

Communicating and Visualizing Publication Data for Departments, Institutes, and Centers

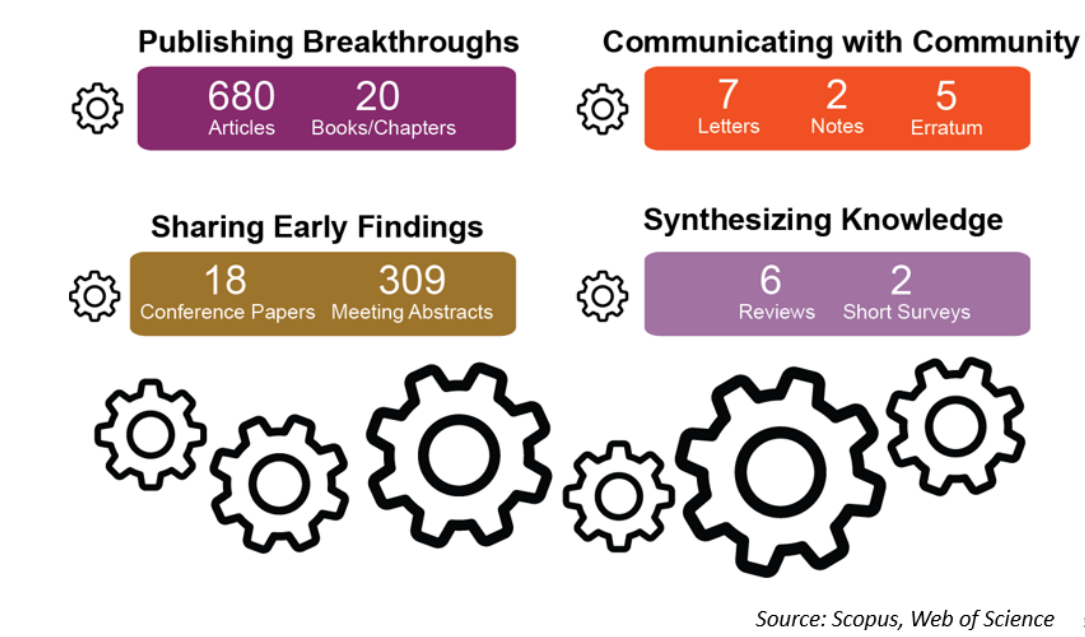
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Galter Health Sciences Library & Learning Center, Feinberg School of Medicine, Northwestern University

One common aspect of bibliometric services in biomedical libraries is to communicate and visualize publication data for groups, such as departments, institutes, or centers. While these groups may have access to bibliometric data through library subscriptions to Scopus or Web of Science, or through open tools, such as Publish or Perish, they may need assistance in finding meaningful ways to communicate or display this data in reports, presentations, websites, or through other mediums.

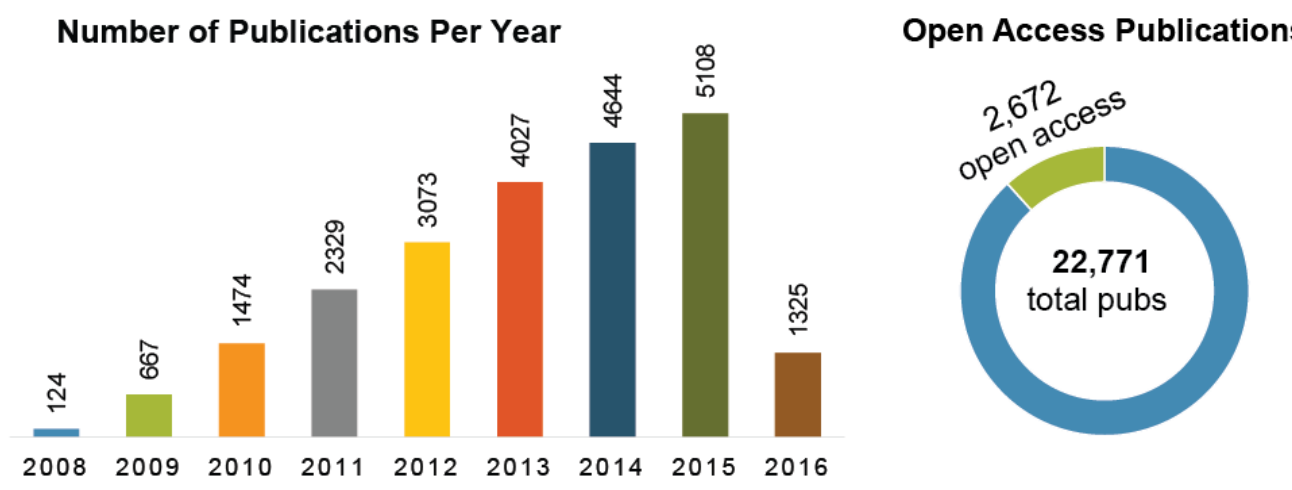
Productivity

visualizations used to assess the quantity of output

Knowledge Production



There are 22,771 publications with CTSA funding in Web of Science from 2008 to 2016.

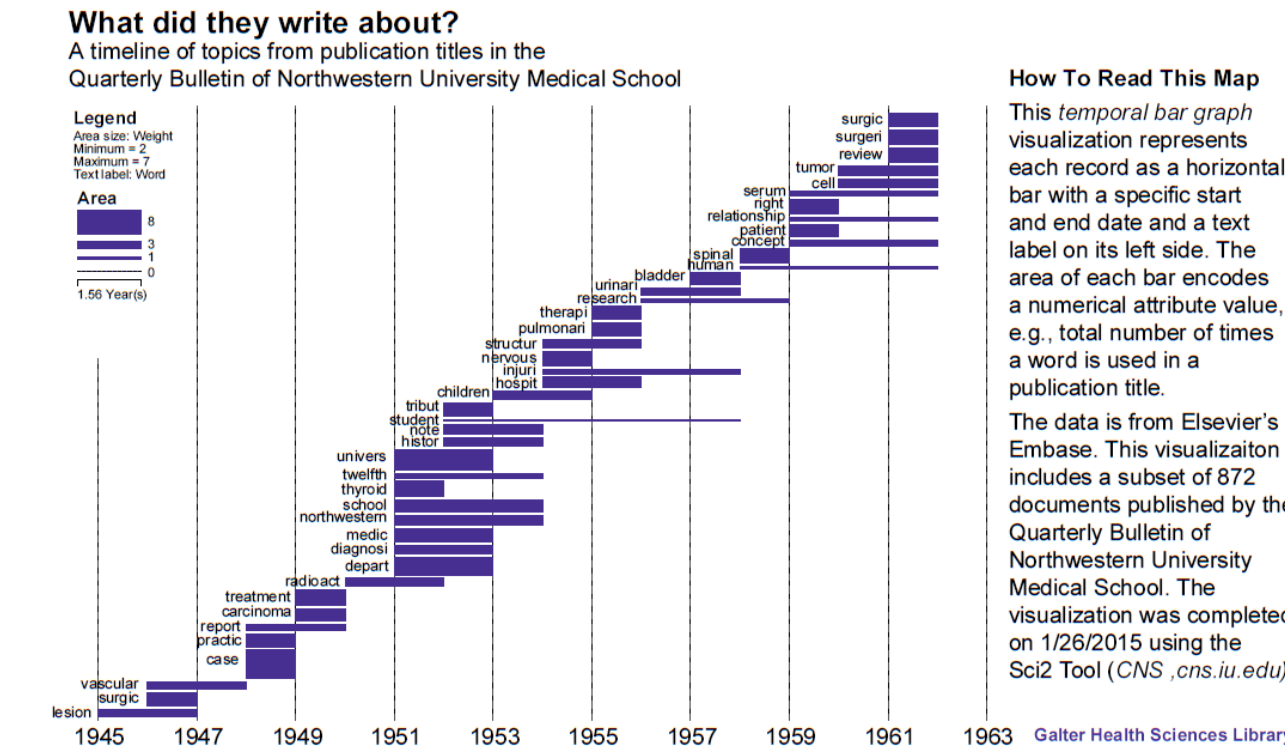
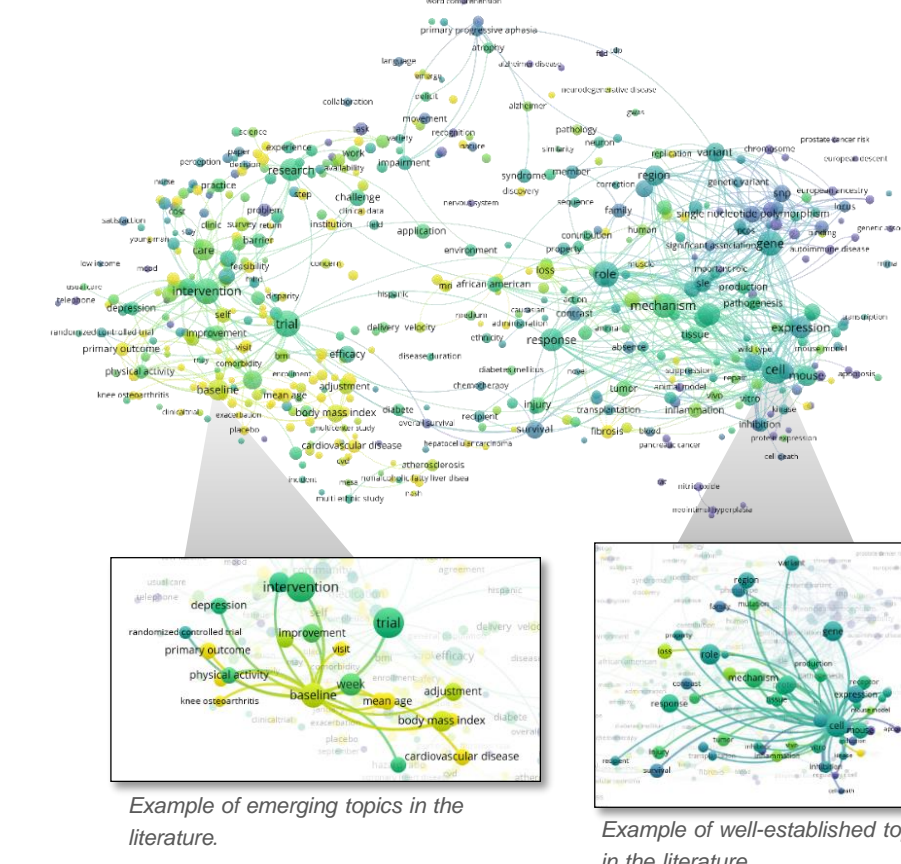


