

## Comments on profession and gender statistics of the EANM membership database 2007

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Dear Sir,

In order to obtain a better insight into membership composition and to anticipate developments to come, the European Association of Nuclear Medicine (EANM) each year sends a membership form to members. In 2007, the form for the first time also included gender reporting. It has to be taken into account, however, that EANM membership is not mandatory even if the EANM is a scientific organisation representing the interests of European professionals in the field. Based on a comparison of members' statistics between national societies and the EANM, one may suppose that the EANM represents about one third to half of all nuclear medicine professionals in Europe. We herewith report and comment on the 2007 profession and gender statistics of the EANM (Membership Database as of April 18, 2007).

### Profession

A total of 3,480 members (100%) are filed in the EANM Membership Database 2007. The results show that most EANM members are physicians (Fig. 1). Technologists

rank in second place followed by physicists and radiopharmacists. Within all 3,480 members, there are 1,850 physicians (53.2%), 316 technologists (9%), 177 physicists (5%), 105 radiopharmacists (3%) and 304 other medical professionals (8.7%). The 851 instances of data not available can either account for corporate ( $n=13$ ) and society ( $n=34$ ) members or for individual members for whom professional data were not available ( $n=804$ ).

In addition to the main profession, the membership form inquired on an additional specialisation, shown as the category "Others" (Fig. 1). Members who are professionally active also outside the field of Nuclear Medicine were additionally listed in the category "Others". For this reason, a total of 3,603 answers or professional categories (103.5%) were indicated for the 3,480 EANM members. The predominant part of "Others" is represented by radiologists ( $n=100$ ) followed by industrial researchers ( $n=71$ ) and by consultants ( $n=57$ ). Technologists are not mentioned here because their category has no further professional split-up.

### Gender

Over two thirds (67%) of the 3,480 EANM members are men and 31% are women (Fig. 2). Neither profession nor gender is attributed to the 47 society or corporate members; they are reflected in the non-gender category (2%), which contains also 30 individual members for whom gender has not been specified.

Out of all 3,480 EANM members, 85% of men and 65% of women are ordinary members. Figure 3 illustrates the sex distribution (including also non-gender members) as related to membership types. The different shades of blue identify the main membership categories (ordinary, junior and associate members). Ordinary members constitute the

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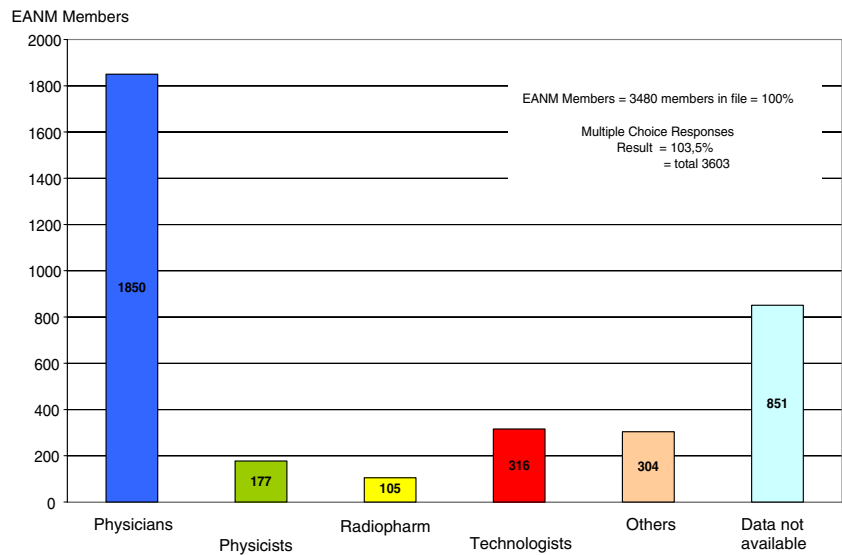
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**Fig. 1** Professional background of EANM members in 2007



largest share ( $n=2747$ ); there is a high predominance of 1,987 (72%) men against 760 (28%) women. Interestingly, sex distribution among junior members ( $n=182$ ) is by and large similar (males  $n=93$ , females  $n=89$ ; Fig. 4). Technologists are made up by about twice as much women (65%) than men (35%).

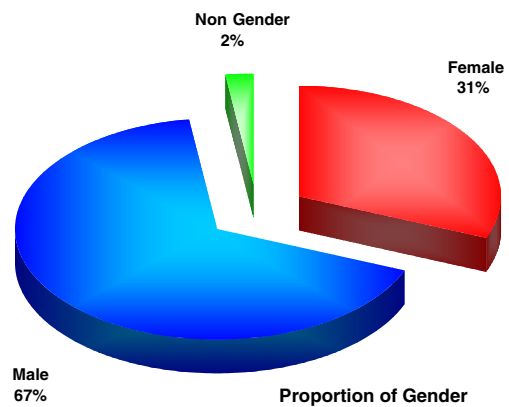
Figure 5 shows the percentages of women and men among EANM members from the top-ten countries, i.e., the ten countries with the highest member representation within the EANM (plus Denmark: rank 21). Interestingly, Greece (rank 7, 47.9%) and Denmark (rank 21, 52%) are the countries with the highest percentages of female members. On the opposite, the lowest female part is found in the US American group (rank 4) with only 18.6% of women. Gender representation may, thus, vary widely from one member country to another within the EANM.

