

6. Peer-reviewed publications

A comprehensive computer literature search of PubMed/MEDLINE database was carried out independently by two different collaborators of the EOC Academic education, Research and Innovation Division. The last database search was performed in March 2022. The string search was built using keywords based on the different EOC sites.

The following inclusion criteria were used in the selection process: a) peer-reviewed articles listed in PubMed/MEDLINE with at least one co-author affiliated with EOC; b) final publication of the article in a scientific journal issue in 2021. Articles listed in PubMed in 2021 as "Online ahead of print" before their publication in final or print format were therefore excluded from the current analysis.

Journal Impact Factor (IF) and Journal IF Quartile of the scientific journals in which EOC researchers published their peer-reviewed articles were also evaluated using data from the Journal Citations Reports (JCR) 2020.

The scientific activity carried out by the EOC researchers, based on the inclusion and exclusion criteria mentioned above, resulted in 815 peer-reviewed articles. The year 2021 showed a significant increase of the EOC scientific production - as illustrated in Figure 4 – confirming the uptrend reported the previous year.

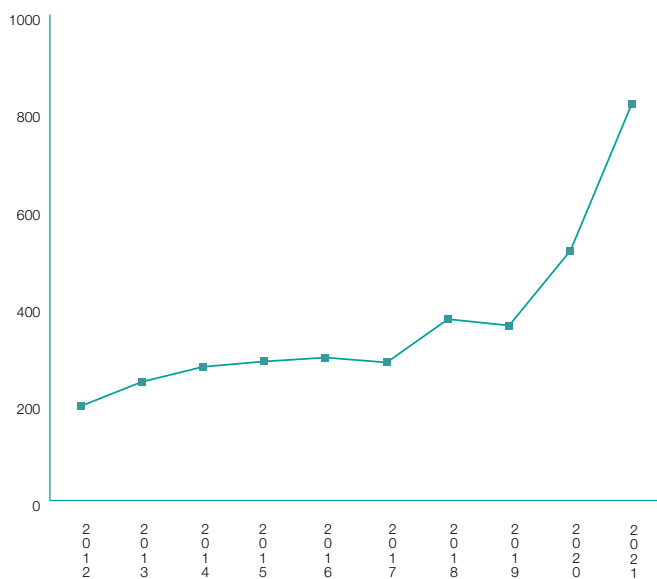


Figure 4. Number of EOC peer-reviewed articles published by the EOC researchers in the last 10 years.

Most of the EOC peer-reviewed publications in 2021 were original articles or reviews (709, 87%). Notably, 14% (N=98) of them were published on high impact factor journals (Journal IF ≥ 10). Key data are summarized in the figures below.

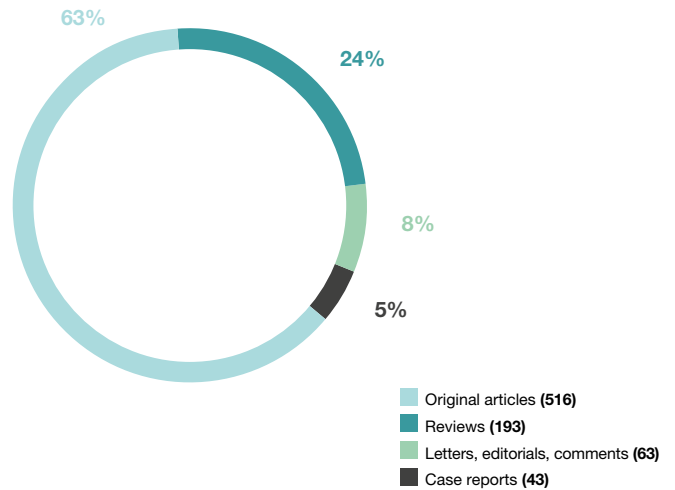


Figure 5. Number and type of the peer-reviewed articles published in 2021 (N = 815). Meta-analyses, surveys and research letters are classified as original articles. Systematic reviews without meta-analyses, case reports with review of the literature, protocols and consensus papers are classified as reviews.