Topical Trends

visualizations used to assess trends in research topics over time

Emerging Research Topics

Average year of publication for research areas supported by NUCATS



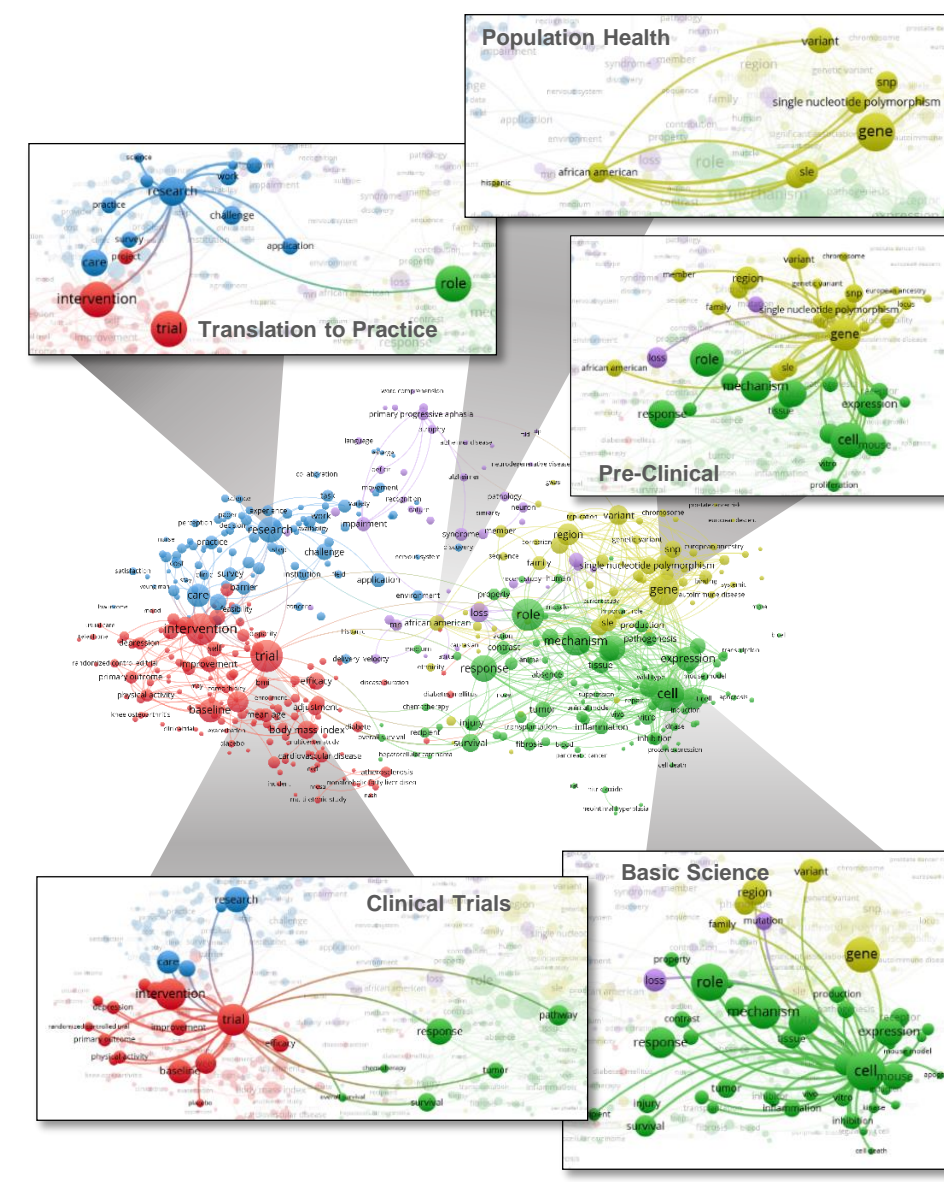
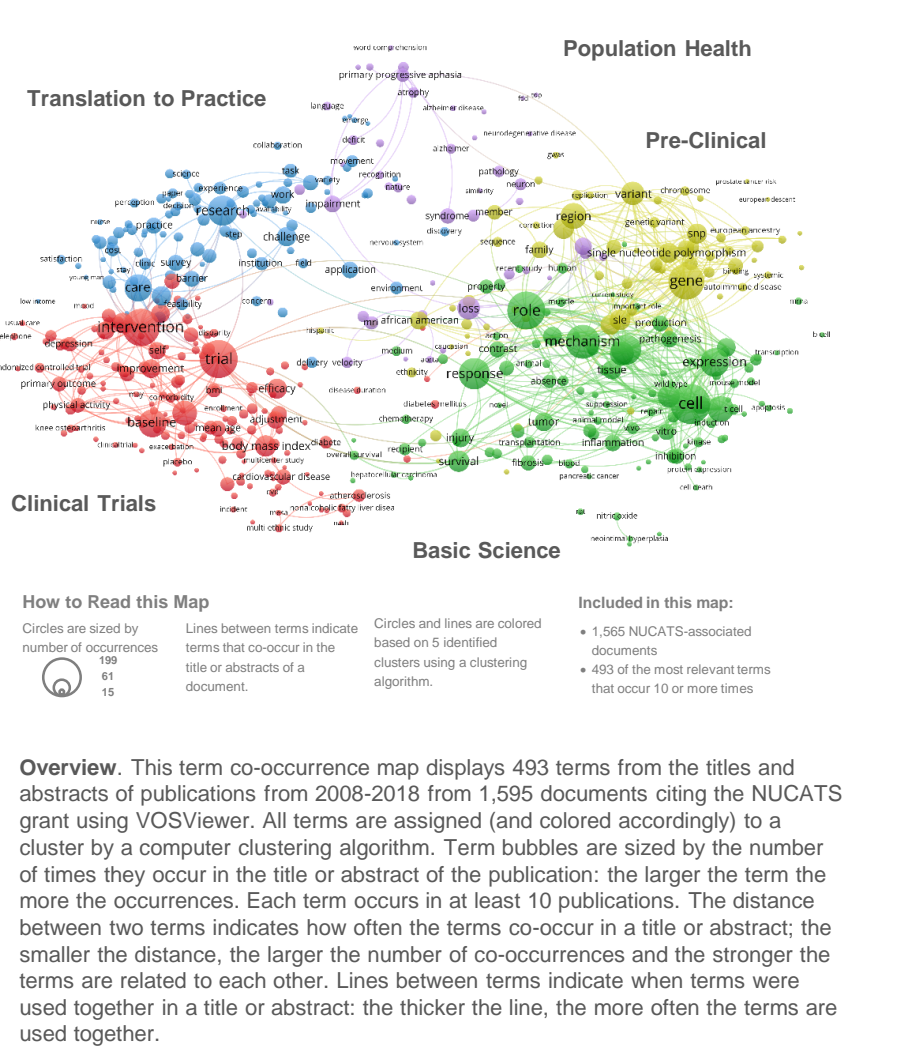
Overview. This term co-occurrence map displays 493 terms from the titles and abstracts of publications from 2008-2016 from 1,585 documents citing the NUCATS grant using VOSviewer. Terms bubbles are colored on a scaled basis on their average year of publication, and are sized by the number of times they occur in the title or abstract of the publication; the larger the term the more the occurrences. The distance between two terms indicates how often the terms co-occur in a title or abstract; the smaller the distance, the larger the number of co-occurrences and the stronger the terms are related to each other.