**Discussion**

The 2007 socio-professional EANM member data show that about two thirds are male and about one third are female. Women are underrepresented as nuclear medicine physicians (one third women) and overrepresented as technologists (two thirds women). Gender distribution is more equilibrated in the other represented professions (males  $n=334$ , females  $n=283$ , non-gender  $n=2$ ). The data illustrate that up to now, the main EANM target group has consisted of male physicians. However, based on the balanced numbers of male and female junior physicians, a raise of female membership can be anticipated. The future generation of nuclear medicine specialists might, thus, progressively be represented by about as many women and men. This trend is illustrated by the observation of

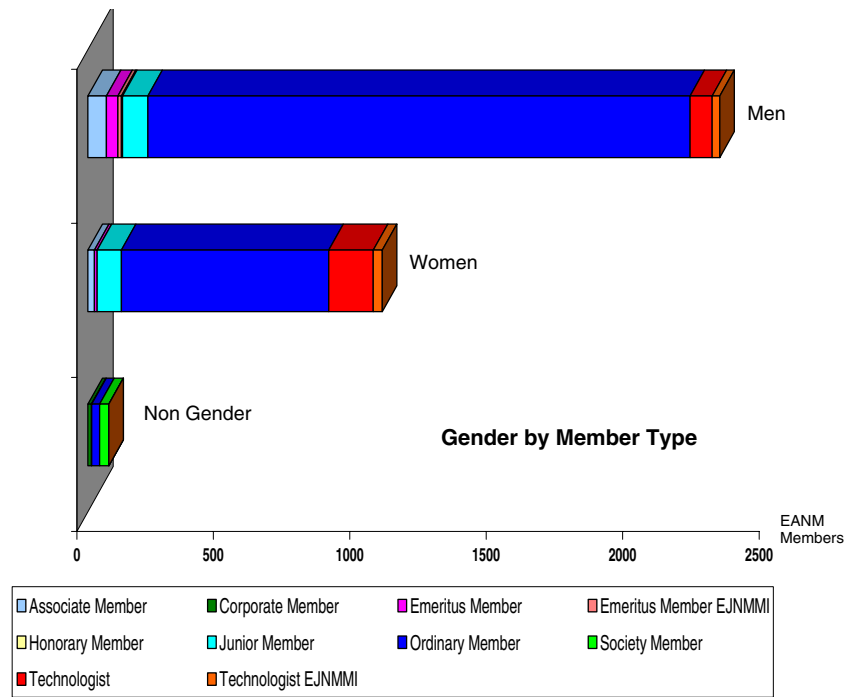
‘female only’ sessions during the 2007 EANM Congress in Copenhagen where chairs and speakers were all female.

Comparison between EANM trends and demographic trends concerning female physicians in Europe in general is quite interesting (Table 1). Compared to 64 ‘Swiss’ EANM members in 2007, the overall Swiss demographic medical data (<http://www.fmh.ch> (members statistics)), for instance, show an increasing trend of women physicians from 28.4% in 1999 to 33.6% in 2007 and a possibly increasing trend of female nuclear medicine physicians from 13% to 19% during the same time period. As another example, compared to 270 ‘German’ EANM members in 2007, Germany’s overall medical population (<http://www.bundesaerztekammer.de> (Ärztstatistik)) shows an increasing trend from 26% female physicians in 1997 to 30.6% in 2007. French demographic data in 2007 (<http://www.web.ordre.medecin.fr>) moreover show that the women part is higher in younger age categories. Other European countries show similar



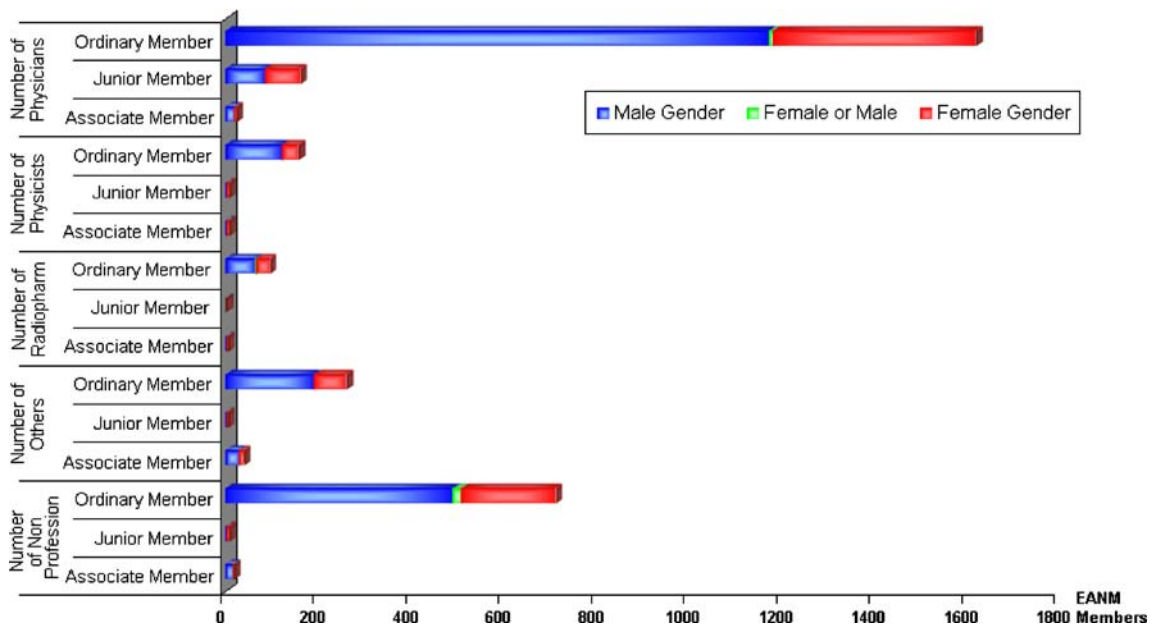
**Fig. 2** Gender distribution within all EANM members in 2007