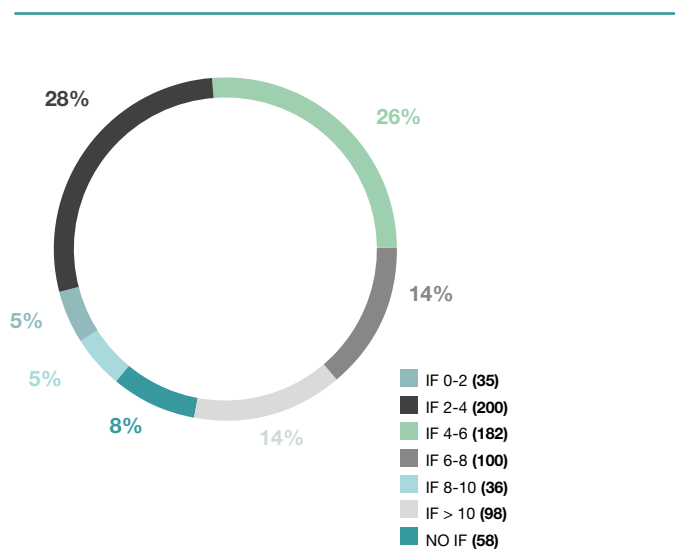


Figure 6. Journal IF of the scientific journals in which peer-reviewed original and review articles were published in 2021 (N = 709).

¹Journal IF is defined as citations to the journal in the Journal Citations Reports (JCR) year to items published in the previous two years, divided by the total number of scholarly items (also known as citable items - these comprise articles and reviews) published in the journal in the previous two years. A Journal IF of 1.0 means that, on average, the articles published one or two years ago have been cited one time (Source: Clarivate Analytics).

²Scientific journals are assigned to a subject category by JCR and ranked by Journal IF. The Journal IF rank is then transformed in a percentile value. The Journal IF percentile is used to calculate the Journal IF Quartile. Q1: Journal IF percentile ≥ 75 ; Q2: $75 <$ Journal IF percentile ≤ 50 ; Q3: $50 <$ Journal IF percentile ≤ 25 ; Q4: $25 <$ Journal IF percentile (Source: Clarivate Analytics).

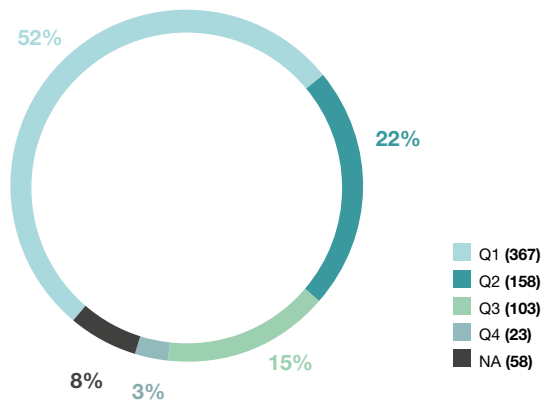


Figure 7. Journal IF Quartile of the scientific journals in which peer-reviewed original and review articles were published in 2021 (N = 709). Journals can appear in multiple subject categories; in this case, the highest Journal IF Quartile was selected. Scientific journals without Journal IF are classified as NA.

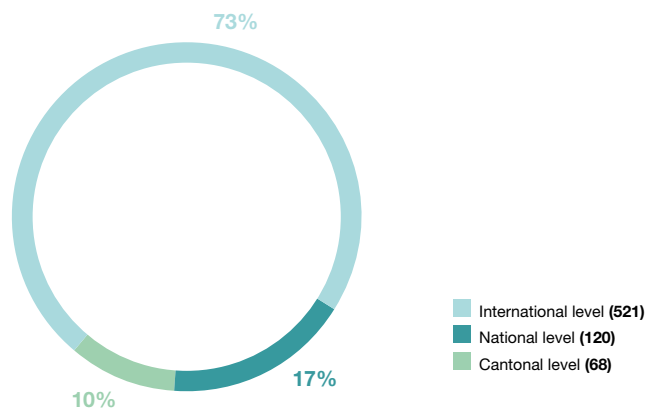


Figure 8. Type of scientific collaboration (local, national or international) based on the peer-reviewed original and review articles published in 2021 (N = 709).