Research Areas

visualizations used to assess prominent areas of knowledge production

Topical Clusters of Research

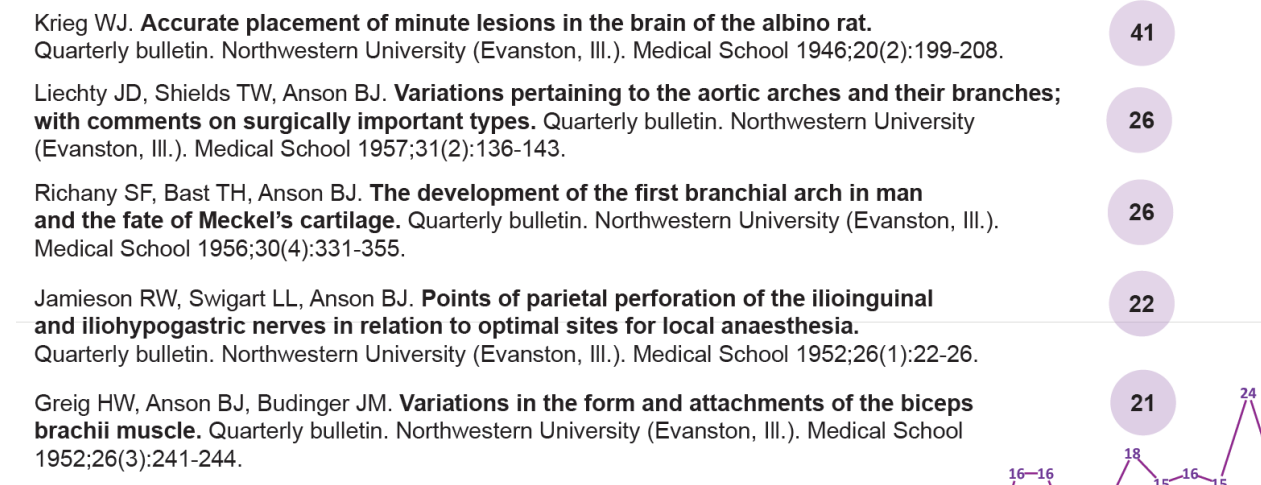
Highlights of the translational continuum supported by NUCATS



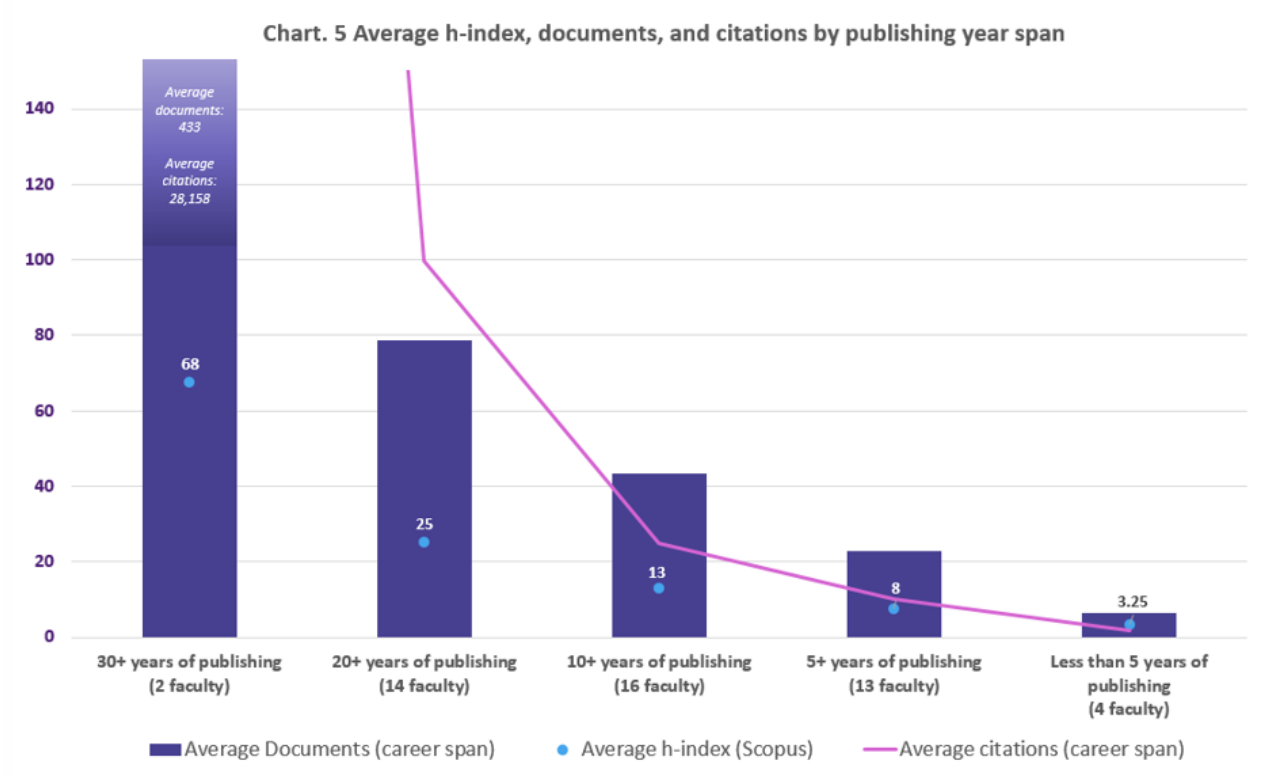
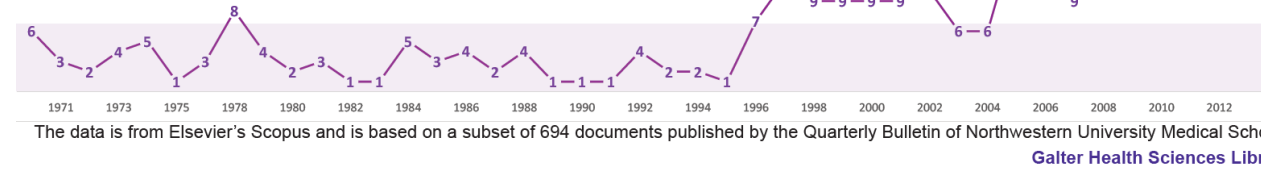
Citation Impact

