

New study identifies who “leads the pack” in veterinary medicine and animal health research

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Using citation analysis, Science Watch, the Thomson Scientific bimonthly newsletter, has determined that The U.S. Department of Agriculture (USDA) and the Department of Agriculture and Rural Development of Northern Ireland (DARDNI) are leaders in the field of veterinary medicine and animal health.

Citation analysis provides insights

Two different types of influence were measured: “total citations,” the number of times an institution has been cited in other published scientific works, and “citation impact”, the average number of times each paper produced by the institution was cited. The USDA leads the field in total citations, and DARDNI leads in citation impact.

Tracking influence

Christopher King, editor of *Science Watch*, explains why citations were used to conduct this analysis: “Citations are an acknowledgement of intellectual debt — a direct demonstration of influence in a given subject area. Tracking these institutions in terms of total citations and citation impact paints a realistic picture of the most influential institutions — the thought leaders — in a given field.”

Included in this extensive survey were over 140,000 papers, published from 1994 to 2004, from 150 Thomson Scientific-indexed journals categorized as veterinary sciences, veterinary medicine, and animal health. Significant findings include:

- The USDA is the only institution to rank in the top ten for both total citations and citation impact
- Eight of the ten most highly-cited institutions are based in the U.S.; the others are the University of Guelph in Canada, and the University of Utrecht in the Netherlands
- European institutions account for six of the ten institutions with the highest impact; three institutions are in the U.S., and one (CSIRO) is Australian
- DARDNI earned its ranking as the institution with the highest impact with an average of more than ten citations per paper for 272 papers published in the period studied

- University of California - Davis boasts the highest output of papers for all institutions ranked in the survey — approximately 2,500 papers during the 11-year period

The study also revealed which were the most highly cited authors in the field of veterinary medicine. The author with the highest number of citations (from the USDA) published 153 papers, with a total of 2,264 citations. The number of papers per author ranges from 16 to 153 papers. Interestingly, the author with the fewest published papers had the highest number of cites per paper: 42.94 citations.

Full rankings available

For an extended list of the top 25 veterinary/animal research institutions, the 25 most highly cited authors, and the 15 most cited-journals in veterinary medicine, go to:

http://sciencewatch.com/may-june2005/sw_may-june2005_page1.htm

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