### Editorial

# The future of Gerontechnology: Proposals from the new editor-in-chief

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Y-L. Hsu, D.L. Bai, The future of Gerontechnology: Proposals from the new editor-in-chief. Gerontechnology 2016;15(3):125-129; doi:10.4017/gt.2016.15.3.001.00 Background Gerontechnology, the official journal of the International Society for Gerontechnology (ISG), has been founded in 2001 as the first international scientific journal devoted to the domain of gerontechnology. As gerontechnology research is interdisciplinary in nature, Gerontechnology receives papers from diversified fields including health, housing, mobility, communication, leisure, and work by older adults. Professor emerita dr. Johanna E.M.H. (Annelies) van Bronswijk is the co-founder of Gerontechnology and has been serving as the editor-in-chief for 15 years. With the approval of ISG executive members and Gerontechnology editorial board members, Professor van Bronswijk nominated the first author, engineering professor and designer from Yuan Ze University, Taiwan, to succeed her as the editor-in-chief of Gerontechnology, starting January 2017. Strategies The main goal for the near future lays in the promotion of Gerontechnology as the leading journal for the gerontechnology domain through the following strategies: (i) reinforcing the efficiency of the reviewing and publishing process; (ii) enhancing the international visibility of the journal; (iii) increasing its academic prestige; and (iv) promoting gerontechnology research in different countries and cultures.

#### Keywords: Gerontechnology, International Society for Gerontechnology, editor-in-chief

Gerontechnology officially became an academic field at the First International Congress on Gerontechnology held in 1991 in Eindhoven, the Netherlands. Gerontechnology includes the research and development of technological products / services, based on the knowledge of aging processes for the benefit of a preferred living and working environment and adapted healthcare for the elderly<sup>1</sup>. In 1997, the International Society for Gerontechnology (ISG) was founded in Europe with its purpose defined as, "Designing technology and environment for independent living and social participation of older persons in good health, comfort and safety".

Gerontechnology, the official journal of ISG, was founded in 2001. It is the first international scientific journal devoted to the domain of gerontechnology, and has a clear-cut commitment to tuning the balance between aging, technology and the emerging knowledge-based society. The aim of this peer-reviewed journal is to provide a forum for reporting original research, review papers, and personal perspectives on the broad area of fitting technological environments to support changing life goals and lifestyle preferences into advanced age. Research outcomes reported in the journal form the basis - for designers, architects, standards developers, builders, engineers, marketers, manufacturers, medical doctors, pharmacists, decision makers, and

related professionals in the health, social, business and technology professions - to provide the proper environment for the greatest number of people in society.

The gerontechnology domain is interdisciplinary in nature<sup>2</sup>. In addition to technology, gerontechnology includes the fields of gerontology and geriatrics: biology and physiology, psychology and social psychology, sociology and demography, medicine, nursing, and rehabilitation, etc. Related technology includes chemistry and biochemistry, architecture and building, communication and information, mechatronics and robotics, design and ergonomics, and business management<sup>3</sup>. This interdisciplinary nature is also the unique feature of the journal. ISG conferences and journals have a long tradition of using needs of older adults rather than technical fields to classify tracks of the papers. Gerontechnology receives papers from diversified fields including health, housing, mobility, communication, leisure and work of older adults, addressing problems of the aging society though solutions to the same problem may be from entirely different technological fields.

Professor emerita dr. Johanna E.M.H. (Annelies) van Bronswijk is the co-founder of Gerontechnology and has been serving as the editor-inchief for 15 years. During this period, Gerontech-

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nology has established its publication quality and diversity, making it an important journal on the subject. With the approval of ISG executive members and Gerontechnology editorial board members, professor van Bronswijk nominated the first author, engineering professor and designer from Yuan Ze University, Taiwan, to succeed her as the editor-in-chief of Gerontechnology. This decision was based upon his notable academic and practical achievements in the gerontechnology domain and his dedicated service at ISG as an associate editor, vice president, IT director, and Sinophone chapter president.

#### **G**OALS

Despite Gerontechnology being published for about 15 years with a solid foundation laid out, significant work remains to promote Gerontechnology as the leading journal. As mentioned earlier, the interdisciplinary nature is the unique feature of the journal Gerontechnology. On the other hand, this interdisciplinary nature also hinders some technology and aging researchers from submitting to this journal. For example, robotics researchers prefer to publish their research results in robotics journals, even though the focus of their research is improving geriatric care. Another important issue is that, Gerontechnology is published independently by the ISG without the help from professional publishing companies. Cost and logistic support have always been concerns.

