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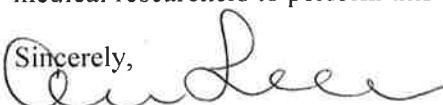
Dear members of the NSF Review Panel,

I am writing in support of the proposal titled "Interactive Machine Learning for Text Analysis", which was submitted by Jeffrey Heer. I am eager to collaborate with Prof. Heer and his team.

I am on the faculty of the Stanford University School of Medicine, Department of Psychiatry and Behavioral Sciences. I am a nationally recognized expert in Addiction Medicine. I have published widely in the social sciences, including educational material, public policy perspective pieces, and over 30 peer-reviewed articles in leading medical journals such as the Journal of General Internal Medicine and the New England Journal of Medicine.

I believe that the social sciences are on the cusp of a revolution, as computational methods transform our ability to analyze qualitative data. For years, the social sciences have been bifurcated into those who do quantitative research, and those who do qualitative research, with the qualitative researchers taking a distinctive back seat. But as Einstein said, "not everything that can be counted, counts", and I am just thrilled that computational scientists like Jeffrey Heer and his students are finding ways to apply the power of automated text mining to qualitative data to legitimize these data, as well as making this kind of research more accessible, powerful and efficient. I am convinced their work will have a profound impact on our understanding of human behavior, with direct applications to the field of medicine.

I look forward to collaborating on this research and using the tools that Heer and colleagues propose in my own work studying addiction. Online correspondence and the text portions of electronic medical records are rich data sources for better understanding addictive disorders. Due to stigma, individuals with addictive disorders are often more willing to communicate in rich detail online with other addicts about their addiction, even when they won't discuss these problems with their health care providers. Health care providers, in turn, are reluctant to enter an 'addictive disorder' on the diagnosis line, making it difficult to analyze medical records for addiction. They will, however, document drug seeking and other stigmata of addiction in the text portion of the 'history of present illness' within the electronic medical record, even when they won't code addiction on the diagnosis line. To comb through every online conversation and electronic medical record by hand is untenable. A software program that enables medical researchers to perform this analysis would be miraculous.

Sincerely,

Anna Lembke, MD