutritional interventions modulating ageing and age-associated diseases, L. Fontana Ed.

These Special Issues have been very successful owing to the relevance and modern nature of the topics as well as the high profiles of the authors. The editorial leadership of ARR will continue this course, and new Special Issues are in the pipeline.

This analysis allowed us to realize at a glance the following distribution of ARR topics in the last two years:

i) **Neuroscience** accounts for **about one third** (58 papers including 15 metanalysis or systematic reviews) of the total published papers. This is reasonable given the importance of neuroscience for human ageing, but it should not be restricted to major pathologies like Alzheimer's disease (see below).
ii) 31 out of the 156 papers contained in the title the words "**meta-nalysis**" or "**systematic review**". Metanalyses and systematic reviews are rigorous methods to address topics that have been thoroughly investigated and where no clear consensus has been reached. Metanalyses are welcome and well received by our scientific audience. In order to improve in this area we encourage scientists to address emerging new fields and perspectives (see below) and to embrace the challenge of interpreting and discussing the results of metanalyses and the molecular and cellular mechanisms underpinning the diseases, pathologies or geriatric syndromes addressed.
iii) Certain topics have been under-addressed in ARR and other journals. In an effort to increase its already strong reputation as the leading tribune for cutting-edge science in geriatrics and gerontology, ARR will invest a significant amount of energy to address **emerging and burning new areas of investigation**, from theories of aging and longevity to molecular mechanisms, from socio-economic determinants to clinic and therapeutic approaches as reported in Table 2.

We intend to prioritize new areas of investigation not sufficiently covered in the field; therefore, we will commit ourselves to promote an editorial policy that considers these main topics. This policy is aimed not only to bring nourishment to the journal in terms of emerging topics, but also to embed the journal in a conceptual framework of research that envisages the ageing phenomenon as a complex and global process.

According to this new editorial line, Ageing Research Reviews encourages scholar contributions in these areas and their more recent cutting-edge advances.

We would also remind prospective authors that ARR accepts three main formats:

i) Review articles providing an in-depth review of topics of interest to the journal's broad readership also including systematic review and metanalysis with a biological rationale, or biologically plausible hypothesis/interpretation.
ii) Short review - focused on a timely aspect of a topic or review critical new findings.
iii) View point - a forum for authors to provide their own views and debate on hot topics giving a vision of future research directions.

https://doi.org/10.1016/j.arr.2019.100934

Available online 15 July 2019

Table 1
Analysis of topical categories published in Ageing Research Reviews based on article title key words.

Topic	January - December 2017 Total (Metanalysis or systematic reviews)	January 2018 – January 2019 Total (Metanalysis or systematic reviews)	January 2017 – January 2019 Total (Metanalysis or systematic reviews)
Mechanisms of ageing and anti-ageing – age-associated diseases[a]	20 (1)	29 (3)	49 (4)
Neurodegenerative diseases – sensory organs	21 (5)	23 (3)	44 (8)
Sarcopenia – obesity – frailty - diabetes	9 (5)	11 (3)	20 (8)
Psychology – Behaviour – Cognitive function	8 (6)	6 (1)	14 (7)
Cardiovascular diseases	7 (1)	5 (1)	12 (2)
Immunology - HIV	5 (0)	3 (0)	8 (0)
Other diseases- multimorbidity	2 (1)	2 (0)	4 (1)
Biomarkers	1 (1)	3 (0)	4 (1)
Artificial Intelligence	0 (0)	1 (0)	1 (0)
Total	73 (20)	80 (11)	156 (31)

[a] Other than those specified elsewhere.

Table 2
Call for neglected research topics.

Overlooked and Neglected Research Topics	Suggestions/Examples
Theories and integrated approach to aging and longevity	• Aging as a complex and systemic remodeling • Aging and stochasticity • Evolution and Programmed vs non-programmed aging • Demography and the limit of human lifespan • Long-term effects of early events • Life course approach to healthy aging • Hormesis • Chronic Inflammation • Genetics of aging, longevity and age-related diseases
Clinical aspects	• Longitudinal studies • Biomarkers of aging, including clocks to distinguish chronological vs biological aging • Co- and Multi-morbidities • Metabolism, including adipose tissue(s) • Sleep and circadian rhythms • Age-associated depression • Brain maintenance
Molecular mechanisms/Geroscience pillars[a]	• Aging of major organs (liver, kidney, heart, lung…) and cross-talk among them • Nucleic acids and macromolecular damage • Mitochondrial dysfunction, Proteostasis, Stem cell biology, Epigenetics • Immune response, Inflammation, Immune-metabolic cross-talk
Integrated Interventions and Therapies	• Life extension strategies • Senolytic drugs and other pharmacological approaches • Nutrition, Lifestyle • Multidomain interventions • iPS cells (induced pluripotent stem cells)
Role of physical,social and cultural environment/context	• External and Internal Exposomes and Embodiment[b] • Worldwide Inequalities and Socio-economic Status • Gene-environment interaction • Personality and emotional stress • Body-mind connection
Comprehensive Multi-layer Analysis and Mathematical Models	• Humans as a meta-organisms • Microbiomes/Viromes • Big Data analysis/Artificial Intelligence • N = 1 strategies[c]

[a] Kennedy et al., Geroscience: linking aging to chronic disease. Cell. 2014 Nov 6;159(4):709-13.
[b] The concept of *embodiment attempts* to establish a causal connection between the social and physico-chemical environments and the biological systems and can be defined as a dynamic set of processes and interactions between individuals within a population and their environments over time.
[c] N = 1 strategies refer to integrated (omics, remote-sensing devices) longitudinal data obtained in the same subject/patient “in the wild”.

We hope readers will appreciate this effort and help us in this mission by continuing to support the journal through submissions and reviewer input, as well as encouraging colleagues to read and contribute to the journal.

Finally, a GREAT THANK YOU TO ALL THE REVIEWERS, who devoted their precious time to ARR and whose contributions were essential to maintain ARR at the top among all journals devoted to gerontology and geriatrics.

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