

Supplementary Table 1 and Legend

The supplement contains a table of topics classified by research category and NIH Institute (pages 2-4), followed by a legend with information on each of the NIH Institutes, including images with each Institute highlighted on the layout graph (pages 5-30, one Institute per page).

Supplementary Table 1. Categories of machine-learned topics and their proportional NIH Institute representations for grants from funding year 2009.

The table shows percentage NIH Institute representations for topics grouped by research category, such that each row in the table adds to 100%. The values in each cell are color-coded, with blue representing the lowest percent representations, and red indicating the highest. A full listing of the topics from each of the categories, with links to the individual pages for each topic, can be accessed by navigating to the Topic Browser page of the interface (<https://app.nihmaps.org/nih/browser/#data=nih.2009;showViz=false;>) and selecting the “Topics by Category” button in the upper left corner of the page.

Legend: Individual NIH Institute descriptions and distributions on the graph layout.

Each page of the legend shows a view of the graph layout with a different Institute highlighted. The format is designed for rapid scrolling in full-page mode. The initial view shows all of the Institutes, with the labeling overlay from Figure 1 for reference. Each subsequent page shows a different Institute, in the order of the Institute acronyms listed in Figure 1, with the corresponding acronym circled. The full Institute names are provided underneath each panel, along with official descriptions of each of the Institutes’ missions, which were obtained from the NIH website (<http://www.nih.gov/icd/>).

Supplementary Table 1

| | | # Topics | NCI | NHLBI | NIAID | NIGMS | NIDDK | NCRR | NIMH | NINDS | NIA | NICHD | NIDA | NEI | NIHES | NIAMS | NIAAA | NIDCD | NIBIB | NIDCR | NINR | NHGRI | FIC | NCCAM | NLM | NCMHD |
|-------------------------------------|---|----------|------|-------|-------|-------|-------|------|------|-------|------|-------|------|-----|-------|-------|-------|-------|-------|-------|------|-------|-----|-------|-----|-------|
| Biochemistry, Cell Biology | Cell Signaling | 34 | 15.2 | 16.3 | 6.0 | 9.2 | 12.9 | 3.9 | 2.9 | 7.1 | 3.8 | 4.0 | 3.0 | 3.3 | 3.7 | 4.3 | 1.2 | 0.9 | 0.1 | 2.1 | | | 0.1 | 0.2 | | |
| | Protein Structure-Function | 13 | 8.9 | 6.9 | 12.2 | 33.9 | 7.7 | 7.7 | 0.9 | 4.3 | 2.3 | 1.5 | 1.8 | 2.7 | 2.6 | 2.2 | 0.2 | | 1.4 | 1.4 | | 0.2 | 0.2 | | 1.1 | |
| | Metals | 3 | 4.3 | 6.3 | 7.4 | 37.8 | 12.7 | 8.2 | | 2.7 | 2.4 | 2.1 | | 1.3 | 7.5 | 0.5 | 0.7 | 0.2 | 4.2 | 0.8 | | 0.2 | | 0.4 | | 0.3 |
| | Cell Structure, Transport | 15 | 9.1 | 12.7 | 7.4 | 18.8 | 11.1 | 5.2 | 1.7 | 7.3 | 2.5 | 3.8 | 1.5 | 5.4 | 1.6 | 5.5 | 0.6 | 1.5 | 1.8 | 2.4 | | 0.1 | | | | |
| | Organelles | 5 | 9.3 | 10.3 | 7.1 | 18.0 | 13.6 | 5.0 | 1.8 | 9.0 | 8.7 | 3.1 | 1.1 | 2.9 | 4.1 | 2.3 | 1.7 | 0.8 | | 0.9 | | | 0.3 | | | |
| | Processing, Degradation | 5 | 15.5 | 8.8 | 11.6 | 18.6 | 9.9 | 4.9 | 0.4 | 7.7 | 6.5 | 2.3 | 1.1 | 3.3 | 3.1 | 2.8 | 0.2 | 0.1 | 0.3 | 2.6 | | | 0.2 | | | |
| | Cell Division, Proliferation | 3 | 25.4 | 7.6 | 4.9 | 20.0 | 8.6 | 4.1 | 1.5 | 3.8 | 3.2 | 6.7 | | 4.0 | 3.7 | 2.7 | 0.7 | | | 2.4 | | 0.9 | | | | |
| | Cell Stress, Redox, Cell Death | 7 | 16.0 | 13.4 | 6.0 | 12.7 | 8.2 | 4.5 | 0.2 | 7.3 | 6.4 | 1.9 | 0.6 | 4.1 | 11.5 | 1.7 | 2.4 | | 0.5 | 1.3 | | | 0.2 | 0.9 | | |
| | Channels, Transporters | 7 | 1.7 | 17.5 | 2.7 | 11.4 | 19.3 | 4.1 | 2.7 | 14.6 | 1.5 | 2.6 | 2.7 | 5.5 | 2.3 | 1.8 | 1.2 | 4.6 | 1.2 | 2.7 | | | | | | |
| | Stem Cells | 5 | 12.9 | 18.7 | 5.5 | 5.8 | 12.8 | 5.0 | 0.4 | 7.4 | 4.5 | 5.5 | | 3.7 | 1.9 | 7.1 | 0.3 | 1.9 | 1.9 | 4.4 | | 0.4 | | | | |
| Molecular Genetics | Gene Expression | 4 | 13.6 | 8.5 | 8.1 | 10.7 | 8.9 | 6.0 | 4.0 | 5.5 | 4.7 | 5.8 | 2.1 | 4.0 | 5.9 | 3.4 | | | 0.5 | 2.8 | | 4.3 | | | 1.3 | |
| | DNA Replication, Repair | 9 | 30.3 | 2.9 | 6.0 | 24.8 | 3.2 | 3.9 | 0.7 | 2.3 | 5.8 | 1.4 | 0.3 | 0.5 | 12.4 | 0.8 | 0.2 | 0.3 | 0.5 | 1.1 | | 2.3 | 0.6 | | | |
| | Epigenetic Regulation | 4 | 26.6 | 5.0 | 5.2 | 22.7 | 8.6 | 3.5 | 1.6 | 3.5 | 2.5 | 3.9 | 1.5 | 0.7 | 7.7 | 1.9 | 0.4 | | | 1.2 | | 3.5 | | | | |
| | Transcriptional Regulation | 4 | 12.4 | 8.7 | 10.2 | 18.1 | 11.3 | 3.7 | 2.0 | 4.2 | 2.3 | 5.9 | 1.1 | 2.9 | 4.3 | 3.9 | | | 0.1 | 2.2 | | 6.1 | | | 0.6 | |
| | RNA | 6 | 12.3 | 6.1 | 12.1 | 32.8 | 6.0 | 4.4 | 1.2 | 5.8 | 2.5 | 4.1 | 2.0 | 1.1 | 1.5 | 3.1 | | 0.2 | 0.6 | 1.8 | | 2.2 | 0.2 | | 0.2 | |
| | Gene Therapy | 2 | 16.4 | 17.8 | 12.3 | 3.2 | 10.3 | 3.8 | | 11.1 | 1.9 | 2.2 | 1.1 | 8.0 | | 4.7 | | 1.4 | 3.1 | 2.2 | | | 0.6 | | | |
| Developmental, Reproductive Biology | 12 | 6.4 | 6.1 | 2.2 | 5.6 | 6.6 | 8.6 | 5.0 | 5.3 | 4.2 | 30.9 | 3.6 | 1.4 | 6.0 | 1.6 | 2.5 | 1.5 | | 1.1 | 0.2 | 0.3 | 0.5 | 0.3 | | 0.1 | |
| Genetics | Evolution, Population Genetics | 4 | 5.4 | 4.2 | 16.8 | 25.8 | 4.3 | 7.7 | 3.2 | 2.9 | 2.5 | 3.6 | 1.1 | 1.5 | 2.9 | 1.3 | 1.1 | 1.7 | | 0.3 | | 9.6 | 1.1 | | 3.0 | |
| | Genetic Mutations | 5 | 10.2 | 8.7 | 9.6 | 8.9 | 8.3 | 5.8 | 4.1 | 8.4 | 5.0 | 7.5 | 1.1 | 6.2 | 0.6 | 4.8 | 0.9 | 3.6 | | 3.3 | | 2.8 | | | | |
| | Genome Analysis | 9 | 13.0 | 9.6 | 5.5 | 5.8 | 6.5 | 6.6 | 10.7 | 3.2 | 5.2 | 3.6 | 4.3 | 2.0 | 3.5 | 3.6 | 6.4 | 0.8 | | 1.4 | | 7.7 | 0.1 | | 0.5 | |
| Infectious Disease | Infectious Agents, Toxins, Biodefense | 3 | 3.9 | 3.3 | 53.2 | 7.2 | 3.6 | 7.3 | 1.4 | 2.4 | 1.3 | 2.1 | | 0.8 | 1.9 | 1.5 | | 0.9 | 0.4 | 2.8 | | | 5.4 | | 0.6 | |
| | Bacterial Biology | 4 | 3.1 | 2.3 | 36.0 | 24.4 | 8.3 | 5.6 | 0.1 | 0.7 | 0.2 | 1.5 | | 0.7 | 2.6 | 0.4 | | 0.6 | 1.1 | 7.6 | | 1.4 | 1.7 | 1.1 | 0.5 | |
| | Bacterial Pathogens | 7 | 3.1 | 5.2 | 55.0 | 7.3 | 3.3 | 5.3 | 0.5 | 0.7 | 0.8 | 3.6 | 0.4 | 1.7 | 0.7 | 1.4 | 0.1 | 2.4 | 0.6 | 4.0 | 0.1 | 0.1 | 3.4 | 0.2 | | |
| | Pathogenic Eukaryotes, Vector Biology | 5 | 2.9 | 3.3 | 57.6 | 8.0 | 1.9 | 7.1 | 0.9 | 1.7 | 0.4 | 1.2 | 0.1 | 1.0 | 1.5 | 1.3 | | 0.4 | 0.1 | 3.8 | | 0.3 | 6.3 | | 0.2 | 0.1 |
| | Viruses | 19 | 9.1 | 3.0 | 45.4 | 3.8 | 3.2 | 11.1 | 4.0 | 3.1 | 0.8 | 2.8 | 3.4 | 1.4 | 0.7 | 0.4 | 1.0 | 0.3 | 0.2 | 2.1 | 0.3 | 0.1 | 3.5 | 0.3 | 0.1 | 0.1 |
| Immune System | Innate Immunity | 3 | 6.1 | 8.2 | 39.3 | 7.1 | 7.7 | 4.3 | 0.2 | 3.3 | 2.5 | 2.1 | 1.1 | 3.2 | 2.3 | 4.7 | 1.6 | 0.7 | 0.4 | 5.3 | | | | | | |
| | Immune Cells | 10 | 13.5 | 7.1 | 43.9 | 3.0 | 7.2 | 5.6 | 0.4 | 3.5 | 2.3 | 1.7 | 0.5 | 2.5 | 1.6 | 4.9 | 0.5 | | 0.1 | 1.7 | | | 0.2 | | | |
| | Cytokines, Inflammation | 6 | 8.8 | 14.1 | 24.4 | 5.5 | 9.9 | 4.5 | 1.3 | 6.1 | 3.2 | 2.5 | 0.7 | 3.8 | 3.5 | 6.0 | 1.3 | 0.1 | | 3.6 | | | 0.3 | 0.5 | | |
| | Antibodies, Vaccines, Immunotherapy | 6 | 23.4 | 4.6 | 36.4 | 4.2 | 4.6 | 6.7 | 0.4 | 3.4 | 2.9 | 1.5 | 1.3 | 1.8 | 1.3 | 3.3 | | | 0.7 | 2.6 | | | 1.1 | | | |
| | Autoimmune Disorders, Transplant Response | 7 | 11.3 | 10.1 | 17.6 | 1.5 | 18.5 | 7.1 | 1.1 | 7.3 | 1.4 | 1.8 | 0.2 | 3.4 | 1.1 | 14.5 | 0.1 | | 0.3 | 1.2 | 0.5 | | | 0.8 | | |

