



MINDS THAT SPEAK HEARTS THAT LISTEN

CATEGORIZING DISCOURSE WITHIN RESEARCH CORRESPONDENCE









Research campuses experience departmental isolation, but most breakthroughs occur through interdepartmental discourse.









Better categorization of passive interdepartmental discourse could accelerate the potential for these breakthroughs.









Can a community text bank like reddit be used to create a model for differentiating disciplines from each other?

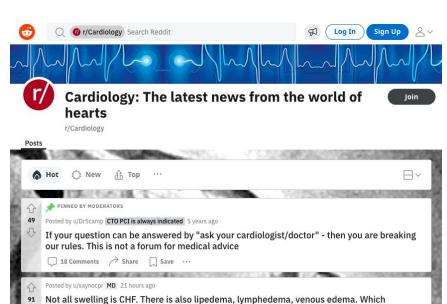
Can this investigation reveal key words that exist at the overlap and extremities of these disciplines?



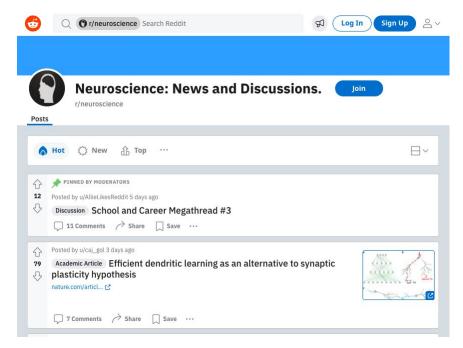








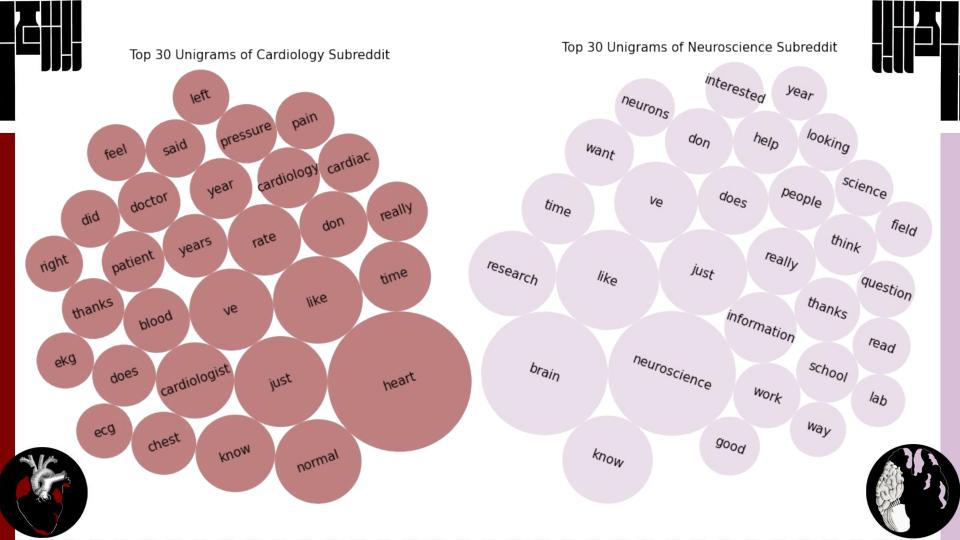
This is chronic venous hypertension / venous insufficiency edema. Note the "inverted champagne bottle" sign in the calves (linodermatosclerosis), the brown staining (hemosiderin deposition) and some scaling and flaking (venous





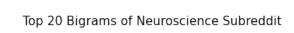
incidentally, respond poorly to diuretics