visualizations for viewing research outcomes or impacts

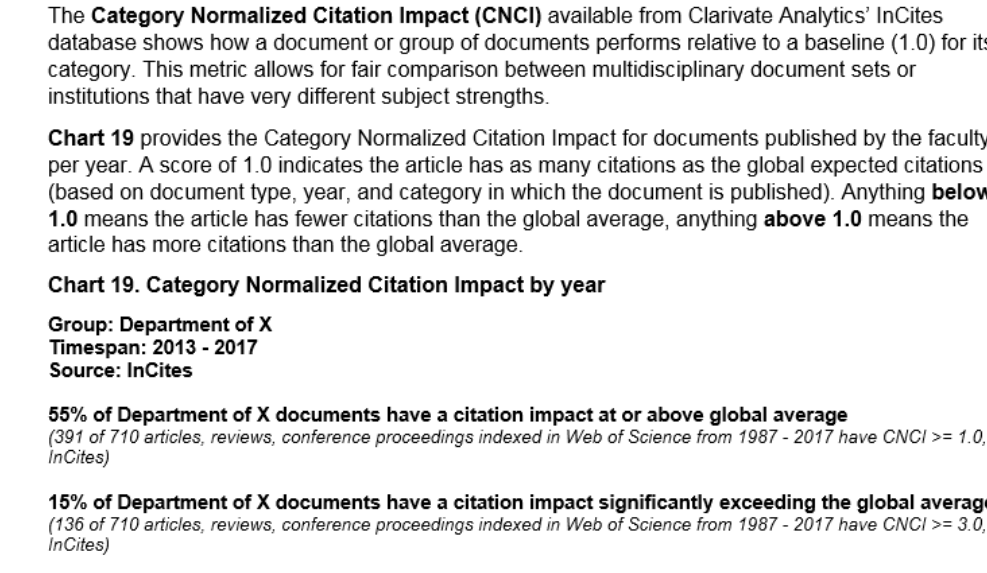
Top 5 most highly cited articles



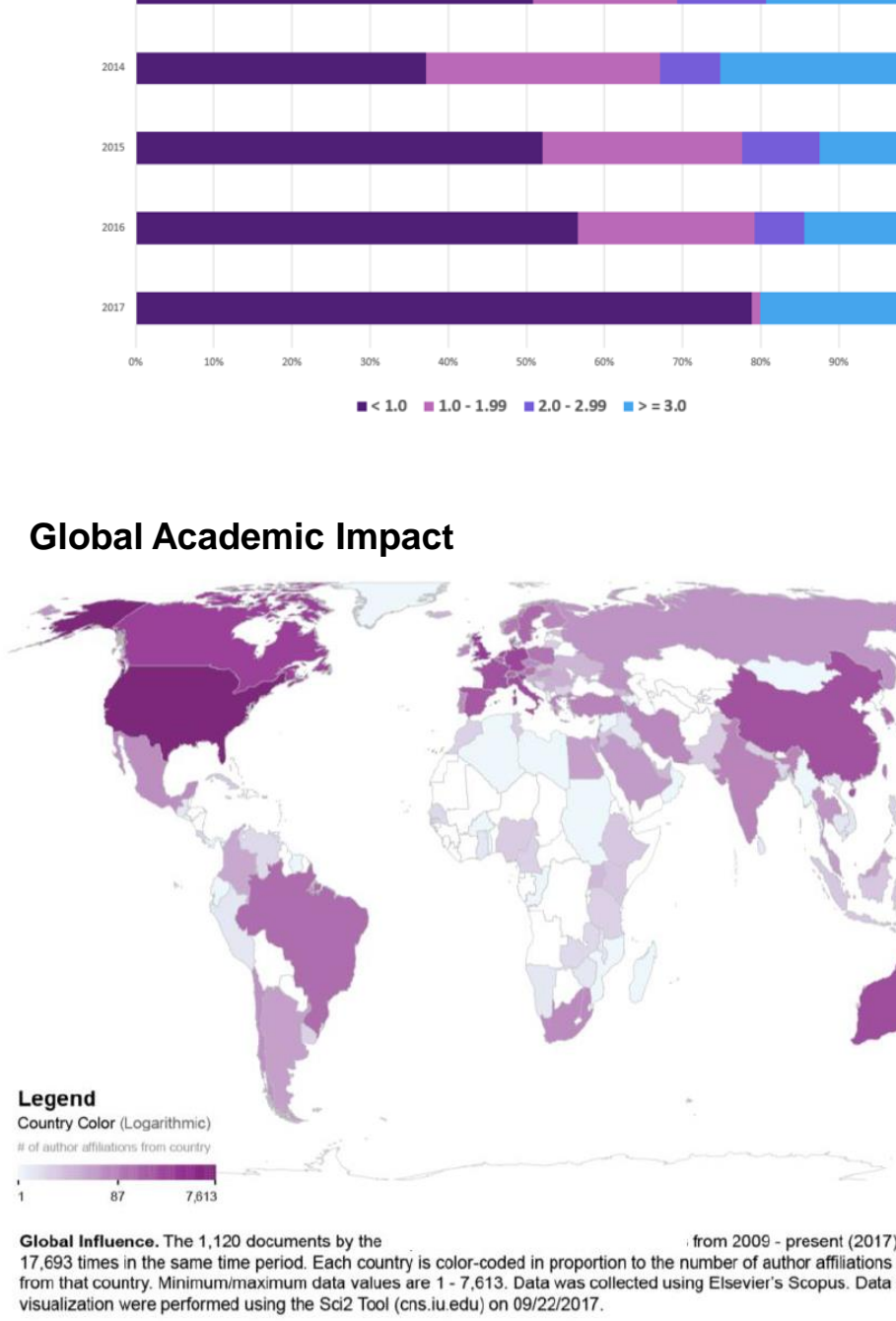
Citations over the years



Category Normalized Citation Impact



Global Academic Impact

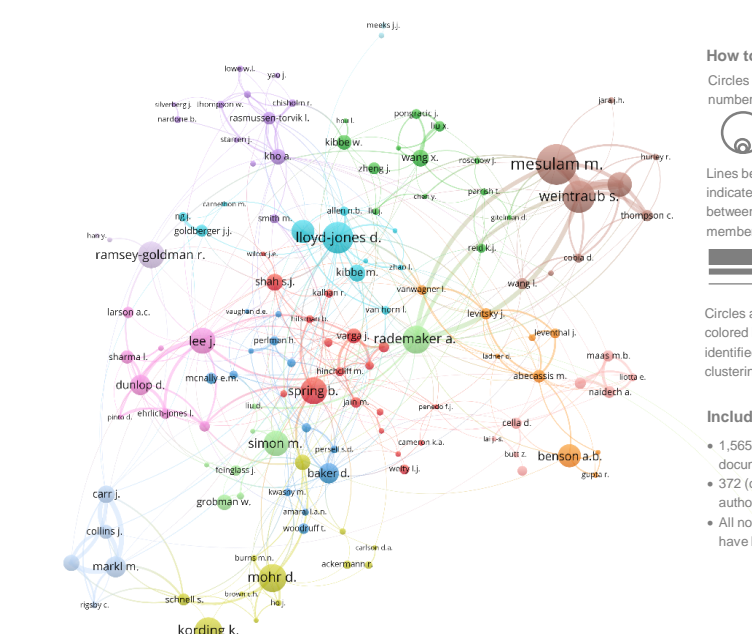


Collaboration

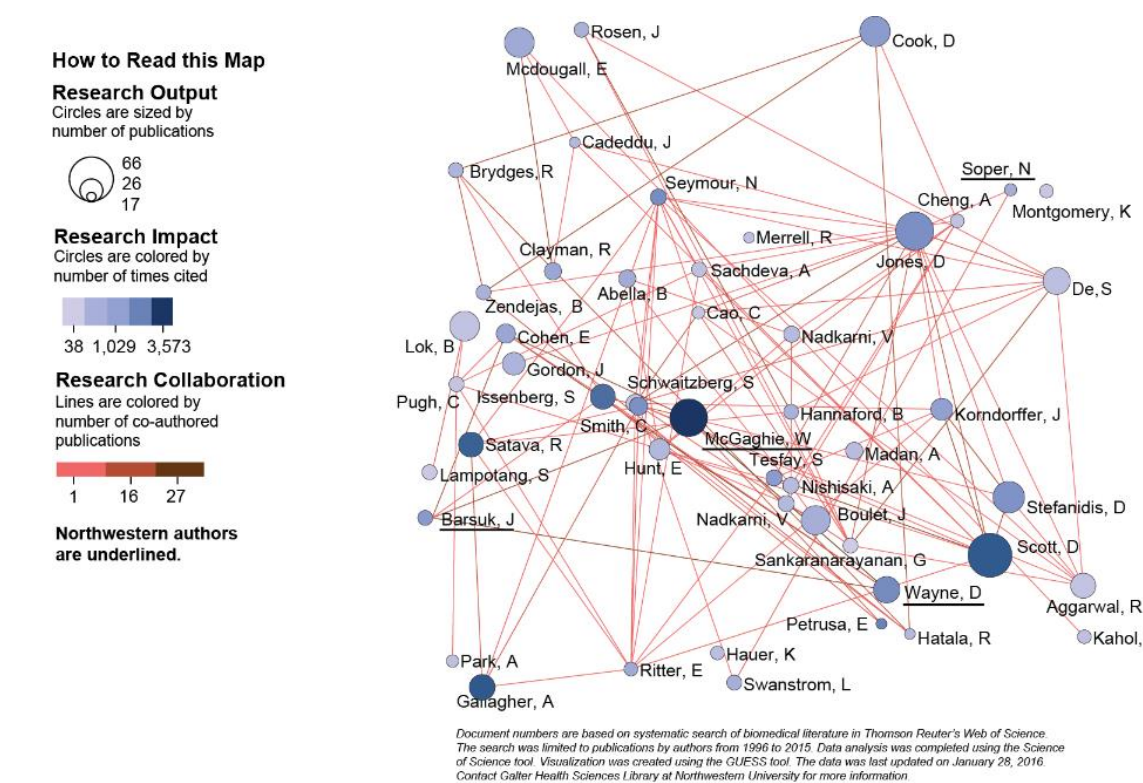
visualizations for assessing research collaborations

Co-author Collaborations

88% of NUCATS-published authors have collaborated with one or more NUCATS members.



Research Collaborations



Overview. The map shows NUCATS co-author collaborations in documents citing the NUCATS grant from 2008-2018. Circles represent authors and are sized by the number of published documents and the lines between the circles are sized by the number of co-author collaborations. Colors represent clusters related authors. This map was created using VOSviewer and represents the 136 NUCATS authors contributing at least 5 documents (out of 420 total NUCATS authors) from the pool of 1,585 documents indexed in Scopus.

