

## 5.2.3 Biomedical Funding Profile of NSF (NSF Data)

|                      |                                  |
|----------------------|----------------------------------|
| MedicalAndHealth.nsf |                                  |
| Time frame:          | 2003-2010                        |
| Region(s):           | Miscellaneous                    |
| Topical Area(s):     | Biomedical                       |
| Analysis Type(s):    | NSF Organization-Program Network |

A NSF Organization-to-Program(s) bimodal network is exhibited here using data downloaded from the NSF Awards Search at (<http://www.nsf.gov/awardsearch>) on Nov 23th, 2009, using the query "medical AND health" in the title, abstract, and awards field, with "Active awards only" checked. This query yielded 286 awards (see section 4.2.2.1 NSF Award Search for data retrieval details).

Load '*yoursci2directory/sampledata/scientometrics/nsf/MedicalAndHealth.nsf*' in NSF csv format (if the file is not in the sample data directory it can be downloaded from 2.5 Sample Datasets). Then run '*Data Preparation > Extract Directed Network*' with parameters:

Make sure to select the nsfPIToProject.properties for the aggregate function file.



### About NSF Text Delimiters:

If you are using a current format (2014 or later) NSF dataset, **use a comma in the Text Delimiter field** for all algorithms that ask for it, instead of the pipe used in the older format NSF files.

Select "Network with directed edges from NSF Organization to Program(s)" in the Data Manager and run '*Analysis > Networks > Unweighted and Directed > Node Indgree*'. Then select "Network with indegree attribute added to node list" in the Data Manager and run '*Analysis > Networks > Unweighted and Directed > Node Outdegree*'. Select the resulting "Network with outdegree attribute added to node list" and run '*Visualization > Networks > GUESS*' followed by '*Layout > GEM*' and '*Layout > Bin Pack*'.

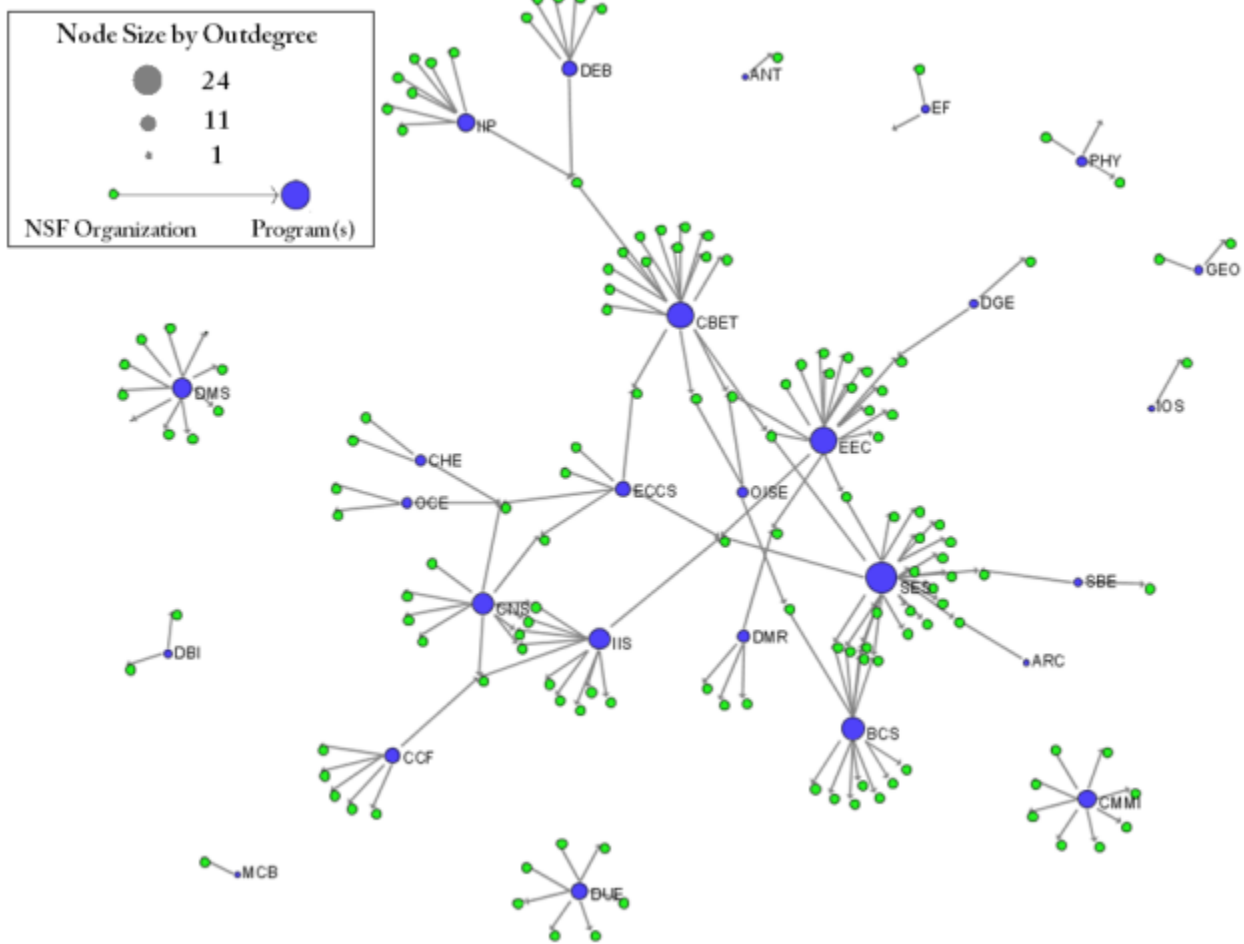
In graph modifier interface:

Select "Colour" from the options directly below and choose desired color.

Then select "Show Label".

Select "Colour" and choose desired color.

The resulting network is visualized in Figure 5.29.



**Figure 5.29: Bimodal Network of NSF Organization to Program(s) of NSF Medical + Health Funding**

To see the log file from this workflow save the [5.2.3 Biomedical Funding Profile of NSF \(NSF Data\)](#) log file.