Full listings of topics can be viewed at: <https://app.nihmaps.org/nih/browser/#data=nih.2009;showViz=false;>

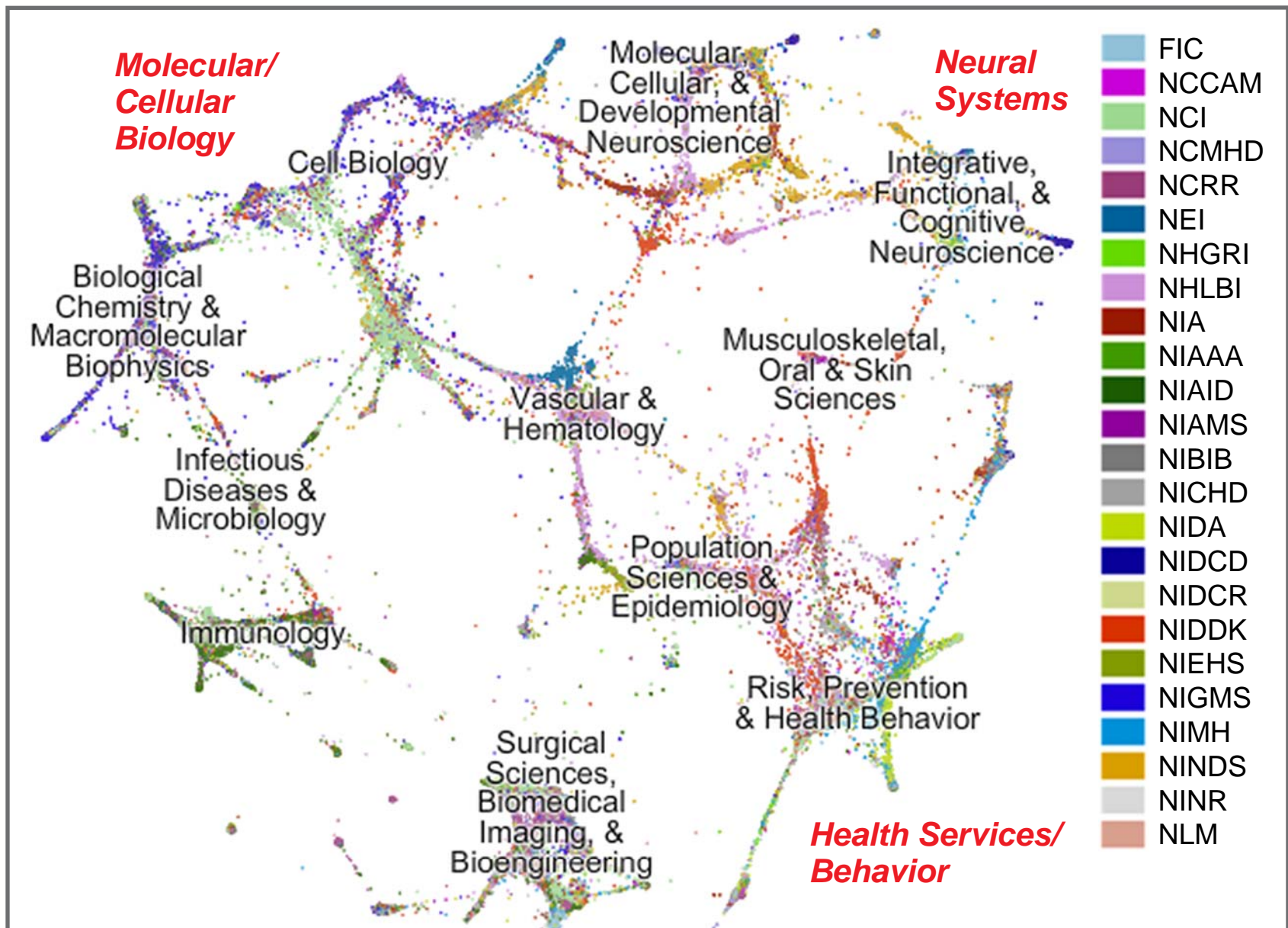
Select "Topics by Categories" for listings and links to individual topic pages.

