Supplemental Table 1. Fifteen general nuclear medicine journals listed in the 2020 Journal

Citation Reports (7).

| Journal |
|---|
| Journal of Nuclear Medicine |
| European Journal of Nuclear Medicine and Molecular Imaging |
| Clinical Nuclear Medicine |
| Molecular Imaging |
| Seminars in Nuclear Medicine |
| Molecular Imaging and Biology |
| EJNMMI Physics |
| EJNMMI Research |
| Annals of Nuclear Medicine |
| Nuclear Medicine and Biology |
| Quarterly Journal of Nuclear Medicine and Molecular Imaging |
| Nuclear Medicine Communications |
| Nuklearmedizin |
| Revista Española de Medicina Nuclear e Imagen Molecular |
| Hellenic Journal of Nuclear Medicine |

Supplemental Table 2. Survey questions and possible answer options.

| No. | Question | Possible answers |
|-----|--|--|
| 1 | How old are you? | <18, 18-24, 25-34, 35-44, 45-54, 55-64, or >65 years old |
| 2 | What is your gender? | Male, female, or other |
| 3 | In which country do you work? | List of 30 prefilled countries, and option to indicate another country |
| 4 | What is your academic degree? | Medical doctor (MD), doctor of philosophy (PhD), master of science (MSc), bachelor of science (BSc), master of public (MPH), and option to indicate another academic degree ^a |
| 5 | Which academic position do you hold? | None, fellow/resident, instructor/lecturer, assistant professor, associate professor, full professor, and option to indicate another academic position |
| 6 | How many years of research experience do you have? | <5, 5-10, or >10 years |
| 7 | Have you committed any of the following in the past 5 years? | Data fabrication, data manipulation/falsification, misleading (e.g. selective) reporting, plagiarism, duplicate/redundant publication, other type of publication fraud (free text field), none of the above ^a |
| 8 | Have you witnessed or do you suspect that anyone from your | Data fabrication, data manipulation/falsification, misleading (e.g. selective) reporting, plagiarism, duplicate/redundant publication, other type of |

| | department committed any of the following in the past 5 years? | publication fraud (free text field), none of the above ^a |
|----|--|--|
| 9 | Do you think that a study with positive results is more likely to be accepted by a journal than a similar study with negative results? | Yes, no, or undecided |
| 10 | Please indicate your confidence in the integrity of published work in your scientific field | 0-10 point linear scale, with 0 corresponding to no confidence and 10 corresponding to high confidence |
| 11 | Is there a co-author on any of your publications in the past 5 years who actually did not deserve this co-authorship based on the International Committee of Medical Journal Editors (ICMJE) criteria? | Yes, no, or undecided |
| 12 | Please feel free to add any narrative comments | Free text field |

Note:

^a Multiple answers possible

Category Variable Count Percentage 25-34 years 34 13.4% Age 35-44 years 79 31.1% 45-54 years 62 24.4% 55-64 years 20.5% 52 >65 years 27 10.6% Gender Male 197 77.6% 22.4% Female 57 Country of work^a 5 Australia 2.0% 5 Austria 2.0% Belgium 15 5.9% 6 Brazil 2.4% 3 Canada 1.2% Chile 3 1.2% 8 China 3.2% 2 0.8% Colombia 1 0.4% Cyprus Denmark 2 0.8% 1 0.4% Egypt Finland 1 0.4% France 17 6.7% 30 Germany 11.8% 6 2.4% India 1 0.4% Iran Israel 1 0.4% Italy 32 12.6% 6 Japan 2.4% Korea 3 1.2% Malaysia 1 0.4% Monaco 1 0.4%

Supplemental Table 3. Characteristics of the 207 survey respondents.

| | | T | [|
|------------------------------|---------------------|-----|-------|
| | Poland | 2 | 0.8% |
| | South Africa | 1 | 0.4% |
| | Spain | 13 | 5.1% |
| | Sweden | 6 | 2.4% |
| | Switzerland | 4 | 1.6% |
| | Taiwan | 2 | 0.8% |
| | Thailand | 1 | 0.4% |
| | The Netherlands | 17 | 6.7% |
| | Turkey | 6 | 2.4% |
| | United Kingdom | 10 | 3.9% |
| | United States | 42 | 16.5% |
| Academic degree | Medical doctor (MD) | 153 | 60.2% |
| | Other degree(s) | 101 | 39.8% |
| Academic position | None | 20 | 7.9% |
| | Fellow/resident | 16 | 6.3% |
| | Instructor/lecturer | 17 | 6.7% |
| | Assistant professor | 33 | 13.0% |
| | Associate professor | 51 | 20.1% |
| | Full professor | 83 | 32.7% |
| | Other | 34 | 13.4% |
| Years of research experience | <5 years | 29 | 11.4% |
| | 5-10 years | 44 | 17.3% |
| | >10 years | 181 | 71.3% |