The main goal for the near future is to promote Gerontechnology as the leading journal for the gerontechnology domain, especially making it the key reference for research and product design in the field of gerontechnology. This leads to the following specific goals for the journal:

Reinforcing the efficiency of the reviewing and publishing process;

Enhancing the international visibility; Increasing its academic prestige; and Promoting gerontechnology research in different countries and cultures.

#### **S**TRATEGIES

To promote Gerontechnology as the leading journal for the gerontechnology domain, the following strategies are identified and expected to be implemented and finished in two years' time. The first author has the advantage of being also the ISG IT director, whose main task is to provide technical support to the ISG and journal websites and journal manuscript handling system. He has assembled a joint ISG editorial and IT office which integrates the duties of the two positions. In particular, the second author is appointed editorial manager to help the implementation of the strategies.

#### Reviewing and publishing

Reviewers listed

Efficient and quality review plays an important role in influencing the process and quality of publishing, both of which are the key evaluation standards of a journal<sup>4</sup>. Unfortunately, the current list of reviewers includes a number of non-responders or slow-responders. These reviewers need to be pruned. In the meantime, our experienced good reviewers need to be retained and new reviewers recruited to replace non-responders.

Responsibilities of editorial board members

The current editorial board members come from different countries with a diversity in their professional background to represent the interdisciplinary nature of the gerontechnology domain. Board responsibilities need to be adjusted to enhance members' influence and contributions. For example, in addition to organizing a review process for a manuscript in his/her field of expertise, the journal may also require that at least one editorial board member is included in the reviewing team of each manuscript. Subsequently, according to the newly defined responsibilities, the current list of editorial members will need to be updated due to members joining or withdrawing from the board.

Publishing process management

From the start to completion of publishing an issue, a number of tasks need to be completed, including calling for papers, paper submission, reviewing, editing, publication online, copy print and delivery, and archiving. The editorial manager will establish a Standard Operating Procedure (SOP) in order to add more clarity to the entire publishing process with time deadlines to shorten the processing time of a manuscript as much as possible. Editors or editorial assistants will be asked to record the start and completion time of each step and to try to finish them before the defined deadline or remind the person who is in charge of that task. The editorial office can also use the process record for further analysis and improvement of publishing process management.

#### **Enhance international visibility**

A new journal website

The journal website is an important platform for authors, readers, reviewers, and editors for handling and discussion of publication issues, and plays a significant role in introducing the journal to the world. As the current journal website based on the Open Journal System (OJS) presented a number of limitations, the first author in his function as ISG IT director has been building a new website for Gerontechnology. The new journal website containing the current issue and

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archives is already up and running, and after further supplementation and correction of the website content, the new journal website is expected to officially replace the current one in 2017.

#### Activities in social media

In recent years, social media has been the most important tool for outreach for many institutions and companies<sup>5</sup>. It has also been the biggest communication platform where people exchange news and information<sup>6</sup>. For international visibility of Gerontechnology, it is important to have accounts and post news and events in wellknown social media websites. Gerontechnology is present on Facebook, Twitter, and LinkedIn. Further consolidation under the banner of ISG is needed. The social media websites can become an important platform that shares the updated research findings, products, and activities related to the gerontechnology domain. For example, a social media website may distribute the content pages of every new issue of Gerontechnology, or even the abstract of every article immediately after it has been published online.

#### Partnering with a commercial publisher

As mentioned earlier, Gerontechnology is independently published by the ISG. Building a relationship with an internationally recognized publisher provides a number of potential benefits to the journal: (i) a more sophisticated and widely used manuscript handling system, (ii) more effective journal marketing and other development strategies, which all will increase the number of subscriptions, resulting in a more global dissemination and visibility.

Some publishers have expressed their interest in Gerontechnology, and a partnership business plan will be discussed and developed pending board approval.

#### Increase academic prestige

Partnering with institutions and researchers With the previous effort by the editorial team, Gerontechnology has developed cooperation with a number of academic institutions, resulting in manuscript submissions and journal subscriptions from those institutions. To further increase manuscript submissions, we need closer partnerships with the existing academic institutions and new partnerships with other academic institutions. For example, we can make a list of the gerontechnology-related academic institutions from different countries and regularly invite its professors, research fellows, and students to submit manuscripts to Gerontechnology.

In the meantime, the editorial board members are encouraged to attend international and local

conferences in the gerontechnology domain to build partnerships with researchers in the subject. In addition, scholars with outstanding research achievements are to be invited as guest editors for special issues on their topic area.

#### Partnering with industries

An important purpose of the gerontechnology domain is to develop technological products and services that benefit older adults in the living and working environment. One ultimate goal of Gerontechnology is to publish papers that will become the gold standard reference for designers and engineers who work in gerontechnology related industries.