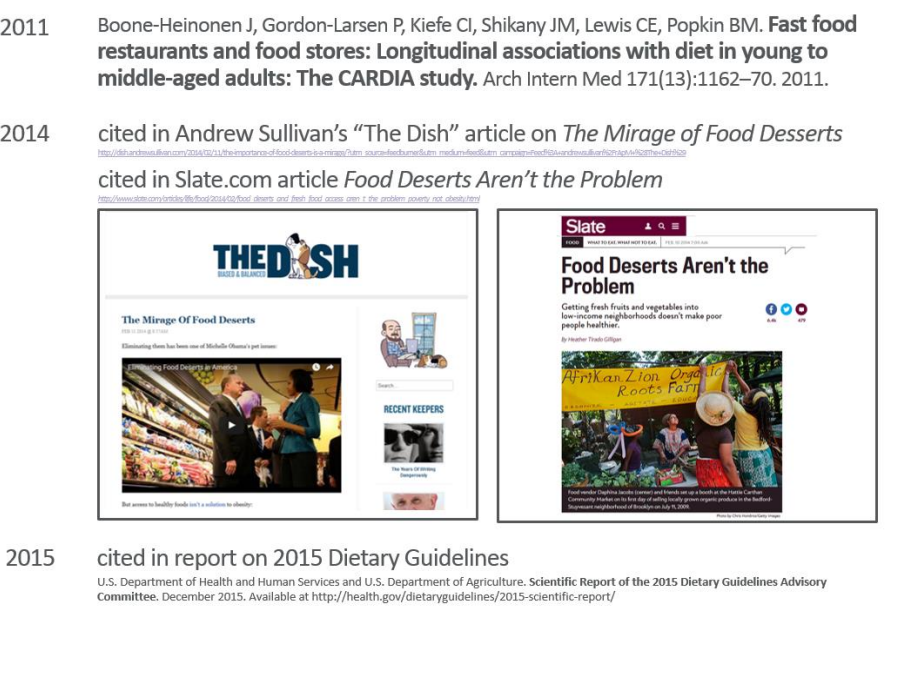
Alternative Metrics

visualizations for assessing dissemination and impact

Policy and Guidelines: Dividing up the Results



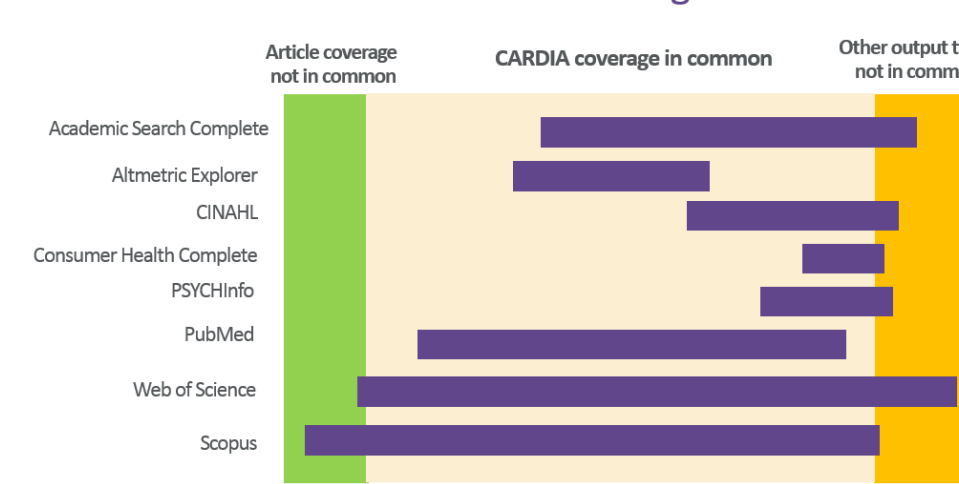
Gathering Attention: Altmetric and popular news



“Our work has been cited in policy documents by the CDC and National Academies Press, demonstrating that our work is leading to widespread changes and traversing the translational sciences spectrum.”

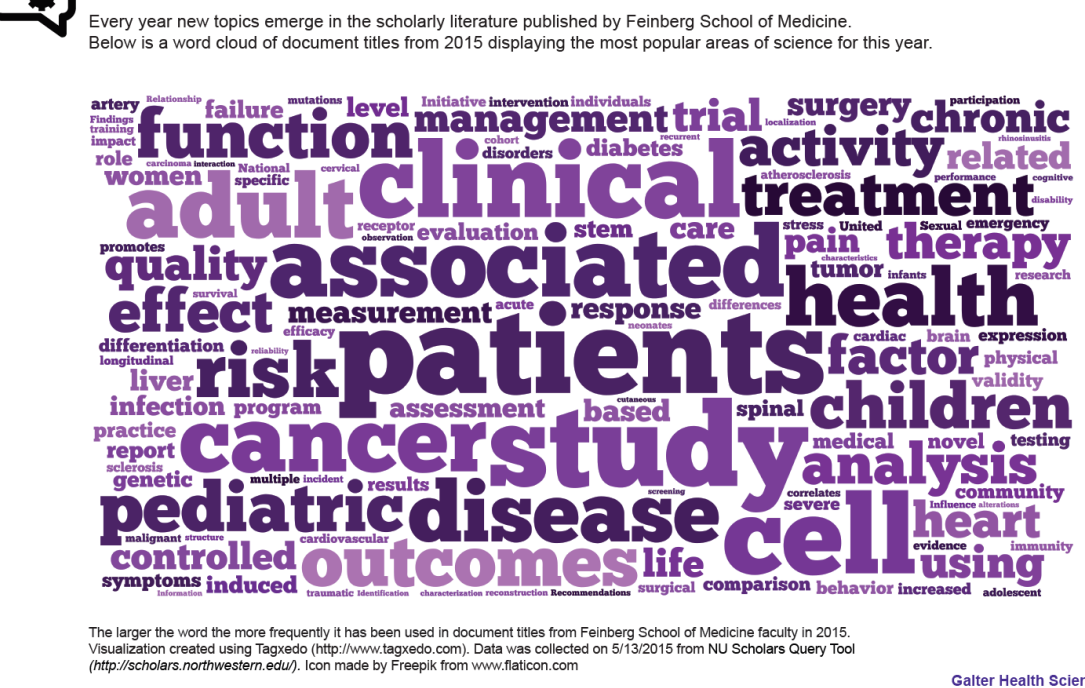
Miscellaneous

Literature Data Sources: Coverage

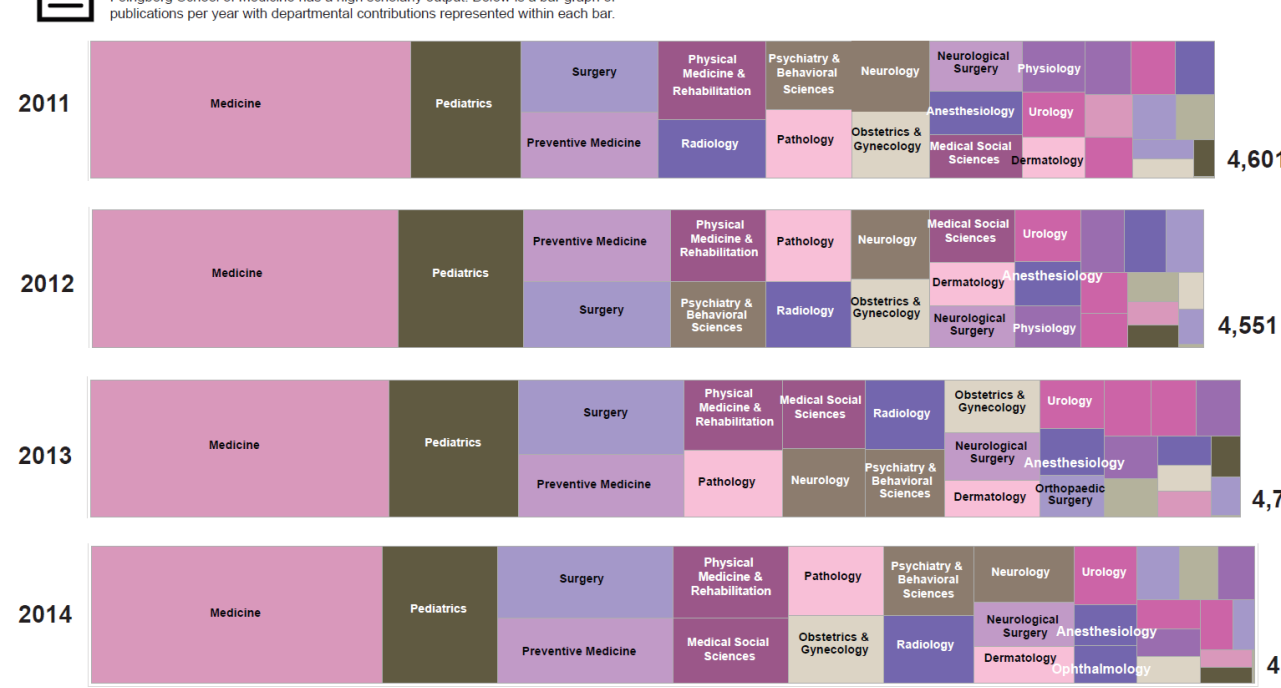


Databases for future searching: Embase, CNHAI, Google Scholar, LexisNexis, WorldCat.