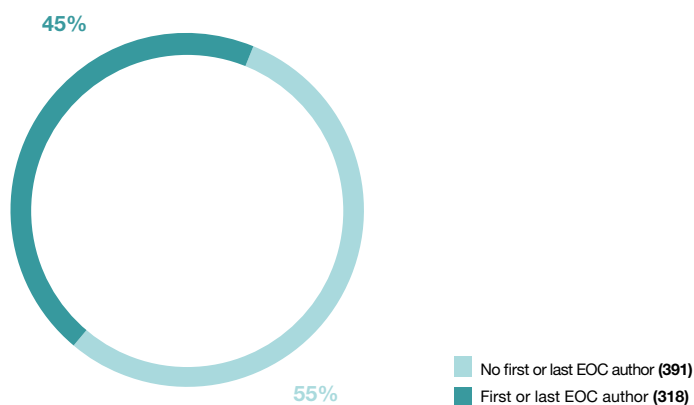


Figure 9. Number of peer-reviewed original and review articles published by EOC researchers as first or last author in 2021 (N = 709).

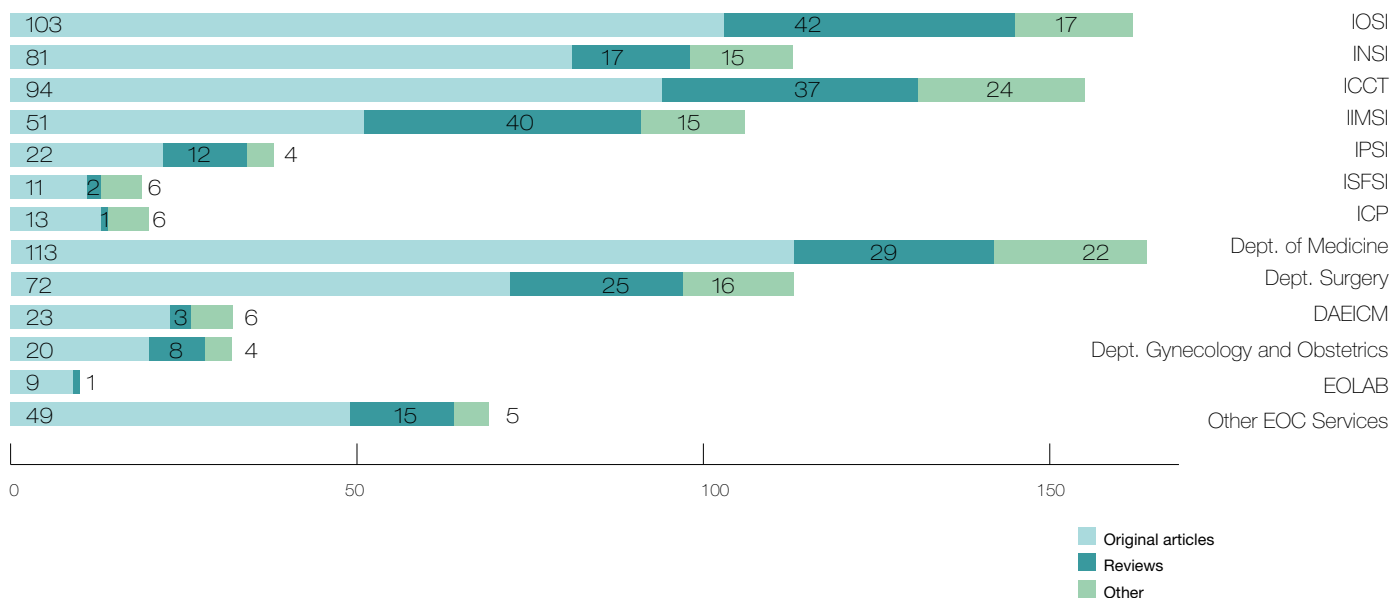


Figure 10. Number of peer-reviewed articles published by each EOC Institute and Department in 2021. Publications shared among different EOC Institutes/Departments were counted for each Institute/Department involved. LRT-EOC publications are included in the EOC Institute/Department with which the concerned laboratory is affiliated. Less than 10% of the EOC scientific publications were from LRT-EOC.