Supplementary Table 1

| | | # | NCI | NHLBI | NIAID | NIGMS | NIDDK | NCRR | NIMH | NINDS | NIA | NICHD | NIDA | NEI | NIHES | NIAMS | NIAAA | NIDCD | NIBIB | NIDCR | NINR | NHGRI | FIC | NCCAM | NLM | NCMHD |
|-------------------------------------|---|--------|------|-------|-------|-------|-------|------|------|-------|------|-------|------|------|-------|-------|-------|-------|-------|-------|------|-------|-----|-------|-----|-------|
| | | Topics | | | | | | | | | | | | | | | | | | | | | | | | |
| Cancer | Cancer Research | 7 | 64.1 | 3.2 | 2.5 | 3.9 | 5.2 | 3.2 | 0.1 | 3.0 | 2.1 | 1.6 | 0.1 | 0.8 | 3.9 | 1.7 | | | 1.3 | 2.6 | 0.1 | 0.3 | | | | 0.1 |
| | Cancer Diagnosis, Therapy | 3 | 68.8 | 2.8 | 2.5 | 2.7 | 3.1 | 3.6 | | 3.2 | 1.4 | 0.8 | 0.3 | 1.4 | 1.8 | 1.2 | | 0.7 | 3.2 | 1.7 | 0.2 | | | 0.4 | | 0.2 |
| | Cancer Types | 15 | 66.4 | 2.7 | 1.6 | 2.5 | 5.7 | 4.1 | 0.1 | 2.4 | 2.0 | 1.7 | 0.1 | 0.5 | 4.6 | 1.5 | 0.3 | | 1.1 | 0.6 | 0.6 | 0.2 | 0.2 | 1.0 | | 0.2 |
| Cardiovasc, Respiratory | Cardiac Function, Dysfunction | 6 | 1.9 | 65.5 | 1.2 | 2.4 | 3.1 | 6.1 | 1.2 | 2.0 | 5.4 | 2.1 | 0.3 | 0.3 | 1.7 | 1.9 | 0.7 | 0.1 | 2.1 | 0.2 | 1.2 | | 0.2 | 0.3 | | |
| | Cardiovascular Disease | 4 | 2.7 | 45.0 | 2.1 | 0.9 | 9.6 | 9.6 | 1.4 | 2.8 | 11.4 | 2.2 | | 0.9 | 2.7 | 3.1 | 0.2 | | 1.4 | 0.2 | 1.4 | | | 1.1 | | 1.1 |
| | Vascular Biol, Hypertension, Ischemia | 10 | 6.5 | 44.5 | 1.5 | 3.0 | 10.0 | 6.1 | 0.7 | 6.6 | 4.8 | 2.7 | 0.6 | 4.1 | 2.1 | 2.0 | 0.6 | 0.7 | 1.7 | 0.7 | 0.4 | | | 0.7 | | |
| | Hematology | 7 | 9.9 | 39.8 | 9.1 | 4.4 | 9.1 | 6.5 | 1.1 | 4.0 | 2.1 | 2.7 | 0.2 | 1.5 | 2.7 | 2.9 | 0.7 | | 1.4 | 1.1 | | 0.2 | 0.7 | | | |
| | Respiratory System | 9 | 5.5 | 43.3 | 8.2 | 2.7 | 5.1 | 8.1 | 0.9 | 3.0 | 1.6 | 4.3 | | 1.4 | 8.2 | 1.5 | 0.6 | 0.7 | 1.8 | 1.0 | 0.9 | 0.1 | 0.1 | 0.6 | | |
| Digestive, Renal | Digestive System | 5 | 9.2 | 4.2 | 7.4 | 3.9 | 43.2 | 6.4 | 0.5 | 1.2 | 1.4 | 3.3 | 0.8 | 0.3 | 4.8 | 1.0 | 7.3 | 1.0 | 0.6 | 0.7 | 0.8 | | 0.3 | 1.8 | | |
| | Renal Function, Disease | 3 | 6.7 | 11.3 | 2.8 | 1.2 | 53.1 | 9.4 | | 1.1 | 3.2 | 2.0 | 0.8 | 0.7 | 2.5 | 2.8 | | | 0.4 | 0.8 | | | | 0.2 | | 0.9 |
| | Diabetes, Metabolic Regulation, Obesity | 12 | 3.7 | 15.0 | 2.1 | 2.5 | 36.7 | 11.7 | 1.7 | 2.5 | 7.5 | 5.2 | 1.0 | 0.9 | 1.6 | 2.0 | 1.7 | 0.1 | 0.6 | 0.2 | 1.2 | | 0.1 | 1.6 | | 0.4 |
| | Diet, Nutrition | 7 | 16.1 | 9.9 | 1.8 | 3.6 | 16.8 | 8.7 | 1.9 | 1.9 | 7.1 | 4.1 | 1.4 | 1.1 | 6.5 | 3.2 | 4.1 | | | 1.4 | 0.5 | | 0.3 | 9.0 | | 0.5 |
| Musc.-skeletal | Muscle Function, Dysfunction | 4 | 1.6 | 8.4 | 0.3 | 3.3 | 5.3 | 6.1 | 0.6 | 12.0 | 15.5 | 13.8 | 0.2 | 3.4 | | 20.6 | 0.4 | 2.7 | 1.7 | 1.1 | 1.3 | | | 0.4 | | |
| | Skeletal Biology, Skin | 6 | 4.8 | 2.8 | 2.3 | 2.1 | 5.7 | 5.4 | 0.3 | 1.3 | 8.8 | 3.5 | | 0.4 | 1.4 | 47.0 | 0.6 | 0.3 | 2.5 | 9.6 | | | | 0.9 | | |
| | Oral, Dental | 3 | 3.0 | 1.7 | 2.7 | 1.0 | 1.3 | 4.9 | 0.2 | 0.9 | 1.2 | 1.9 | 0.7 | | 1.4 | 2.6 | | 2.2 | | 72.6 | | | 1.3 | | 0.3 | |
| Neuroscience, Neurology, Psychiatry | Neural Cells, Signaling | 18 | 1.5 | 2.7 | 0.6 | 3.2 | 2.8 | 3.8 | 13.4 | 26.8 | 5.1 | 3.6 | 18.1 | 5.2 | 1.8 | 0.1 | 5.1 | 4.9 | 0.7 | 0.5 | | | | 0.2 | | |
| | Neural Imaging, Recording | 6 | 1.8 | 3.6 | 0.6 | 2.0 | 2.0 | 9.0 | 18.7 | 16.4 | 7.0 | 6.0 | 5.0 | 5.4 | | 0.8 | 2.6 | 8.7 | 9.4 | | | 0.2 | | 0.6 | 0.3 | |
| | Neural Systems | 3 | 1.5 | 5.3 | 1.5 | 1.1 | 4.7 | 7.7 | 18.3 | 18.3 | 7.8 | 4.9 | 7.3 | 4.4 | 0.6 | 0.3 | 3.1 | 9.4 | 2.2 | 0.4 | | | | 0.9 | 0.3 | |
| | Visual System | 8 | 1.0 | 1.0 | 0.6 | 1.6 | 0.9 | 4.3 | 7.1 | 3.8 | 2.2 | 3.2 | 0.8 | 68.0 | 0.3 | 0.4 | 0.3 | 3.2 | 1.1 | 0.1 | | 0.1 | | 0.0 | | |
| | Vestibular, Auditory | 4 | 1.1 | 1.2 | 0.3 | 1.6 | 0.6 | 3.1 | 2.6 | 3.7 | 3.2 | 3.3 | 0.4 | 4.7 | 0.1 | 1.0 | | 70.9 | 1.1 | 0.5 | | | | 0.1 | | |
| | Olfactory, Gustatory | 2 | 1.1 | 1.4 | 1.4 | 3.1 | 4.1 | 2.5 | 5.4 | 4.3 | 2.9 | 2.5 | 3.3 | 1.2 | 1.0 | | 4.1 | 61.0 | | 0.7 | | | | | | |
| | Somatosensory, Pain | 5 | 2.6 | 4.8 | 0.9 | 3.8 | 5.2 | 4.9 | 5.9 | 23.4 | 2.3 | 3.5 | 7.9 | 10.6 | 0.7 | 4.0 | 0.4 | 6.3 | 1.7 | 5.7 | 1.4 | | 0.3 | 3.6 | | |
| | Motor Systems | 2 | 1.2 | 1.1 | | 1.6 | 0.5 | 7.0 | 8.5 | 36.1 | 6.1 | 16.1 | 2.7 | 4.3 | 0.6 | 4.4 | 2.3 | 4.2 | 2.6 | | | | | | | |
| | Sleep, Circadian Rhythm | 3 | 2.5 | 13.0 | 0.5 | 6.1 | 3.3 | 6.9 | 18.0 | 13.0 | 11.6 | 3.6 | 4.1 | 2.4 | 0.6 | 3.4 | 2.8 | 0.3 | | | 5.3 | | | 2.0 | | |
| | Language, Cognition | 6 | 2.2 | 2.1 | 1.6 | 2.0 | 1.4 | 4.4 | 16.8 | 6.9 | 13.0 | 15.1 | 4.9 | 1.7 | 1.0 | 0.4 | 3.2 | 20.7 | 0.2 | | 0.9 | | 0.1 | | 1.2 | 0.1 |
| | Learning, Memory | 3 | 1.1 | 1.1 | 0.3 | 1.3 | 0.8 | 4.3 | 33.8 | 9.6 | 17.3 | 8.3 | 8.1 | 3.1 | 0.3 | | 2.8 | 6.3 | 0.9 | | | | | 0.3 | 0.3 | |
| | Emotion, Affect, Stress | 8 | 2.1 | 2.9 | 0.9 | 2.4 | 3.6 | 6.4 | 35.0 | 6.8 | 5.6 | 6.6 | 12.8 | 1.0 | 1.0 | 0.2 | 8.1 | 2.6 | 0.1 | 0.5 | 0.8 | | | 0.7 | | |
| | Reward, Craving | 2 | 3.6 | 2.1 | 0.7 | 0.9 | 1.6 | 5.2 | 21.2 | 4.0 | 5.9 | 4.9 | 29.4 | 3.9 | | 0.8 | 10.8 | 2.5 | | | 1.7 | | | 0.7 | | |
| | Stroke, Brain & Spinal Cord Injury | 4 | 3.5 | 7.9 | 0.8 | 3.0 | 8.2 | 5.2 | 1.9 | 45.9 | 5.0 | 7.9 | 0.7 | 0.7 | 0.8 | 1.5 | 1.3 | 0.6 | 1.9 | | 1.7 | | | 0.7 | | |
| | Neurodegenerative Disorders, Epilepsy | 10 | 1.5 | 2.1 | 1.4 | 2.8 | 2.7 | 5.3 | 3.8 | 26.9 | 42.2 | 2.3 | 1.0 | 1.2 | 2.7 | 0.8 | 0.6 | 0.5 | 0.8 | 0.1 | 0.1 | 0.2 | 0.1 | 0.7 | 0.3 | |
| | Psychiatric, Psychosocial Disorders | 13 | 2.8 | 2.0 | 0.3 | 0.4 | 2.0 | 3.9 | 47.9 | 2.0 | 4.8 | 6.8 | 13.3 | 0.1 | 0.5 | 0.6 | 7.4 | 0.6 | 0.2 | 0.2 | 2.5 | 0.1 | 0.7 | 0.7 | 0.0 | 0.2 |
| | Substance Abuse | 11 | 4.8 | 1.6 | 1.1 | 0.7 | 1.0 | 3.2 | 4.8 | 1.0 | 0.9 | 1.5 | 44.9 | 0.1 | 1.3 | 0.2 | 30.9 | 0.2 | | 0.3 | 0.1 | | 1.0 | 0.1 | 0.1 | 0.1 |