Current topics in the science



Communicating science

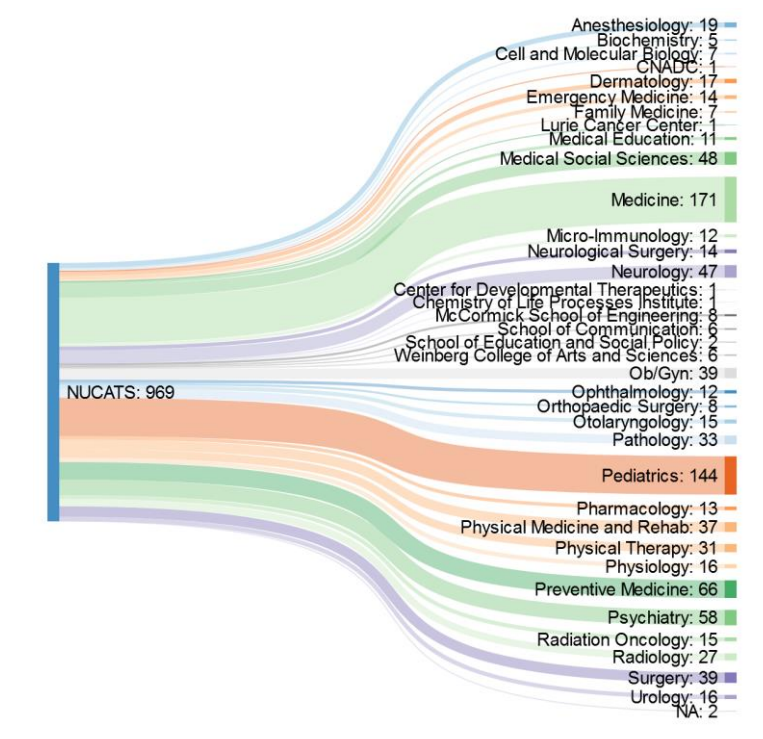


Membership

visualizations for identifying key partners or members in a research group

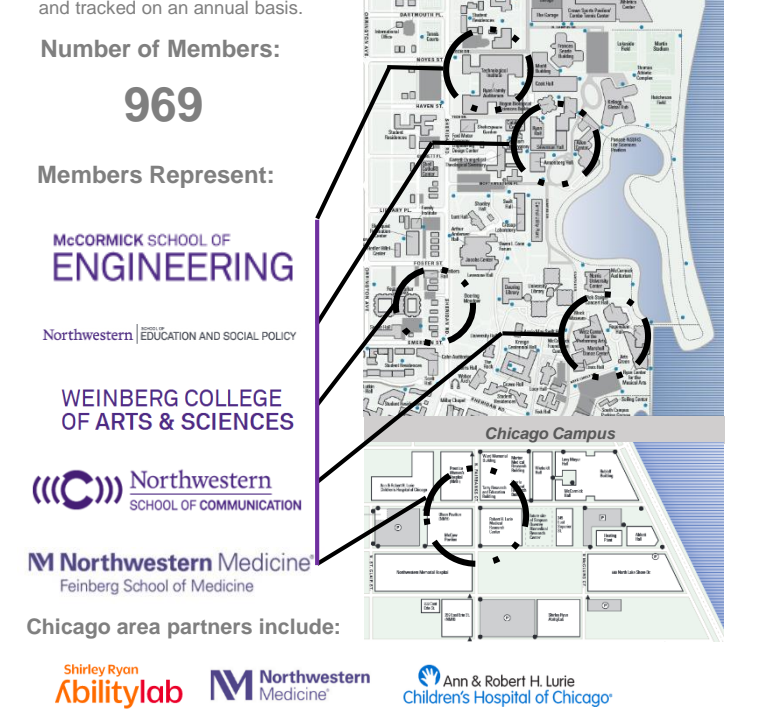
Membership

NUCATS has 969 members from across Northwestern University. Membership is strongly encouraged and tracked on an annual basis.



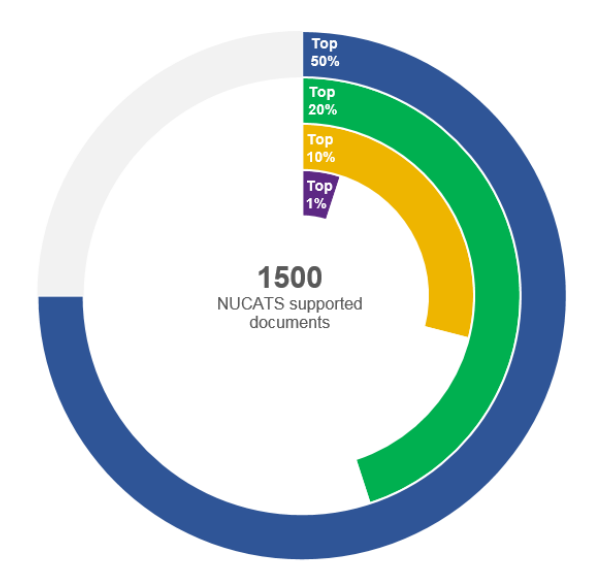
Membership

NUCATS has 969 members from across Northwestern University representing 5 of the 12 colleges. Membership is strongly encouraged and tracked on an annual basis.



Citation Impact

75% of NUCATS supported documents rank in the 50th percentile or above for citation impact in their respective subject areas.



There are 1,500 NUCATS supported documents from 2008-2018 indexed in InCites. Each document is assessed on the number of citations received when compared with similar documents (i.e. same document type, published in same year, assigned to same subject category) and ranked on a scale of 1-100, with 1 indicating no citations, to 100 indicating a top ranked document in a subject area.