Supplemental Table 4. Linear regression analysis on the association of several variables with overall confidence in the integrity of published scientific work.

| Variable | Category | Univariate analysis | | | Multivariate analysis | | |
|---------------------------------|------------------------------------|---------------------|-----------------|-----------------|-----------------------|-----------------|-----------------|
| | | β | 95% CI | <i>P</i> -value | β | 95% CI | <i>P</i> -value |
| Age ^a | 25-34 years (n=34) | -0.326 | -0.856 to 0.204 | 0.227 | -0.213 | -0.846 to 0.420 | 0.509 |
| | 45-54 years (n=62) | 0.388 | -0.051 to 0.826 | 0.083 | 0.347 | -0.120 to 0.814 | 0.145 |
| | 55-64 years (n=52) | 0.565 | 0.103 to 1.026 | 0.017 | 0.560 | -0.007 to 1.127 | 0.053 |
| | >65 years (n=27) | 0.357 | -0.219 to 0.934 | 0.223 | 0.396 | -0.247 to 1.039 | 0.227 |
| Gender ^b | Female (n=57) | 0.159 | -0.237 to 0.555 | 0.429 | - | - | - |
| Continent ^{c,d} | Asia (n=35) | 0.956 | 0.479 to 1.433 | <0.001 | 0.983 | 0.512 to 1.454 | <0.001 |
| | North America (n=45) | -0.104 | -0.536 to 0.328 | 0.635 | -0.193 | -0.631 to 0.244 | 0.385 |
| | South America (n=12) | 0.468 | -0.297 to 1.233 | 0.229 | 0.614 | -0.144 to 1.372 | 0.112 |
| Academic degree ^e | Other degree(s) than MD (n=101) | 0.126 | -0.212 to 0.463 | 0.464 | - | - | - |
| Academic | None (n=20) | 0.198 | -0.449 to 0.845 | 0.547 | 0.651 | -0.056 to 1.359 | 0.071 |
| position ^f | Fellow/resident (n=16) | -0.702 | -1.411 to 0.007 | 0.052 | 0.201 | -0.664 to 1.066 | 0.648 |
| | Instructor/lecturer (n=17) | -0.364 | -1.055 to 0.328 | 0.301 | -0.078 | -0.830 to 0.674 | 0.839 |

| | Assistant professor (n=33) | -0.558 | -1.092 to -0.023 | 0.041 | -0.174 | -0.795 to 0.447 | 0.582 |
|-------------------------------------|-------------------------------|--------|------------------|--------|--------|-----------------|-------|
| | Associate professor (n=51) | -0.050 | -0.512 to 0.412 | 0.832 | 0.064 | -0.437 to 0.564 | 0.802 |
| | Other (n=34) | -0.599 | -1.128 to -0.070 | 0.027 | -0.263 | -0.846 to 0.320 | 0.375 |
| Years of | <5 years (n=29) | -0.924 | -1.439 to -0.409 | <0.001 | -0.662 | -1.421 to 0.097 | 0.087 |
| research experience ^g | 5-10 years (n=44) | -0.276 | -0.709 to 0.157 | 0.211 | 0.056 | -0.458 to 0.571 | 0.829 |

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Abbreviation:

CI: confidence interval

Notes:

^a 35-44 years (n=79) was used as reference category

^b Male gender (n=197) was used as reference category

^c Europe (n=156) was used as reference category

^d Africa (n=1) and Australia (n=5) were excluded from linear regression analysis

^e MD degree (n=153) was used as reference category

^fFull professor (n=83) was used as reference category

^g>10 years (n=181) was used as reference category

| No. | Comments |
|-----|---|
| 1 | In my opinion, at least in Nuclear Medicine, metanalysis results are not far more important than "image of the month" or a clinical series of 5 patients with a rare disease. |
| 2 | I believe at least 50% (may be more) of what is published in our field is fabricated and misleading. I usually disagree to include people in papers where they just provided tools or fund but I see it happening a lot. |
| 3 | It is unlikely that if a author publishes in a peer reviewed high ranked scientific journal writes false things or engages in fraud |
| 4 | I am not sure if asking if a co-author on the own publications does deserve co- authorship is the right question. I have seen many publications from other groups were there are many co-authors that do not deserve to be on the paper though. |
| 5 | Some papers in the field of emergent therapies (local phase 2, without control arm) present data that are rarely confirmed in RCT. There should be problem in the selection of patients included in the paper, without clear notification about why some patients are excluded. I am not claiming this is fraud though, just presented data better than what they are in real life. |
| 6 | The answer to Q10 may vary based on the reputation/peer-review process of the journal. |
| 7 | Last 5 yrs is a short period for a long scientific life, especially if one switched to a city hospital. My answers would have been different 20 years ago ;-) |
| 8 | The ICMJE criteria are quite strong, and if properly applied, may lead the exclusion of people who carried out (real) technical work while senior PI will always claim authorship for (more or less real) intellectual contribution. I recently adopted the CREDIT taxonomy and which I use to transparently report the contributions of all co-authors. |
| 9 | It is a common rule to add some co-authors from your department or hospital in articles |

Supplemental Table 5. Narrative comments provided by 17 respondents at the end of the survey.

| 10 | It is obvious the field is being flooded with numerous un-scientific papers which |
|----|---|
| | are either inherently incorrect or intentionally misleading. EJNMMI is a cesspool |
| | for these. I don't know what to do about these but I vigorously agree they must be |
| | stopped! |
| 11 | I am aware of a case where an individual that clearly deserved coauthorship has |
| | not been named author on publication |
| 12 | 10 years ago it happened that co-authors were listed whose contribution was not |
| | in full agreement with the ICMJE but in the last 5 years I never observed such |
| | inadequate co-authorship |
| 13 | Would help to define integrity in q10. I think willful misconduct is 1 thing, |
| | accidental misconduct is another thing, and poor science is a third thing. Many |
| | articles are being published with poor science but for the sake of this |
| | questionnaire I still considered them with integrity though you could argue that |
| | these paper lack integrity. |
| 14 | Journals should be open to publish studies with negative results and studies that |
| | are trying to reproduce previous work. The goal of journals to always be the first |
| | to report leads to lack of scrutiny and risk of data fabrication/manipulation. |
| 15 | The scientific world and its journals have gradually become much more money |
| | dependent, bought and in fact often corrupt, so that access to major clinical (non- |
| | radiological, non-nuclear) journals is close to impossible, unless we as nuclear |
| | medicine (or radiological) specialists are part of a major and influential clinically |
| | based work group or are supported by pharma in a way that can pave access to |
| | the highly esteemed journals, the scientific and impartial varnish of which is |
| | often crackled. In addition, open access sounds as a good idea, but soon only |
| | authors/institutions, who are willing to pay for that will get their manuscripts |
| | accepted, almost no matter how good they are. |
| 16 | Unclear about what is purpose of the questionnaire. |

| 17 | 15 years ago, a colleague (well known, now deceased) published my work, which |
|----|--|
| | has been agreed that it could not be published a year before, because there were |
| | not enough data to conclude with a statistically significant analysis. |
| | He sent me the published article, without having contacted me to review, and my |
| | name, which should have been the first of the author list, was put in |
| | antepenultimate <remaining blinded="" identity<="" keep="" part="" respondent's="" th="" the="" to=""></remaining> |
| | concealed> |
| 17 | Problems may arise from clinical databases that different groups use (with or |
| | without knowing from each other) to collect study data and similar publication |
| | may arise. |
| 18 | While these things do happen, but my experience has been it's on a minuscule |
| | level. Scientific medical research is majorly ethical and accurate. |
| 19 | Reviewers are often incompetent in study design, statistics, selection bias, |
| | exclusion bias They also tolerated too short series to be conclusive, no |
| | validation group for confirmation after proposition of results based on data from |
| | one study group, and almost always confusion between correlation and |
| | equivalence of methods. Very often no references about previous similar studies |
| | using an alternative method or modality. |
| 20 | Sometimes it is not possible to know for sure the answers to any of these |
| | questions when it concerns someone in one's own department or other |
| | collaborating sites. |
| 21 | Always difficult to determine if someone contributing patients to a study should |
| | be a co author. I tend to err on inclusion on authorship, especially when there are |
| | small, but real, contributions to the work which may be viewed as borderline for |
| | authorship per ICMJE. It is problematic to exclude someone whose contribution |
| | is borderline as they often have a greater opinion of their contribution than others |
| | in the author list. |
| 22 | PSMA therapy is all the hype. Lots of "beautiful" results |