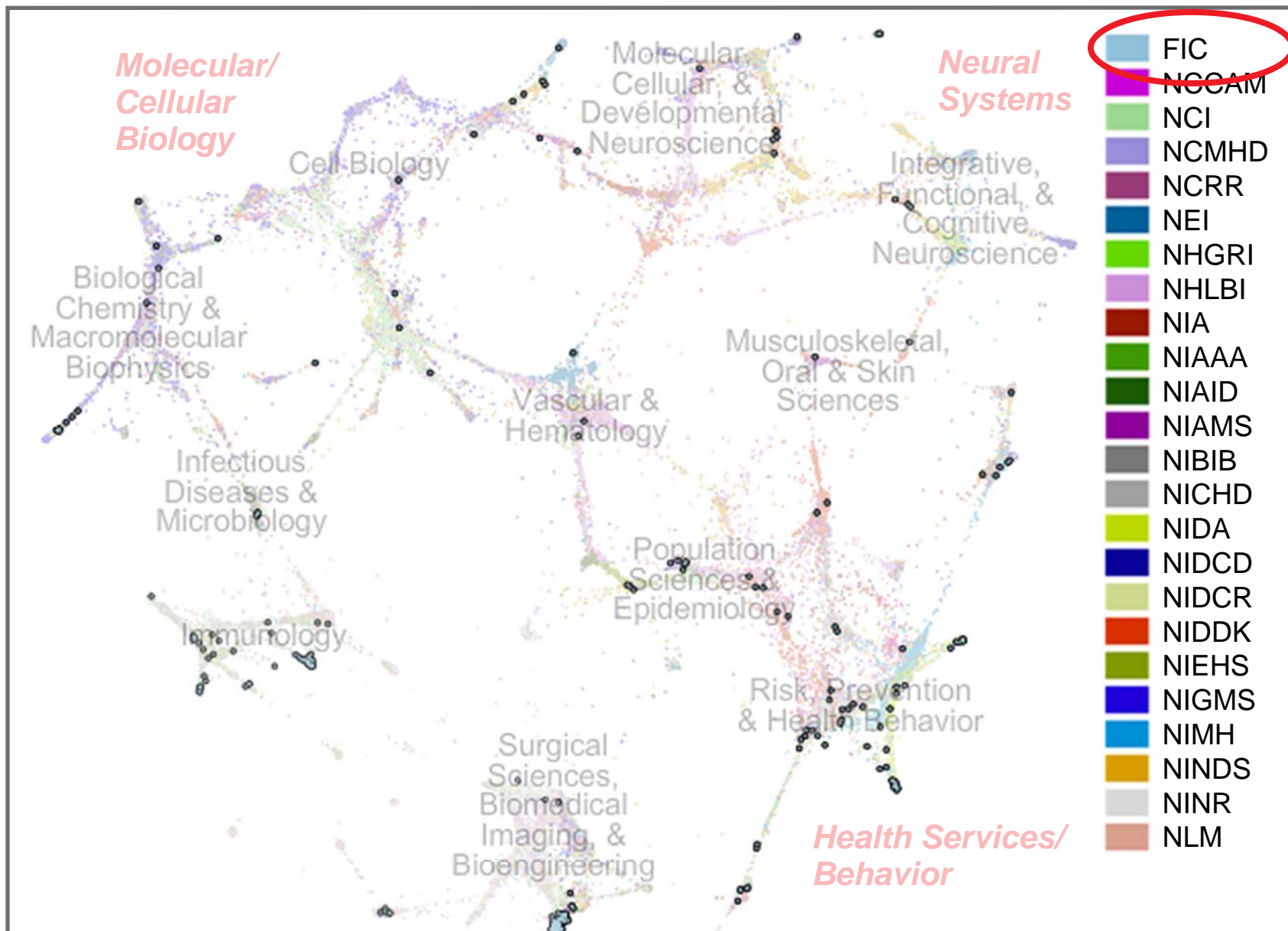
Supplementary Table 1

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|--|--|----------|------|-------|-------|-------|-------|------|------|-------|------|-------|------|-----|-------|-------|-------|-------|-------|-------|------|-------|-----|-------|------|-------|
| Technology Development, Bioengineering | Chemical, Genetic Assays | 9 | 12.6 | 5.8 | 9.9 | 12.6 | 6.8 | 12.3 | 2.6 | 4.7 | 4.0 | 2.1 | 2.7 | 1.4 | 7.6 | 0.5 | 0.5 | | 4.1 | 2.5 | | 5.4 | 0.5 | 0.6 | 0.3 | |
| | Cell Sorting, Protein Purification, Cryopres | 3 | 8.6 | 6.8 | 10.9 | 14.9 | 6.7 | 28.8 | 0.8 | 3.3 | 2.0 | 2.6 | 1.7 | 2.9 | 2.8 | 2.0 | | | 3.3 | 1.5 | | 0.3 | | | | |
| | Cellular/Molecular Imaging | 7 | 11.0 | 6.0 | 5.1 | 21.2 | 5.2 | 13.6 | 1.3 | 4.8 | 2.0 | 1.4 | 0.2 | 5.8 | 1.1 | 3.1 | | 1.5 | 13.4 | 1.4 | | 1.2 | 0.2 | | 0.3 | |
| | Image Reconstruction | 2 | 11.4 | 7.7 | 0.4 | 3.1 | 0.6 | 11.5 | 6.0 | 7.1 | 4.7 | 2.6 | 1.7 | 5.1 | | 2.5 | 1.3 | 1.9 | 30.4 | | | | | | 2.0 | |
| | Medical Imaging, Monitoring Devices | 14 | 19.6 | 9.1 | 2.1 | 2.5 | 3.8 | 10.8 | 4.1 | 8.0 | 4.1 | 2.7 | 1.6 | 2.4 | 1.4 | 2.3 | 0.8 | 1.3 | 21.6 | 0.7 | 0.4 | | | 0.2 | 0.5 | |
| | Materials, Implants, Fluidics | 9 | 7.2 | 11.7 | 3.3 | 8.9 | 3.5 | 5.0 | 0.5 | 3.3 | 1.9 | 1.5 | | 3.2 | 1.9 | 11.3 | | 1.8 | 19.2 | 13.3 | | 2.1 | | | | |
| | Modeling, Bioinformatics, Software | 7 | 9.3 | 5.2 | 4.1 | 13.0 | 2.6 | 8.4 | 7.1 | 4.2 | 4.1 | 3.2 | 3.6 | 2.3 | 2.6 | 0.4 | 0.5 | 2.0 | 7.4 | | 0.4 | 7.4 | | | 12.3 | |
| | Technology Development, Commercialization | 3 | 11.2 | 8.5 | 9.0 | 12.3 | 5.5 | 8.6 | 3.6 | 5.5 | 3.3 | 5.3 | 2.3 | 3.2 | 2.5 | 1.1 | | 2.7 | 8.9 | 2.1 | | 4.4 | | | | |
| Epidemiology, Population Sci | Life Stages | 14 | 4.3 | 4.4 | 3.6 | 0.2 | 3.3 | 6.3 | 14.9 | 1.9 | 16.4 | 17.0 | 9.0 | 0.9 | 2.3 | 2.0 | 5.1 | 1.3 | | 0.7 | 4.2 | 0.1 | 1.6 | 0.3 | | 0.1 |
| | Ethnic, Geographic Populations | 6 | 9.8 | 8.2 | 7.1 | 0.6 | 7.1 | 6.1 | 10.2 | 2.2 | 9.0 | 7.5 | 6.9 | 1.0 | 1.1 | 2.9 | 3.3 | 0.9 | | 1.1 | 4.0 | | 8.7 | | | 2.4 |
| | Socioeconomic Factors | 5 | 6.2 | 5.5 | 2.1 | 0.4 | 2.2 | 3.4 | 7.1 | | 17.3 | 14.0 | 6.5 | | 8.3 | | 3.6 | | | 1.2 | 5.0 | | 2.9 | | 0.4 | 8.0 |
| | Risk Assessment | 7 | 22.4 | 9.6 | 4.9 | 0.2 | 6.0 | 5.2 | 7.5 | 3.1 | 11.3 | 6.9 | 4.9 | 1.1 | 5.1 | 5.5 | 2.8 | 0.4 | | 0.8 | 1.1 | | 1.2 | | | |
| | Surveys | 3 | 9.0 | 3.8 | 2.4 | | 5.5 | 5.1 | 15.3 | | 12.5 | 9.2 | 10.7 | | 1.6 | 1.9 | 5.5 | | | | 9.2 | 2.1 | 2.5 | 0.9 | 1.2 | 1.6 |
| Pharmacol Toxicology | Chemistry - Synthetic, Analytic | 8 | 12.6 | 5.3 | 8.1 | 37.6 | 4.5 | 7.6 | 1.3 | 3.1 | 1.6 | 0.6 | 4.9 | 1.4 | 4.0 | 1.1 | 0.2 | | 3.1 | 0.8 | | 0.8 | 1.3 | | | |
| | Therapy Development | 10 | 18.5 | 7.2 | 13.8 | 10.6 | 7.2 | 6.8 | 3.3 | 6.3 | 3.9 | 2.9 | 4.6 | 2.1 | 6.1 | 2.0 | 1.2 | | 1.0 | 1.3 | | | 0.2 | 1.2 | | |
| | Toxin Exposure | 6 | 8.9 | 4.6 | 3.5 | 3.1 | 2.1 | 4.6 | 1.2 | 1.5 | 1.8 | 1.8 | 2.1 | 0.6 | 58.3 | 0.5 | 1.9 | | | 0.5 | | | 0.7 | | | |
| Health Care Delivery | Diagnosis, Screening | 3 | 16.3 | 9.5 | 7.0 | 1.0 | 7.9 | 8.6 | 8.6 | 5.7 | 8.1 | 5.4 | 3.7 | 6.0 | | 4.0 | 1.3 | 1.0 | 1.3 | | 1.7 | | 1.2 | | 1.0 | 0.7 |
| | Patient Care | 4 | 8.2 | 5.2 | 2.6 | 0.2 | 4.2 | 4.7 | 13.6 | 2.3 | 21.6 | 5.3 | 5.0 | | 0.8 | 1.2 | 2.8 | | | | 15.3 | | | 2.4 | 3.0 | 1.7 |
| | Treatment Outcomes | 6 | 10.7 | 8.9 | 5.4 | 0.9 | 8.2 | 7.1 | 10.0 | 4.7 | 11.0 | 7.1 | 5.6 | 1.7 | 0.3 | 5.2 | 1.5 | | | 0.9 | 6.4 | | | 2.0 | 1.9 | 0.5 |
| | Behavioral Intervention | 3 | 9.2 | 7.2 | 3.0 | | 6.1 | 4.5 | 18.5 | | 7.4 | 6.6 | 10.7 | | | 1.8 | 6.8 | | | 0.7 | 12.0 | | 0.9 | 2.4 | 0.5 | 1.6 |
| | Mental Health Services | 2 | 1.9 | 0.9 | 1.1 | | 1.3 | 1.9 | 29.4 | | 2.5 | 2.9 | 38.1 | | | 0.6 | 12.4 | 0.7 | | 0.5 | 2.2 | | 0.6 | 0.7 | 0.4 | 1.8 |
| | Community Outreach | 3 | 9.3 | 5.2 | | | 4.2 | 4.7 | 14.5 | | 5.1 | 9.9 | 15.2 | | 5.3 | | 4.3 | | | 0.6 | 6.6 | | 2.3 | | 5.5 | 7.4 |
| | Surgery, Trauma | 5 | 5.7 | 19.4 | 3.2 | 13.2 | 11.0 | 7.6 | 1.5 | 5.5 | 5.1 | 6.6 | 1.5 | 3.7 | 0.8 | 5.8 | 1.5 | 0.7 | 2.2 | 1.8 | 2.7 | | | 0.2 | 0.3 | |
| | Clinical Trials | 8 | 23.6 | 6.4 | 6.1 | 0.2 | 6.4 | 12.0 | 9.1 | 4.1 | 4.9 | 6.1 | 5.5 | 2.7 | 0.3 | 2.2 | 2.5 | 0.3 | | 1.1 | 1.4 | 1.3 | 0.3 | 2.6 | 1.0 | 0.1 |
| Resources, Training | Cell Lines | 5 | 23.7 | 9.8 | 8.2 | 7.1 | 10.5 | 5.2 | 0.5 | 6.0 | 3.4 | 3.7 | 1.4 | 4.8 | 5.2 | 3.6 | 0.8 | 1.3 | 1.7 | 2.7 | | | | 0.4 | | |
| | Non-Human Models | 18 | 7.3 | 11.0 | 7.5 | 9.8 | 10.4 | 7.2 | 3.8 | 8.0 | 4.9 | 5.3 | 3.1 | 5.2 | 5.2 | 3.9 | 2.9 | 2.0 | 0.0 | 1.4 | | 0.5 | 0.5 | 0.0 | 0.0 | |
| | Conferences | 3 | 10.9 | 8.7 | 9.6 | 4.9 | 7.0 | 5.5 | 6.3 | 8.3 | 5.1 | 6.2 | 3.8 | | 5.1 | 6.3 | 2.6 | | 4.9 | 3.7 | | 1.0 | | | | |
| | Research Resources | 9 | 16.1 | 6.6 | 6.8 | 4.8 | 5.5 | 15.7 | 4.4 | 4.9 | 7.4 | 4.8 | 3.2 | 2.2 | 4.6 | 2.8 | 1.7 | 1.2 | 1.8 | 1.2 | 0.2 | 1.1 | 0.5 | | 1.8 | 0.4 |
| | Training, Career Development | 9 | 6.8 | 8.3 | 5.8 | 11.1 | 7.6 | 9.7 | 8.4 | 3.9 | 5.2 | 8.7 | 5.5 | 1.4 | 2.7 | 2.4 | 1.7 | 1.2 | 0.8 | 0.9 | 1.0 | 0.4 | 2.8 | 1.3 | 0.7 | 1.5 |

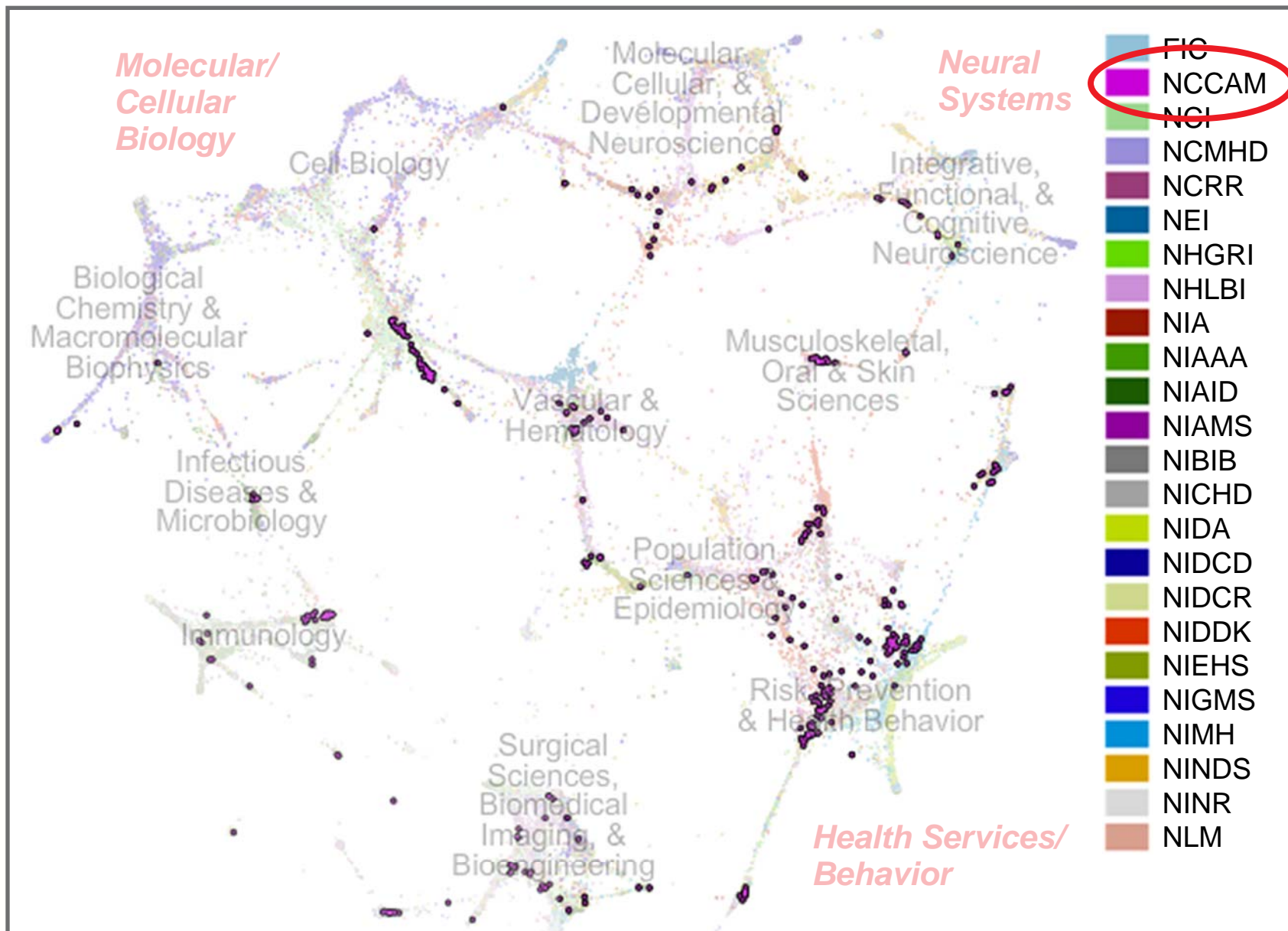


Legend: Individual NIH Institute descriptions and distributions on the graph layout.

Each of the following pages shows a view of the graph layout with a different Institute highlighted. The format is designed for rapid scrolling in full-page mode. The current page shows an initial view of all of the Institutes, with the labeling overlay from Figure 1 for reference. Each subsequent page shows a different Institute, in the order of the listed Institute acronyms, with the corresponding acronym circled. The full Institute names are provided underneath each panel, along with official descriptions of each of the Institutes' missions, which were obtained from the NIH website (<http://www.nih.gov/icd/>).

