Reviewer's report

**Title:** Deafness mutation mining using regular expression based pattern matching

**Version:** 1  **Date:** 6 September 2007

**Reviewer:** Thomas Van De Water

**Reviewer's report:**

This paper is clearly written and describes how literature searches can be improved in their efficiency with the novel PREP software developed by the author and cites a Bioinformatics.org website where this search software is available. There is a clear demonstration of the utility and advantage of this software when searching Pub Med for deafness genes. The benefits of this software are greatest when the task is complex and PREP based literature searches lose their advantage when the task is simpler where multiple key words will suffice. The use of this PREP software is easy and has a distinct advantage over multiple key word searches by its ability to eliminate false positives in a complex search. My understanding is that this type of pattern matching based literature search as put forth in PREP is unique and I am not aware of search software that uses a similar logic. PREP version 1.0 was first released by Chris Frenz on July 2005 on Bioinformatics.org and its utility is described on a bioinformatics web page. PREP software is freely available from the bioinformatics web site to all who wish to use it in their literature searches. I highly recommend PREP search software as a labor saving approach to any individual who has a complex literature search to perform. The addition of a section that describes the specific steps a reader should take to set up this novel PREP search program on their computer would be helpful.

**What next?:** Accept after minor essential revisions

**Level of interest:** An article of outstanding merit and interest in its field

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests