Case 2: Sleep Disordered Breathing

**Approach**

To explore currently federal funded projects and their publications associated with sleep disordered breathing, I used Research Portfolio Online Reporting Tools to find out:

* From 2000 – 2019, which administering institute / organizations have the highest number of publications related to “sleep disordered breathing”?
* Within these publications, what topics are talked about most related to “sleep disordered breathing”?

**Tools**

To solve the problems stressed in the approach, I used NIH Research Portfolio Online Reporting Tools, which an intuitive, easy-to-use tool for navigating and analyzing large-scale funding data published on National Institutes of Health (NIH) website.

**Results**

From the chart below, we can see that NCI (National Cancer Institute) has the highest number of publications which is 33,190, followed by NIA (National Institute of Aging), NIDDK (National Institute of Diabetes & Digestive & Kidney Diseases, etc.

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From perspective of universities research, we can see that The University of Texas MD Anderson Cancer Center has the greatest number of publications which is 16,596, followed by St. Jude Children's Research Hospital, Johns Hopkins University, University of Michigan At Ann Arbor, etc.

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Within these publications, by implementing clustering technique, we can see some topics have been extensively discussed, such as Sleep Apnea, Diabetes Mellitus, Alzheimer Disease, Career Development, etc. These topics are worth to be explored.

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To view the full detail of clustering result, [Clink link](https://projectreporter.nih.gov/reporter_hchartresults.cfm?icde=46752916&ddparam=&ddvalue=&ddsub=&btype=C&pball=&dType=2)