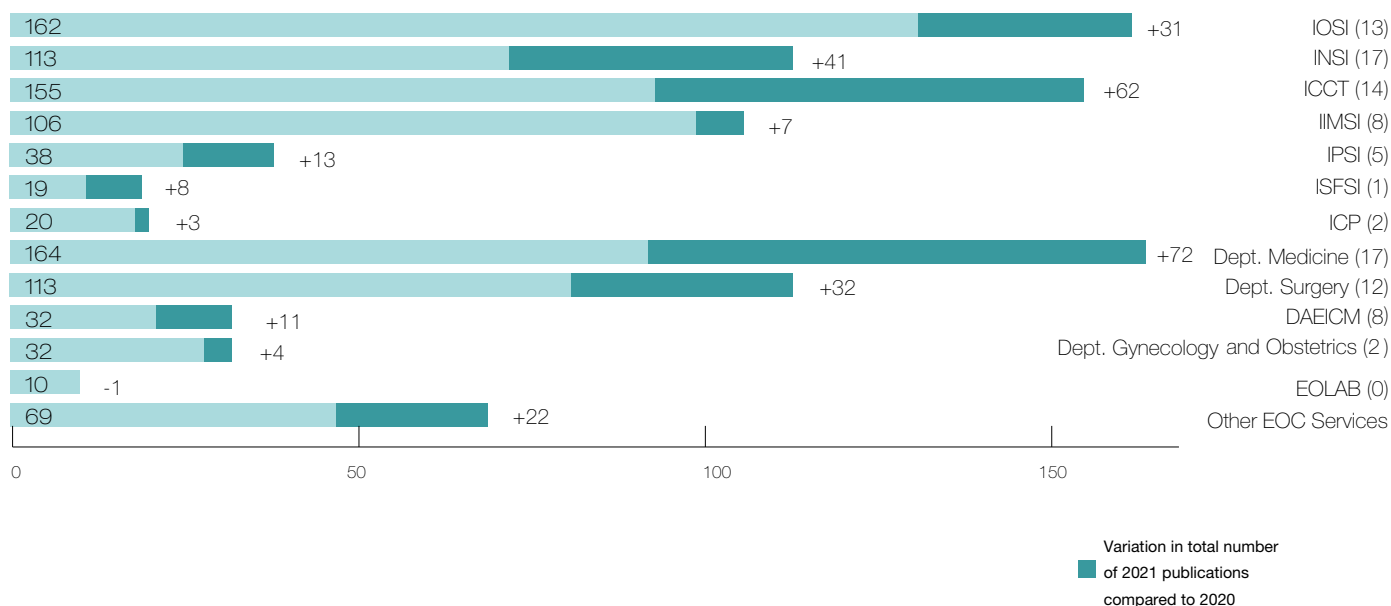


Figure 11. Comparison of the total number of peer-reviewed publications in 2021 (shown on the bar) versus 2020 by the EOC Institutes and Departments. Publications shared among different EOC Institutes/Departments were counted for each Institute/Department involved. The name of the Institute/Department with the related number of Professors and PD are indicated on the vertical axis.

Overall, EOC research activities saw a noticeable increase in productivity in 2021 compared to 2020. Beyond the quantitative metrics, a significant increase of original articles and reviews published in Q1

journals was reported in 2021, as a surrogate marker of the improved quality of the scientific outputs at the EOC hospitals and labs.

>> The list of publications is available on the EOC website at the following [link](#).