To achieve this goal, in addition to improve the number and quality of papers focusing on application, it is of importance to develop cooperation with these industries to increase the visibility of our papers in the real industrial world. For example, industrial partners could receive immediate open-access to Gerontechnology, special invitations to their employees to attend ISG conferences and master classes, and requests to publish their product related research findings in Gerontechnology.

#### SCI journal selection

Gerontechnology has a citation index in Elsevier's SCImago, but not in Thomson Reuters' Science Citation Index (SCI)<sup>7</sup>. Originally founded by the Institute for Scientific Information (ISI), SCI is the more well-known index, covering, just as SCImago, the world's leading journals of science and technology after a rigorous selection process<sup>8-10</sup>. Many factors are taken into account when evaluating journals for coverage including basic publishing standards, editorial content, international focus, and citation analysis10. Of all the listed publishing standards (peer review, ethical publishing practices, publishing format, timeliness, international editorial conventions, and full text English), timeliness of publication is of primary and fundamental importance. Gerontechnology must start to publish according to its stated frequency, and three consecutive current issues are evaluated by Thomson Reuters as soon as they are published online or in print for timeliness.

Editorial content is judged to determine if the journal's content will enrich the database or if the topic has already been adequately addressed in existing coverage. International focus is measured by the level of international diversity among the journal's contributing authors, editors, and editorial board members for the target audience. The number of citations is a significant factor determining the importance and influence of a journal in the surrounding literature of its subject<sup>11</sup>, with

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the total citation counts over the entire publishing history, recent impact factor on the literature of its subject<sup>12</sup>, and self-citation rates taken into consideration. We will keep watching the growth of these indices for Gerontechnology, and encourage our authors and editorial board members to cite the papers published in Gerontechnology.

Gerontechnology being covered in SCI journal selection, as well as in SCImago, is not only a recognition of journal's quality and influence according to its current status and publishing history, but will also bring more positive impact in the future such as further increase in the number and quality of manuscript submissions and the number of citations of published papers. With all the methods and strategies stated above, we expect the journal to submit for SCI journal selection application by the end of the two-year period of this project.

#### Different countries and cultures

ISG has six chapters for different languages and cultures, including a Dutch-Flemish Chapter, a Francophone Chapter, a German Austria Swiss Chapter, a Japanese Chapter, a North America Chapter, a Sinophone Chapter, and a Brazilian Chapter under construction 13. For now, only the Sinophone Chapter has its own academic publication named 'Journal of Gerontechnology and Service Management', publishing manuscripts in Chinese. This journal not only contributes to the local gerontechnology research, but also keeps a close relationship with Gerontechnology by publishing English abstracts there. This close relationship of the international journal and a local journal not only increases the opportunity of local researchers, but also enhances the visibility of Gerontechnology among local researchers.

Language is often a barrier for many local scholars and practitioners to publish their research findings in international journals<sup>14</sup>. Using the Journal of Gerontechnology and Service Management as an example, other chapters are encouraged to found their journals in their own native languages. The ultimate goal is to develop a series of Gerontechnology journals in different chapters in their native language to promote gerontechnology research both internationally and locally in different cultures and countries. We will also invite the local chapter presidents to organize special issues that focus on the local chapter research in Gerontechnology. Detailed

strategies for local journals include, assisting in (i) the development of plans in each chapter; (ii) soliciting editorial board members and reviewers; (iii) building a manuscript handling system; (iv) completing the publication of its first issue; and (v) publishing English abstracts of local journal articles in Gerontechnology.

#### **C**ONCLUSIONS

Tasks we intend to achieve are summarized as follows:

- (i) Reinforce the efficiency of reviewing and publishing, by:
  - Pruning the current list of reviewers and solicit new reviewers;
    - Adjusting responsibilities of editorial board members;
    - Reinforcing the management of the publishing process.
- (ii) Enhance the international visibility of Gerontechnology, by:
  - Putting the new website of the journal officially online;
  - Consolidating accounts and be more active in social media websites;
  - Completing a partnership with a commercial publisher.
- (iii) Increase the academic prestige of Gerontechnology, by:
  - Strengthening partnerships with academic institutions and researchers;
  - Developing cooperation with gerontechnology related industries;
  - Preparing and applying for SCI journal selection
- (iv) Promote gerontechnology in different countries and cultures, by:
  - Developing plans for founding local journals for each ISG-Chapter and assisting local journals in:
  - (a) soliciting editorial board members and reviewers,
  - (b building a manuscript handling system,
  - (c) completing the publication of the first issue, and
  - (d) publishing the English abstracts of local journals in Gerontechnology.

