## Free Microsoft Word plug-in facilitates reproducible research in academic medical science

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Reproducible research, in which statistical programming and documentation is sufficient so that others may replicate results and the research process, is gaining widespread practice in biostatistics and many other areas of science. Biostatisticians have a responsibility to implement reproducible research, yet there are many challenges to doing so in a collaborative research environment within an academic medical center.

Popular tools for reproducible research, such as knitR and R Markdown, rely on plain text editors for document preparation. Despite the merits of these programs, Microsoft Word remains the mainstay, and sometimes singular option, for manuscript preparation in academic medicine. To our knowledge, there are no broadly accessible tools to integrate document preparation in Word with statistical code, results and data.



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With this need in mind, we developed StatTag (stattag.org), a free plug-in for conducting reproducible research using Microsoft Word and Stata, SAS or R. StatTag provides an interface to edit statistical code directly from Word and allows users to embed statistical output from that code (estimates, tables, figures) within Word.

This talk will present: 1) an overview of reproducible research and the challenges specific to biostatistics units within clinical and translational science; 2) an introduction to StatTag, including worked examples; and 3) future work to promote the widespread adoption of reproducible research within the academic medical community.

Learn more at a lecture sponsored by UB's Clinical and Translational Science Institute BERD (Biostatisitics, Epidemiology and Research Design) core and the School of Public Health and Health Professions Department of Biostatistics:

## StatTag: A Reproducible Research Tool for Clinical and Translational Science

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4 p.m.

125 Kimball Tower

**UB South Campus** 

This is a general audience talk.