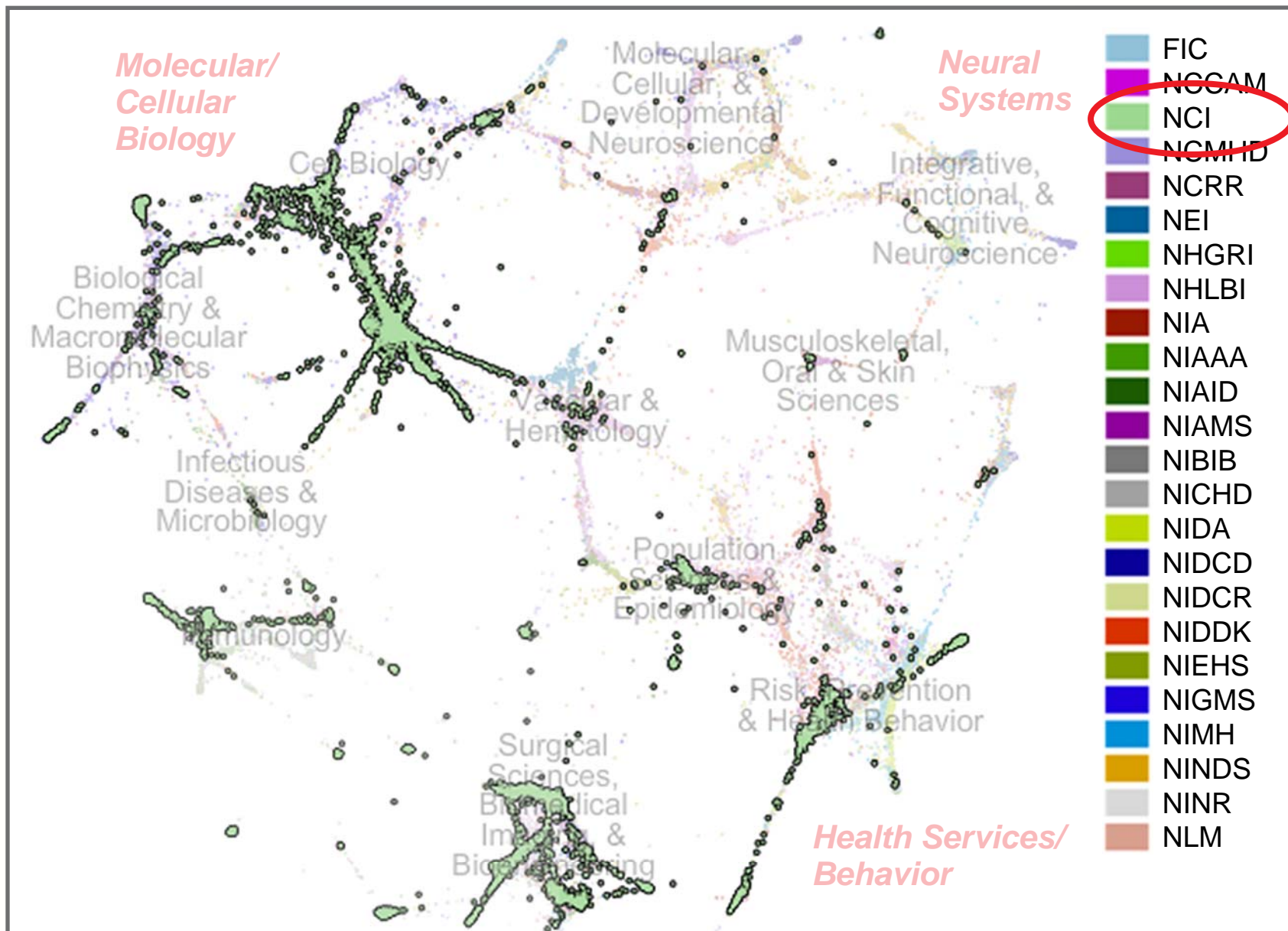


[John E. Fogarty International Center for Advanced Study in the Health Sciences \(FIC\)](#) — Est. 1968
 FIC promotes and supports scientific research and training internationally to reduce disparities in global health.



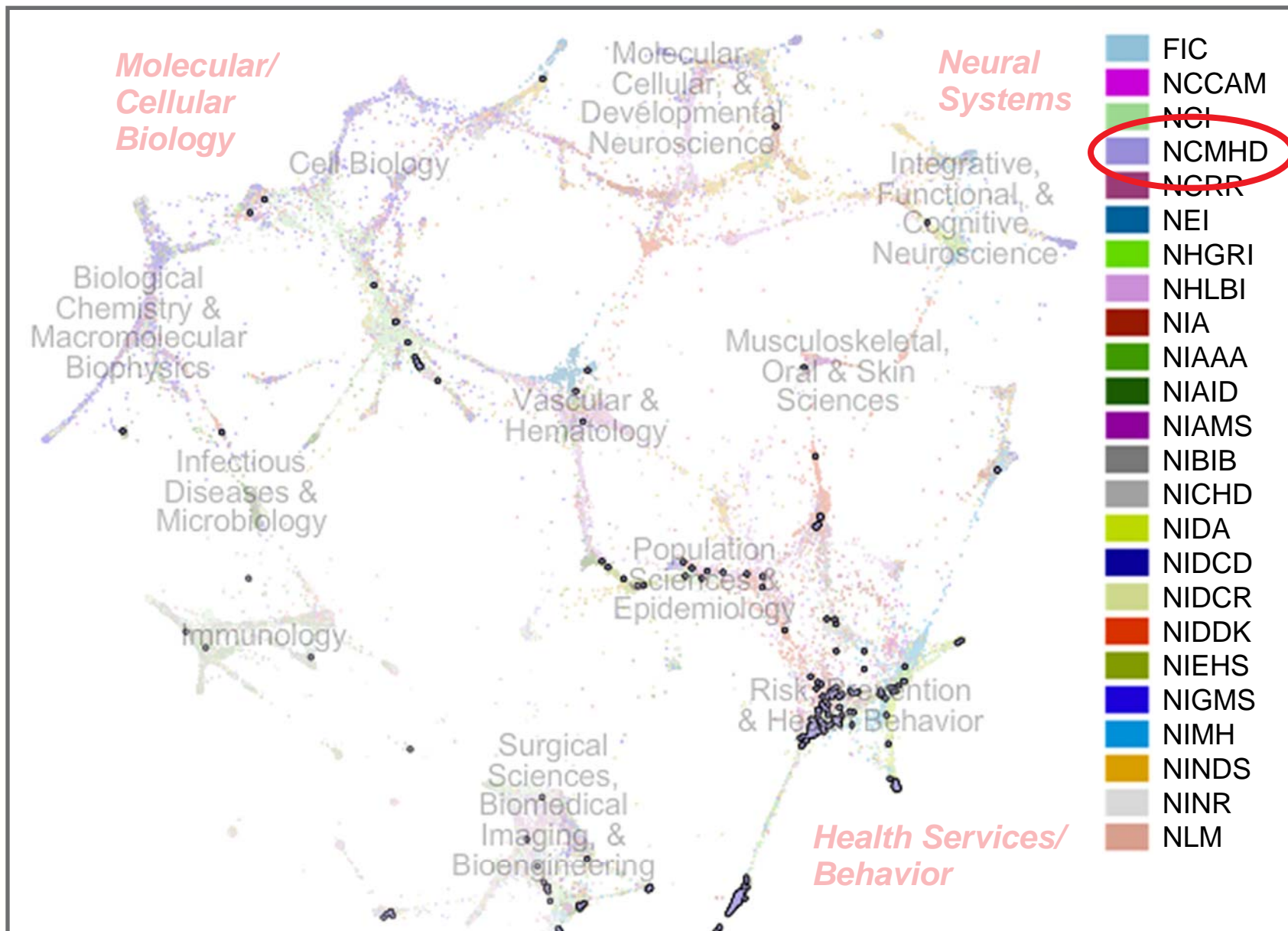
[National Center for Complementary and Alternative Medicine \(NCCAM\)](#) — Est. 1999

NCCAM is dedicated to exploring complementary and alternative medical (CAM) practices in the context of rigorous science; training CAM researchers and disseminating authoritative information.



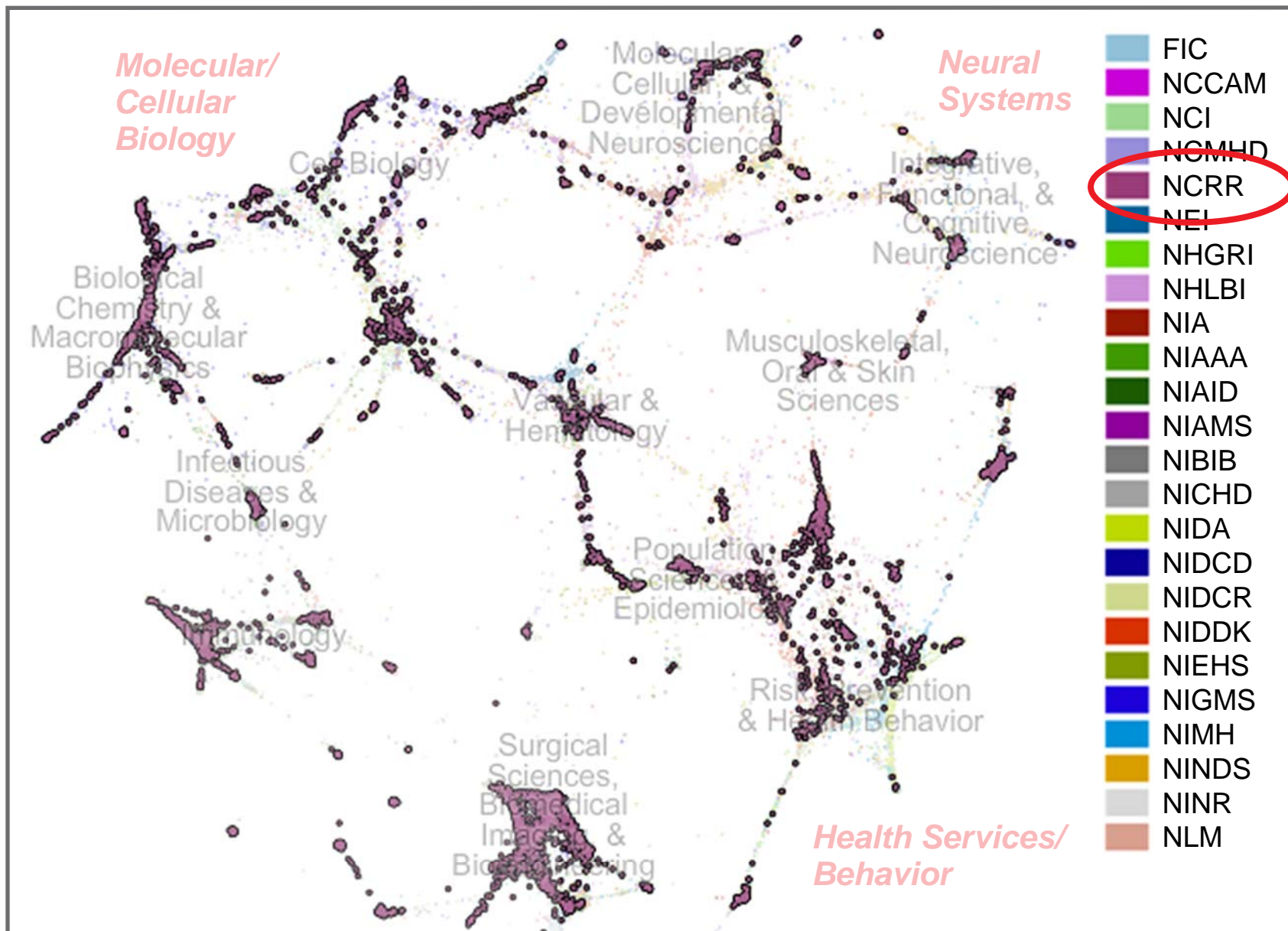
National Cancer Institute (NCI) — Est. 1937