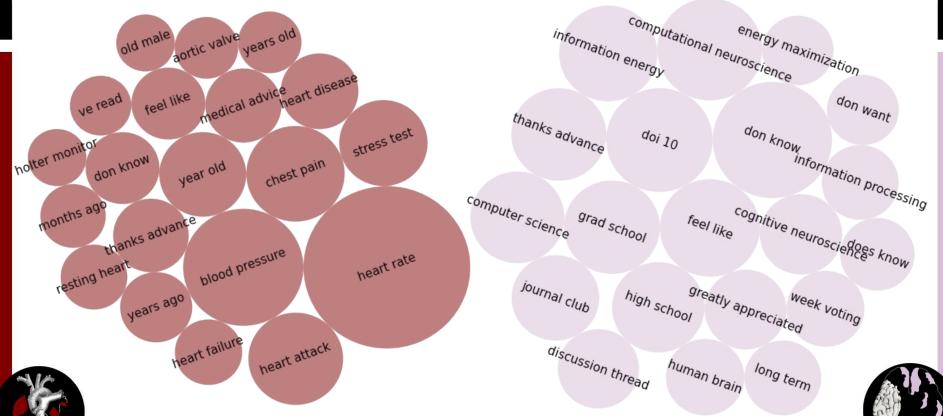










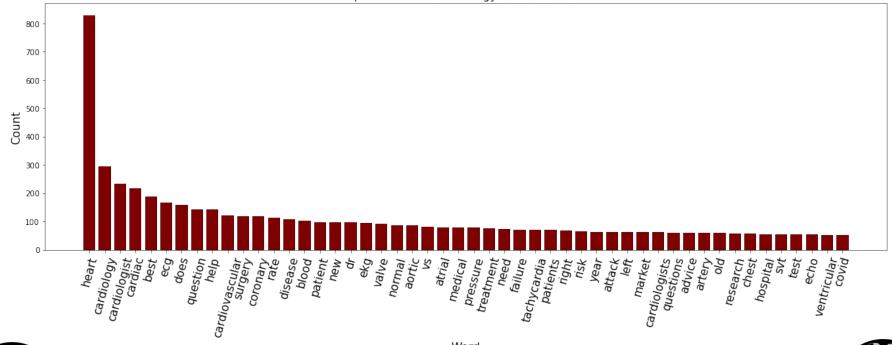








Top 50 Words in Cardiology Subreddit Titles



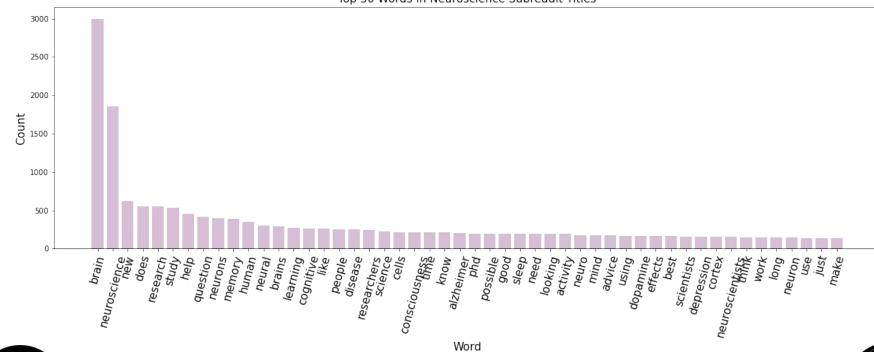








Top 50 Words in Neuroscience Subreddit Titles

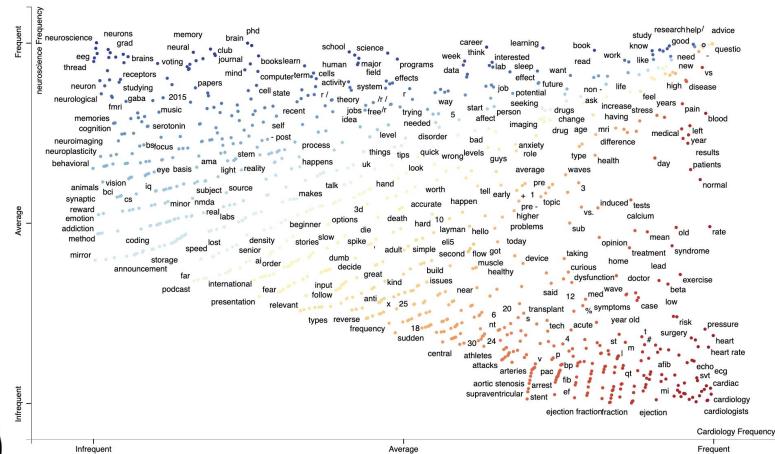






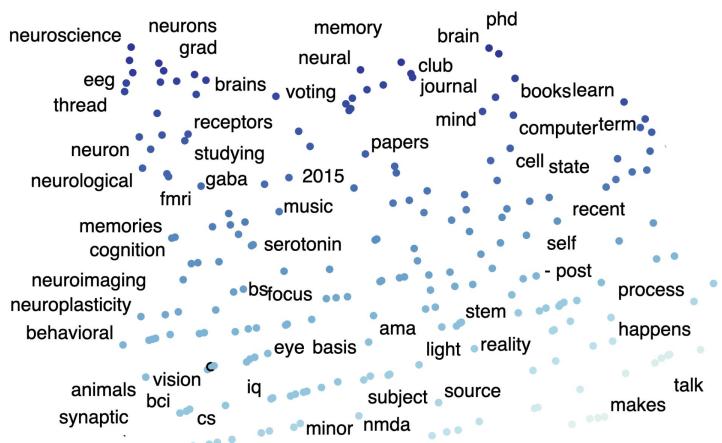










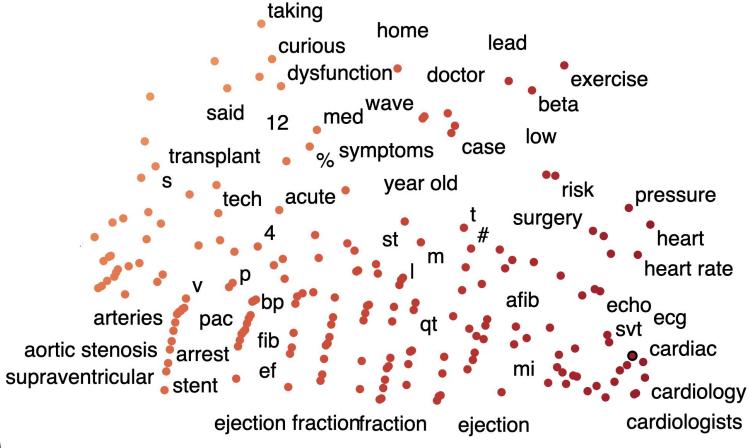








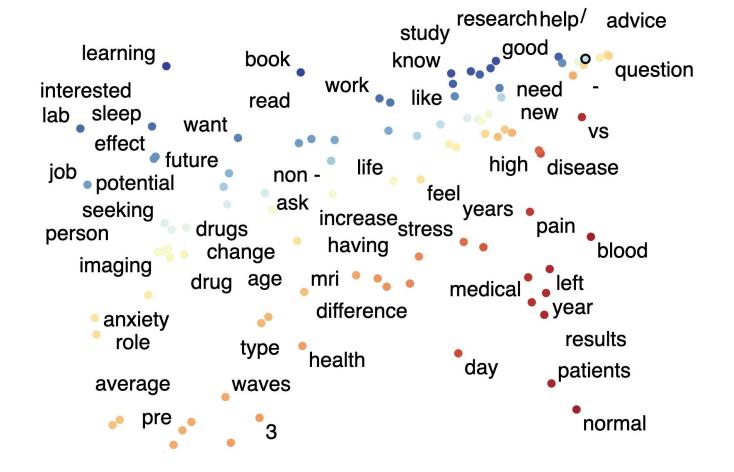








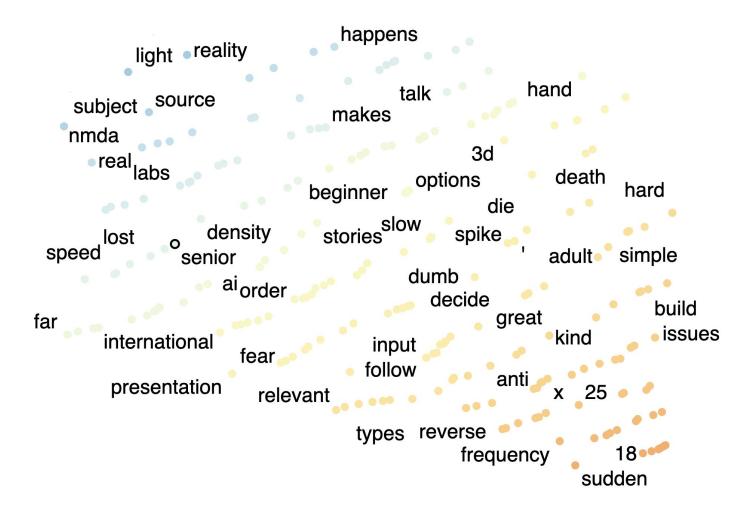








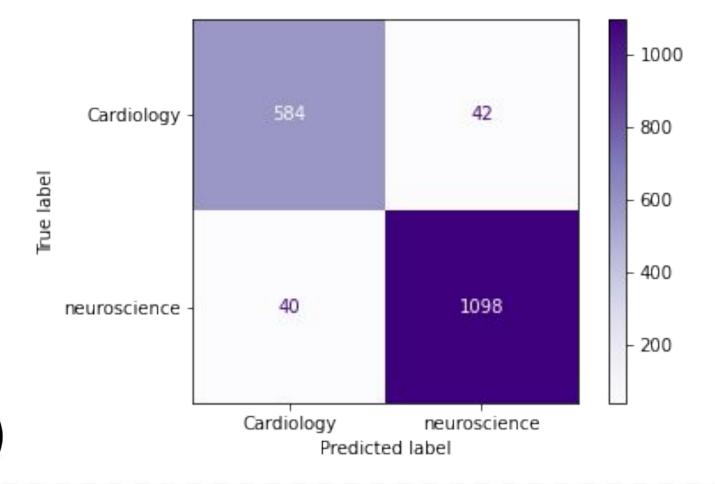










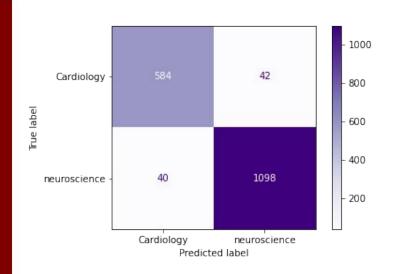












- 95.4 % of all observations are correctly predicted.
- 93.6% of predicted positives are correctly predicted.
- 93.6% of actual positives are accurately predicted.
- 93.2 % actual negatives are correctly predicted.
- Only, 4.6% of all predictions are misclassified.









Misclassification mostly caused by:

- 1. BOTH CASE (keywords inversely weighted cause confusion)
- 2. BOTH CASE (keywords equally weighted cause confusion)