**Fig. 3** Gender distribution and member status of EANM members in 2007



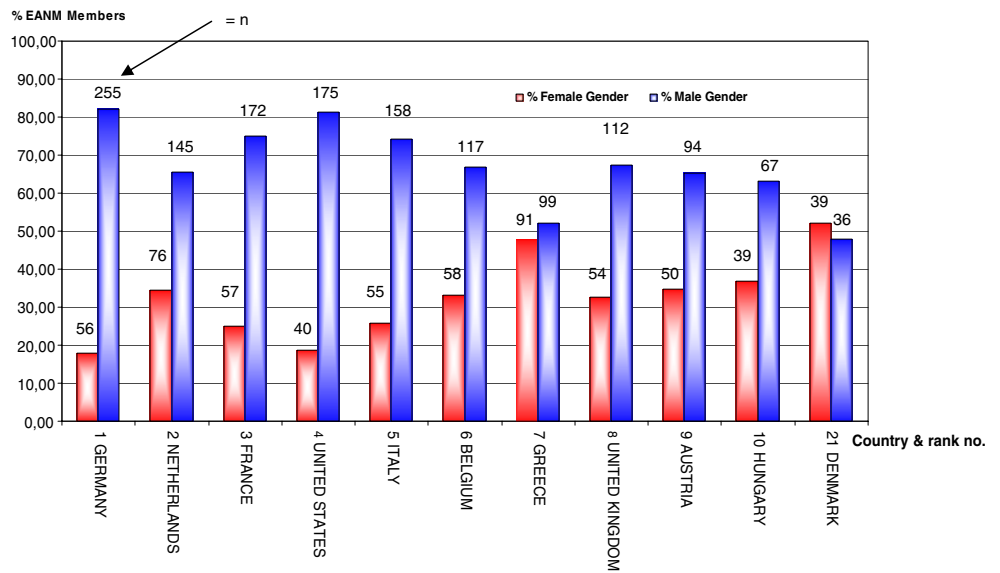
gender trends over 10 years. Within the different specialisation fields of medicine, however, female representation may vary widely from 2% in urology, 4% in surgery, 22% in radiology, 52% in general medicine and up to 57% in pedo- and adolescent psychiatry, as exemplified in Switzerland in 2007 (<http://www.fmh.ch> (members statistics)).

Representation of women within working groups, committees and the Executive Committee of the EANM is variable. Concerning high executive EANM functions, the EANM up to now has had only one woman as an EANM President and only two women as EANM Congress Presidents. In 2001–2003, the EANM Executive Commit-



**Fig. 4** Distribution of ordinary, junior and associate members of the EANM within the professional subgroups of physicians, physicists, radiopharmacists and other professions

**Fig. 5** Gender distribution among 2007 EANM members from the top-ten countries (the ten countries with the highest absolute member numbers, in decreasing order), plus from Denmark



tee has consisted of 100% of men, whereas from 2004 to 2008 is has consisted of one woman and of six men.

Within the populations of medical students in most European medical universities as well as among those who finish medical school, representation of women is around 50% or even above 50%. The discrepancy between a recent trend of a high representation of women in the student community and an underrepresentation of women exercising as physicians shows that a substantial part of them do

not work as a physician. However, a positive trend is emerging with the age pyramid. Efforts ought to be undertaken to make medicine and especially nuclear medicine training programmes and professional environment attractive for young colleagues, women and men.

Besides, as technologists make up for 10% of the EANM membership and rank on the second place within the professional categories, their status within the EANM should be further studied.

**Table 1** Examples of increasing percentage of women physicians in Europe in 2007

Country		Percentage of women physicians in general medicine (%)	Related absolute numbers	Percentage of women physicians in nuclear medicine (%)	Related absolute numbers
Switzerland	2007	33.6	9,682 out of 28,812	19	
	1999	28.4		13	
Germany	2007	30.6	124,354 out of 406,974	27.6	264 out of 955
	1997	26			
France	2006 <sup>a</sup>	39.2		32	

<sup>a</sup> Women part is higher in younger age categories