NCI leads a national effort to eliminate the suffering and death due to cancer. Through basic and clinical biomedical research and training, NCI conducts and supports research that will lead to a future in which we can prevent cancer before it starts, identify cancers that do develop at the earliest stage, eliminate cancers through innovative treatment interventions, and biologically control those cancers that we cannot eliminate so they become manageable, chronic diseases.



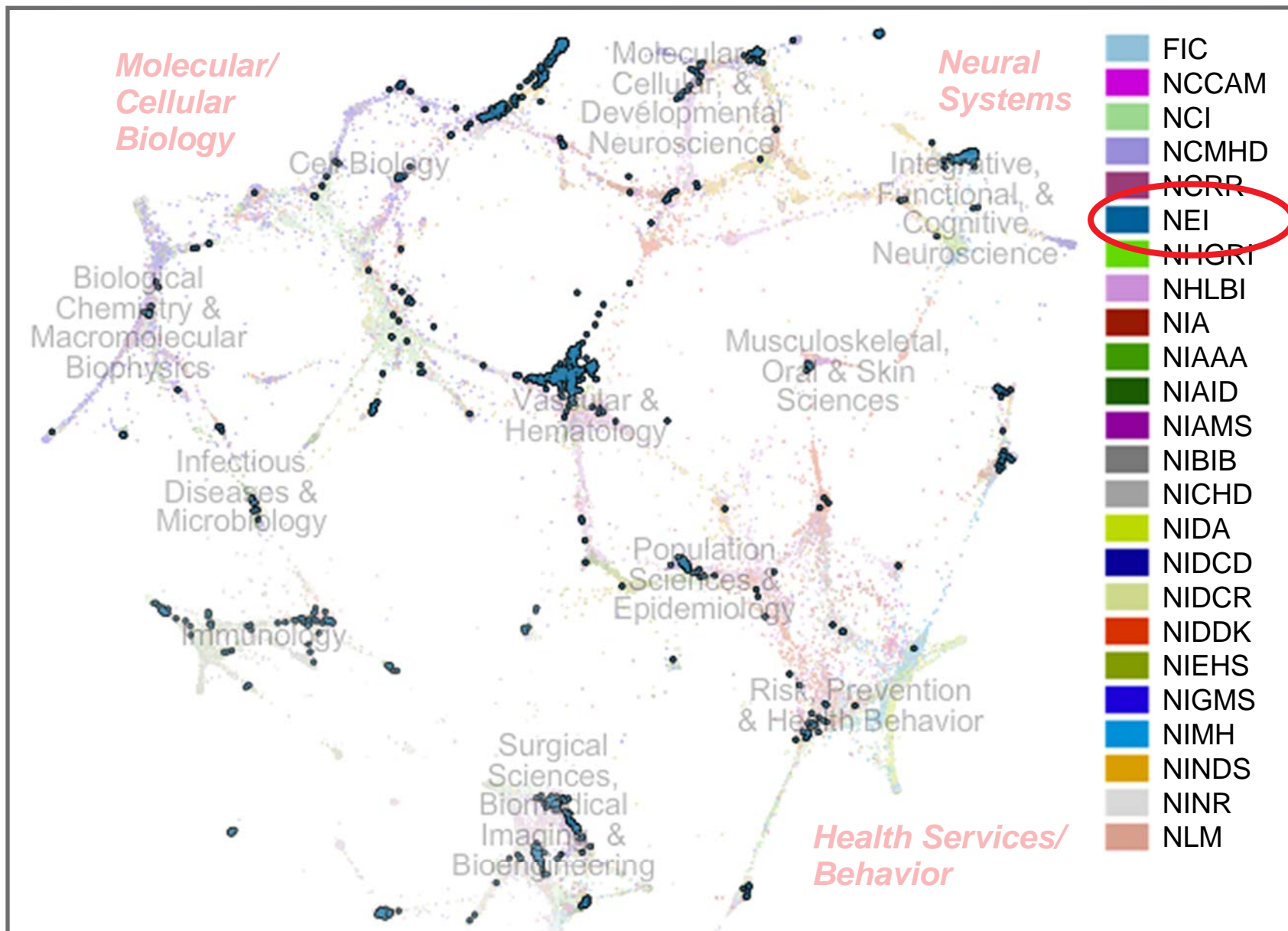
National Institute on Minority Health and Health Disparities (NIMHD) — Est. 1993

The mission of NIMHD is to promote minority health and to lead, coordinate, support, and assess the NIH effort to reduce and ultimately eliminate health disparities. In this effort NIMHD will conduct and support basic, clinical, social, and behavioral research, promote research infrastructure and training, foster emerging programs, disseminate information, and reach out to minority and other health disparity communities.



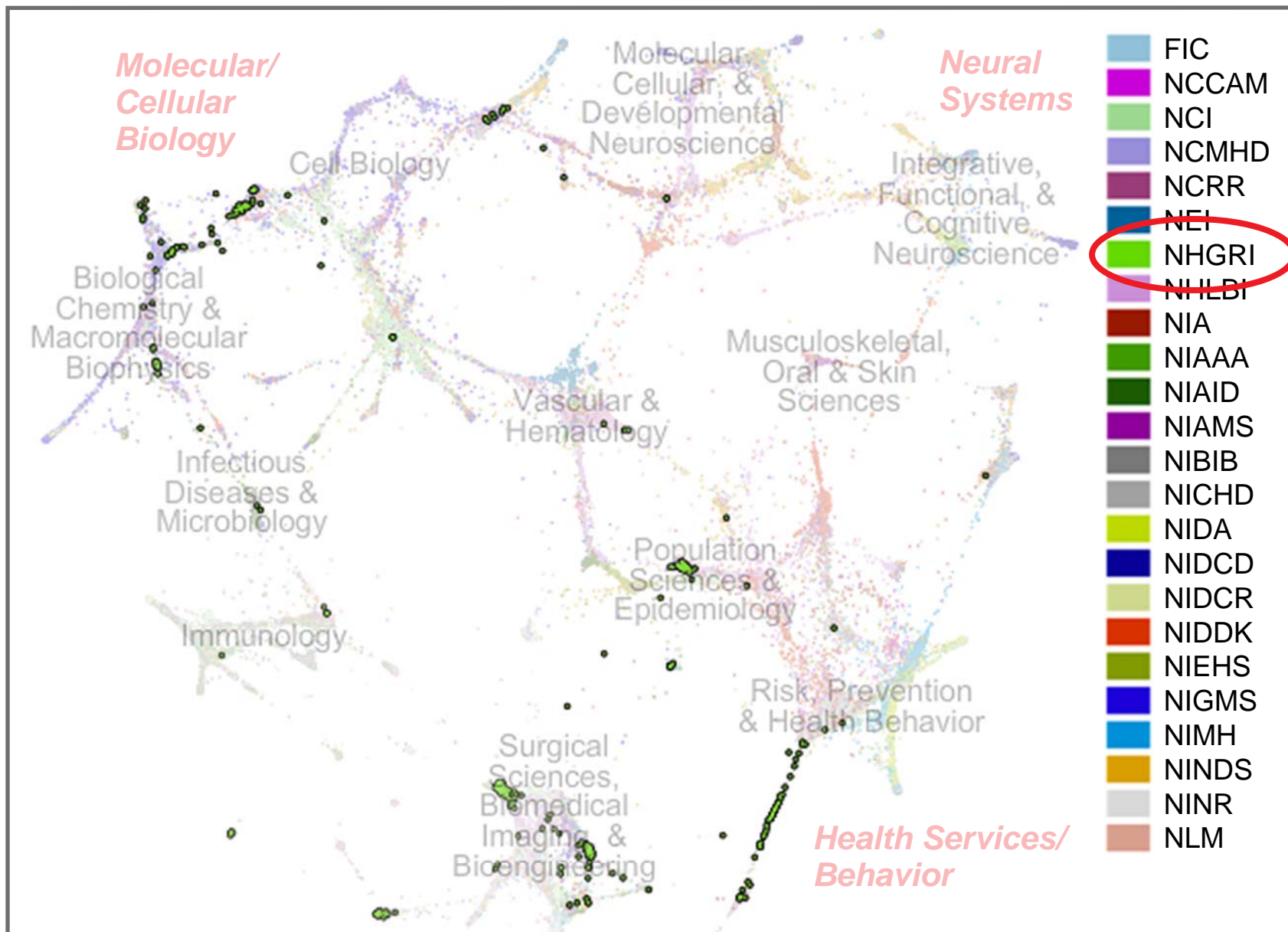
National Center for Research Resources (NCCR) — Est. 1962

NCCR provides laboratory scientists and clinical researchers with the environments and tools they need to understand, detect, treat, and prevent a wide range of diseases. With this support, scientists make biomedical discoveries, translate these findings to animal-based studies, and then apply them to patient-oriented research.