- 3. NEITHER CASE

selftext	Subreddit	Predictions
looking for most common examples that you would use in a ELI5 (that means to lay ppl, those dont know anything about any of this)\n\nhttps://en.wikipedia.org/wiki/Limen		Cardiology
Hi! Anyone can send me this article?\n\nhttps://doi.org/10.1016/j.jacc.2020.03.084\n\nImpossible with sci-hub, only visible first page, the other white \n\nThanks in advance!	Cardiology	neuroscience
I'm curious if there's any new developments on what HPPD is and why only some people get it, last I checked I was under the impression that nobody knows anything about it.		Cardiology
I'm working on a research project and unfortunately I'm having trouble getting data. My project centers around Heart Rate data and movement disorders, but HD patients are pretty rare around these parts. \n\nIf any of you work with HD patients, it would be an absolute lifesaver if we could get in touch, I submit the necessary documentation, and you collect heart rate data. I only need around 15 minutes of EKG data per patient. \n\nThis is probably a longshot, but what the hell.	nauroscianca	Cardiology
Every protocol I look at just says "overnight"	neuroscience	Cardiology
I have a handful of programs I am looking at very very closely. But in general I would be happy going to any fellowship in any part of the country (suburban, urban, rural) and in any setting (academic, community). I am honestly very appreciative of connections that I have received for research but at this point would like to connect with PDs and sell myself. Lol, I'm joking (not really)	Cardiology	neuroscience









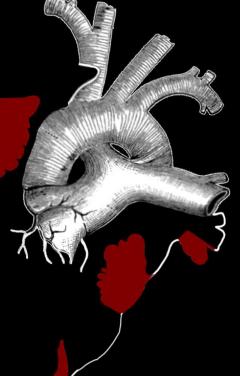
RECOMMENDATION:

Subreddits, as initial sources of community language, prove to be exceptionally strong source datasets for creating models that accurately predict and classify research community discourse.









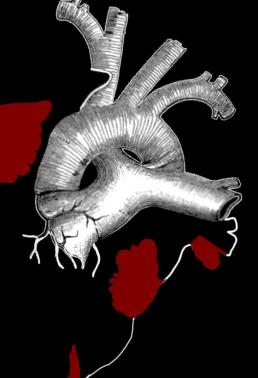
SOURCES:

- https://www.reddit.com/r/Cardiology/
- https://www.reddit.com/r/neuroscience/









THANKS!

