



Global Advancement of Nuclear Medicine: KSNM 60 Years of Achievements

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Nuclear medicine in Korea has been an exemplar of the changes in our profession with time, and the impact our speciality can have on the treatment of patients. The editorial article “Short Essay on 60 years’ Challenges and Achievements of KSNM,” by Drs. HG Ryoo, M Suh, JC Paeng, and JK Chung provides an important history of the development and achievements of the nuclear medicine community in Korea [1]. The accomplishments are remarkable, and Korea truly sits with the major international countries for clinical implementation, academic achievements, and professional leadership at a country, regional, and international level.

There are many parallels between Korea and Australia in the development of nuclear medicine. After the introduction of nuclear medicine departments in Australia in the 1960s, ANZSNM was established in 1969, and the 50th ANZSNM scientific meeting was held in 2020. The history of implementation of SPECT and introduction of PET in Australia is aligned with the history of nuclear medicine in Korea, and the current number of nuclear medicine studies per population is remarkably similar in both countries [1]. Both Korea and Australia have also shown leadership in the international stage, with Korea hosting the World Federation of Nuclear Medicine and Biology (WFNMB) Congress in 2006 (under the leadership of Prof Myung Chul Lee) and Australia hosting the WFNMB Congress in 2018 (with myself as President and co-Convenor).

Through the advocacy and vision of key Korean leaders including Prof MC Lee, Prof JK Chung, and Prof HS Bom, the establishment of the ARCCNM, and promotion of nuclear medicine in Asia-Oceania through AOFNMB, has been achieved. This is particularly important in view of the development of training and mentorship programs for young nuclear medicine professionals, which is a critical part of planning for the future and expanding the impact of nuclear medicine across the region.

The challenges and opportunities for Korean nuclear medicine outlined in the article [1] are highly relevant to contemporary challenges for countries across the globe. We are clearly faced with tremendous opportunities with new tracers, therapies, and the emergence of theranostics as a major direction for nuclear medicine. How should we embrace these opportunities and work across countries to achieve improved access and outcomes for patients through nuclear medicine?

A key approach must be the establishment of evidence for new diagnostic studies, and therapies, that can allow incorporation of nuclear medicine techniques into standard clinical practice guidelines and justify reimbursement from the government or private insurers. We have examples of how this can be achieved through recent multi-center clinical trials for ⁶⁸Ga-PSMA [2] and recent FDA approval for this imaging approach in prostate cancer patients [3]. In addition, theranostic-based multi-center trials of ¹⁷⁷Lu-PSMA in patients with metastatic prostate cancer have shown remarkable efficacy, and importantly through both investigator-initiated [4] and industry-sponsored [5] studies just reported. The emergence of vibrant academic cooperative groups conducting nuclear medicine trials, such as ARTnet [6], show how we can work together both within countries, and in multi-national studies, to achieve the goal of enhancing the “virtual circle” referred to in the KSNM editorial [1].

We must also work towards ensuring that the opportunities for new diagnostic and therapeutic approaches for nuclear medicine are shared among all countries and allow

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access to patients despite differences in the economic status of that country. Two recent global reviews of equipment and workforce [7], and access to radiopharmaceuticals [8], have clearly shown the challenges faced in low and middle income countries to providing nuclear medicine services to their populations. With this information we have the opportunity to advocate for improved infrastructure and enhanced workforce and training, in our region and globally. Under the leadership of new Editor Prof HS Bom, *Nuclear Medicine and Molecular Imaging* will have an important role to play in highlighting the opportunities for promotion of nuclear medicine and facilitating the evidence base for practice in the years ahead.

Compliance with Ethical Standards

Conflict of Interest Andrew M. Scott declares no conflict of interest.

Ethics Approval None.

Informed Consent None.

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