These tasks are planned for implementation and finishing in two years. These strategies and tasks will be evaluated and further discussed at the Gerontechnology associate editor meeting during the 11<sup>th</sup> World Conference of Gerontechnology in 2018.

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#### References

 Graafmans JA, Bouma H. Gerontechnology, Fitting Task and Environment to the Elderly. In Proceedings of the Human Factors and Ergonom-

### ISG Business

- ics Society Annual Meeting 1993;37(2):182-186; doi:10.1177/154193129303700205
- Bouma H, Graafmans JAM, editors. Gerontechnology. Amsterdam: IOS Press; 1992
- Bouma H, Fozard JL, Bouwhuis DG, Taipale VT. Gerontechnology in perspective. Gerontechnology 2007;6(4):190-216; doi:10.4017/ gt.2007.06.04.003.00
- Špier R. The history of the peer-review process. Trends in Biotechnology 2002;20(8):357-358; doi:10.1016/S0167-7799(02)01985-6
- Leonardi PM. Social media, knowledge sharing, and innovation: Toward a theory of communication visibility. Information systems research 2014;25(4):796-816; doi:10.1287/isre.2014.0536
- Kaplan AM, Haenlein M. Users of the world, unite! The challenges and opportunities of Social Media. Business horizons 2010;53(1):59-68; doi:10.1016/j.bushor.2009.09.003
- Garfield, E. The evolution of the science citation index. International Microbiology: Official journal of the Spanish Society for Microbiology 2007;10(1):65-70; doi:10.2436/20.1501.01.10
- Garfield E. Significant scientific literature appears in a small core of journals;1996; www.thescientist.com/?articles.view/articleNo/18038/title/

- The-Significant-Scientific-Literature-Appears-In-A-Small-Core-Of-Journals/; retrieved September 7, 2016
- Ho YS. The top-cited research works in the Science Citation Index Expanded. Scientometrics 2013;94(3):1297-1312; doi:10.1007/s11192-012-0837-z
- Testa J. The Thomoson Reuters journal selection process; 2016; http://wokinfo.com/essays/journalselection-process/; retrieved August 23, 2016
- McVeigh ME. Journal self-citation in the Journal Citation Reports; 2002; http://wokinfo.com/essays/ journal-self-citation-jcr/; retrieved September 7, 2016
- 12. Garfield E. The history and meaning of the journal impact factor. JAMA 2006;295(1):90-93; doi:10.1001/jama.295.1.90.
- Silva Santana C da. Brazilian gerontechnology. Gerontechnology 2016;15(2):63-64; doi:10.4017/ gt.2016.15.2.002.00
- 14. Garfield E. Welljams-Dorof A. Language use in international research: a citation analysis. The Annals of the American Academy of Political and Social Science 1990;511(1):10-24; doi:10.1177/0002716290511001002

#### Cor Pernot MSc: A tower of strength

Cor E.E. Pernot MSc has been a real tower of strength for the journal and was instrumental in saving the journal when it received its first hard blow.

In September 2001 Holapress Science (Valkenswaard, The Netherlands) published the first issue of Gerontechnology, but a year later in the middle of the production of the conference issue of 'Gerontechnology 2002' the publisher decided not to continue. Fortunately, the ISG obtained a loan from the 'Herman Bouma Foundation' so printing and distribution of the conference issue 2(1) was secured. But how to continue?

Although a friendly hand-over occurred of journal data and materials, panic lurked at the corner. The then small team of editors had little money and no experience in publishing, typesetting, or printing.

A free typesetting program, SCRIBUS, was found on the Internet. But it proved too complicated for both editors. I then reluctantly approached a colleague and good friend, a physicist who had no experience in publishing or typesetting, but who had proven to be helpful, accurate and reliable, and who knew computers in and out. Cor accepted to do the job for a very small fee, and ever since he did the typesetting, correction of photographs and other pictures, and registering the digital object identifiers (doi) of issues and articles. A few years later he also took over the journal website with the handling of digital versions of the journal.

After the first blow of Holapress leaving us, there were many additional small blows to the progress of the journal. But Cor always kept his cool and calmly answered all questions (even the impossible ones) and solved every technical or managerial problem. Without Cor Pernot the journal would have perished long ago. Now that he retires, I can only say that it was a pleasure to work with him



In the summer of 2012 Cor Pernot and his partner relaxed on a tourist boat in front of the Lycian rock-cut tombs of Dalyan (Turkey), after years and years of typesetting the journal and managing the journal website

and that I will be forever grateful for his work and support. *Johanna E.M.H. van Bronswijk* PhD, editor 2001-2016 E: j.e.m.h.v.bronswijk@tue.nl doi:10.4017/gt.2016.15.3.008.00