

Visualizing Impact with Publication Data

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Introduction

The Research Medical Library (RML) contributes to clinical and academic research at MD Anderson Cancer Center by providing resources, education, and services to the faculty and staff. Librarians and scientific editors are experts in navigating the scientific writing and publishing processes. Librarians provide expert searching skills to complete literature and systematic review searches which increase the quality and rigor of the research.¹ Scientific editors perform substantive and copy editing of journal articles, reports, and original research. Editorial services may improve the acceptance rate of publications.²

The library tracks published materials that are co-authored or contributed to by library staff. These materials are visualized annually on a library dashboard to demonstrate the impact of expert library services on publishing at MD Anderson.

Methods

RML staff created Google Scholar alerts for each editor and librarian who participates in the academic publishing process, in order to capture library staff acknowledgements and co-authorships. Each alert includes name variations, including middle initials and shortened names.

Alerts are received by email and reviewed by administrative staff for accuracy. Applicable publications are added to an EndNote database. At the end of the fiscal year, the data is downloaded from EndNote to Excel.

The library's Clinical Librarian cleans the data and adds additional data for context. This includes Impact Factors, which are not included in PubMed or Web of Science records, and funding information, which is often inaccurate or missing. Lastly, data is visualized using Tableau Public (Version 2021.1.0).

Results

The RML was acknowledged or co-authored on 225 publications which were published in 142 journals. Publication types (Fig 1) include, original research (69%), review articles (18%), meeting abstracts (4%), editorials, case reports, preprints, practice guidelines, and other publications like a book chapter, a technical note, a book review, and a database review.

27.6% of publications supported by RML editors and/or librarians appear in journals with an impact factor above six (Fig 2).

158 of the publications were identified as being supported by federal, institutional, or private funds. At least 10% of reported publications do not have funding due to the nature of the output.

Approximately 46% of reported funding sources are from the NIH, including the Cancer Center Support Grant (Fig 3). Further research is required to determine why this number is lower than expected.

Conclusion

The RML's publication dashboard demonstrates the impact and contributions of MD Anderson library staff. More research needs to be completed to show the overall impact on research quality.

<https://mdanderson.libguides.com/librarydashboard>

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1. Rethlefsen ML, Farrell AM, Osterhaus Trzasko LC, Brigham TJ. Librarian co-authors correlated with higher quality reported search strategies in general internal medicine systematic reviews. *J Clin Epidemiol.* 2015 Jun;68(6):617-26.
2. Meyer HS, Durning SJ, Sklar DP, Maggio LA. Making the First Cut: An Analysis of Academic Medicine Editors' Reasons for Not Sending Manuscripts Out for External Peer Review. *Academic medicine.* 2018;93(3):464-470.

Library Staff Co-authored and Contributed to Publications in 142 Journals in 2020; 27.6% of Publications are in Tier 1 or 2 Journals (Impact Factor > 6.0)

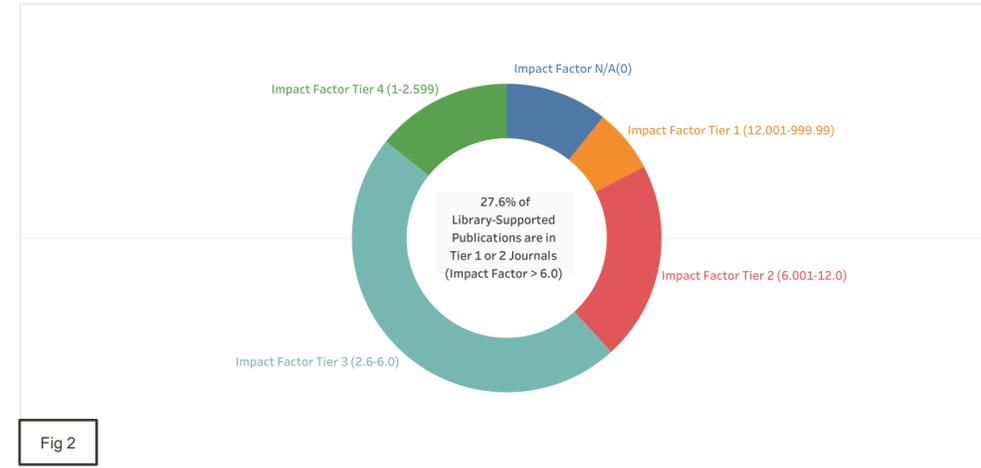


Fig 2

Library Staff Co-authored and Contributed to 225 Publications in 2020

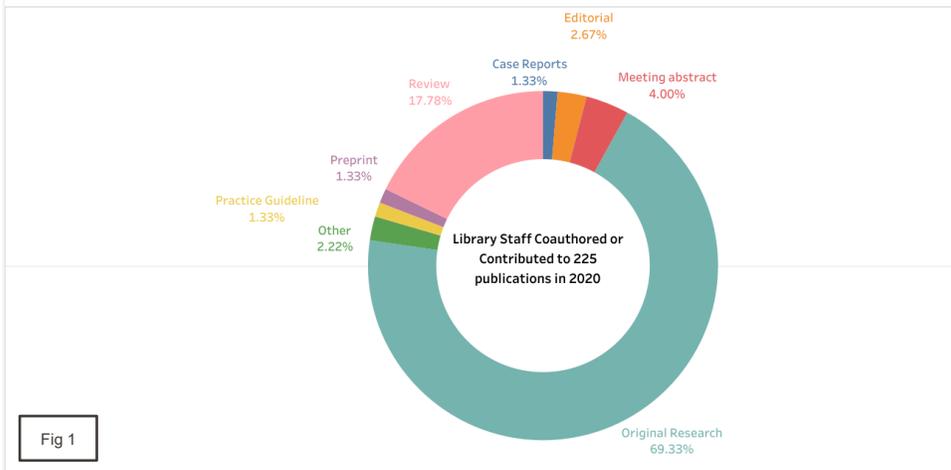


Fig 1

158 out of 225 RML Coauthored or Contributed Publications in 2020 have a funding source acknowledged. A publication may have multiple funding sources.

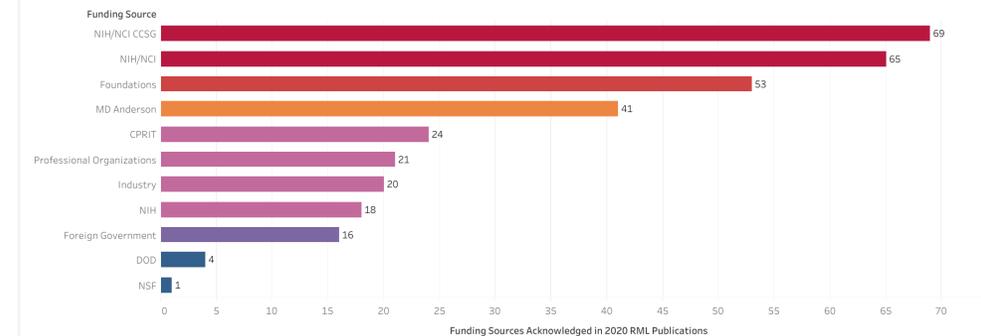


Fig 3