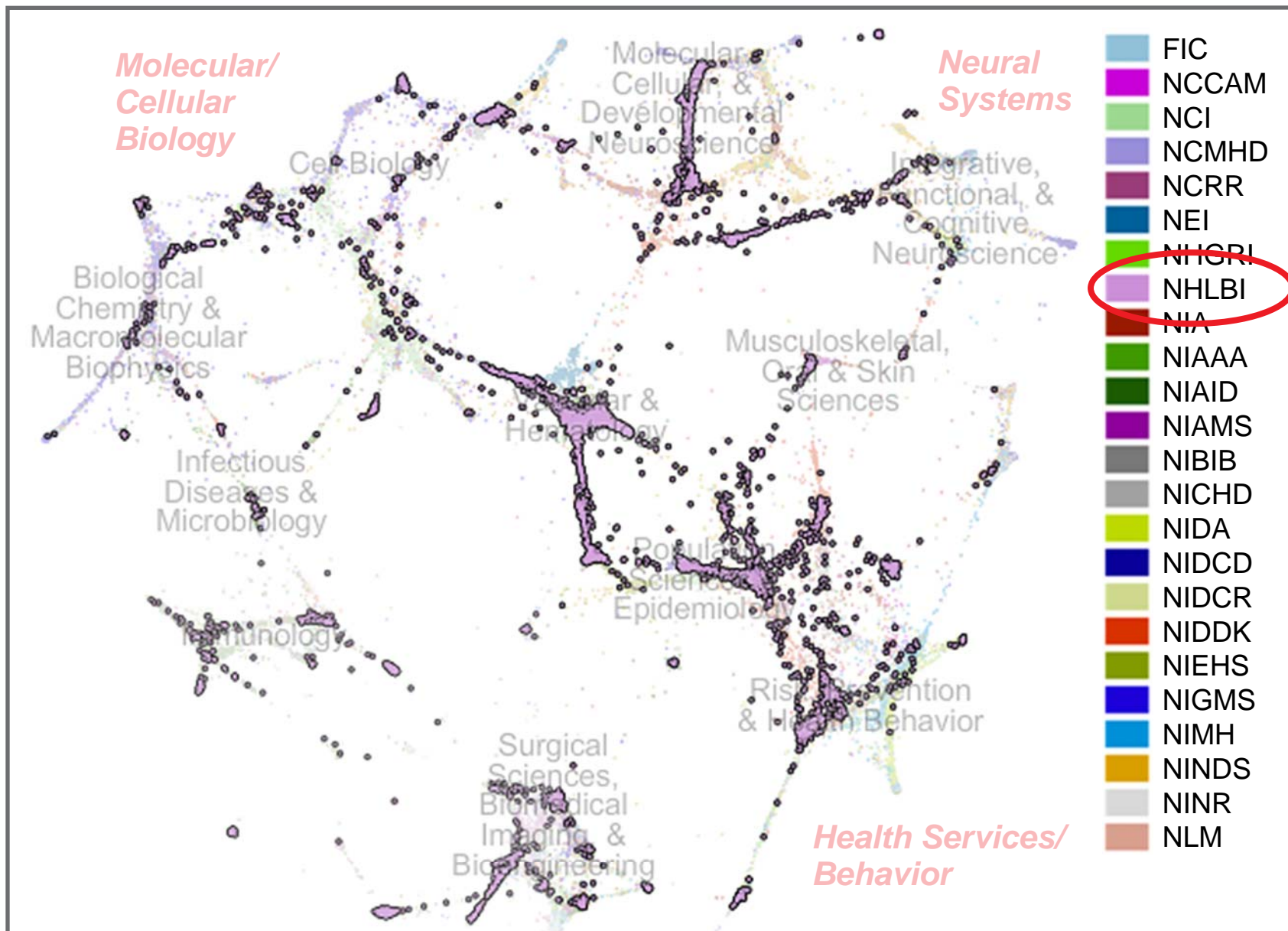
[National Eye Institute \(NEI\)](#) — Est. 1968

NEI conducts and supports research that helps prevent and treat eye diseases and other disorders of vision. This research leads to sight-saving treatments, reduces visual impairment and blindness, and improves the quality of life for people of all ages. NEI-supported research has advanced our knowledge of how the eye functions in health and disease.



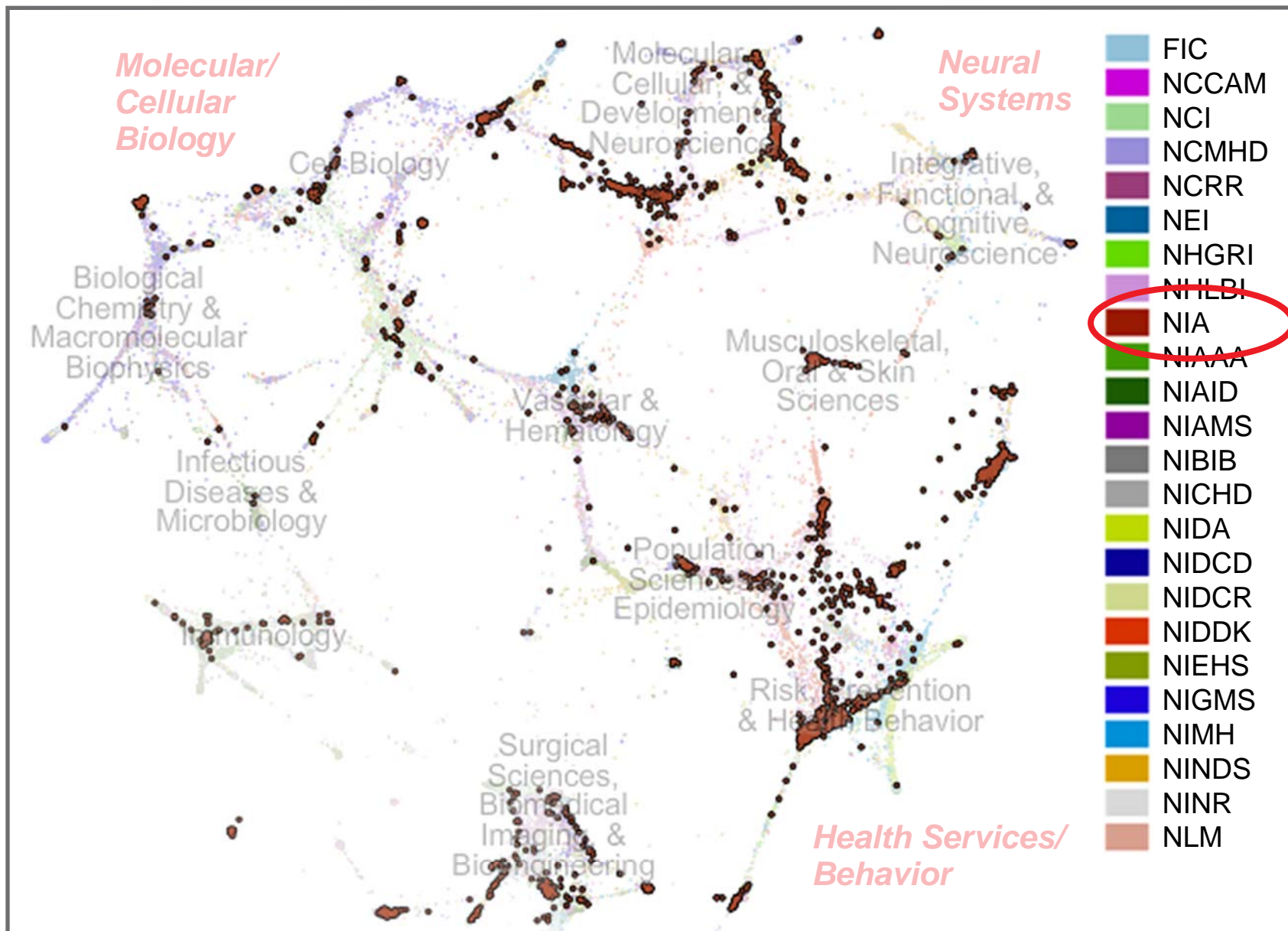
National Human Genome Research Institute (NHGRI) — Est. 1989

NHGRI is devoted to advancing health through genome research. The Institute led NIH's contribution to the Human Genome Project, which was successfully completed in 2003 ahead of schedule and under budget. Building on the foundation laid by the sequencing of the human genome, NHGRI's work now encompasses a broad range of research aimed at expanding understanding of human biology and improving human health. In addition, a critical part of NHGRI's mission continues to be the study of the ethical, legal and social implications of genome research.



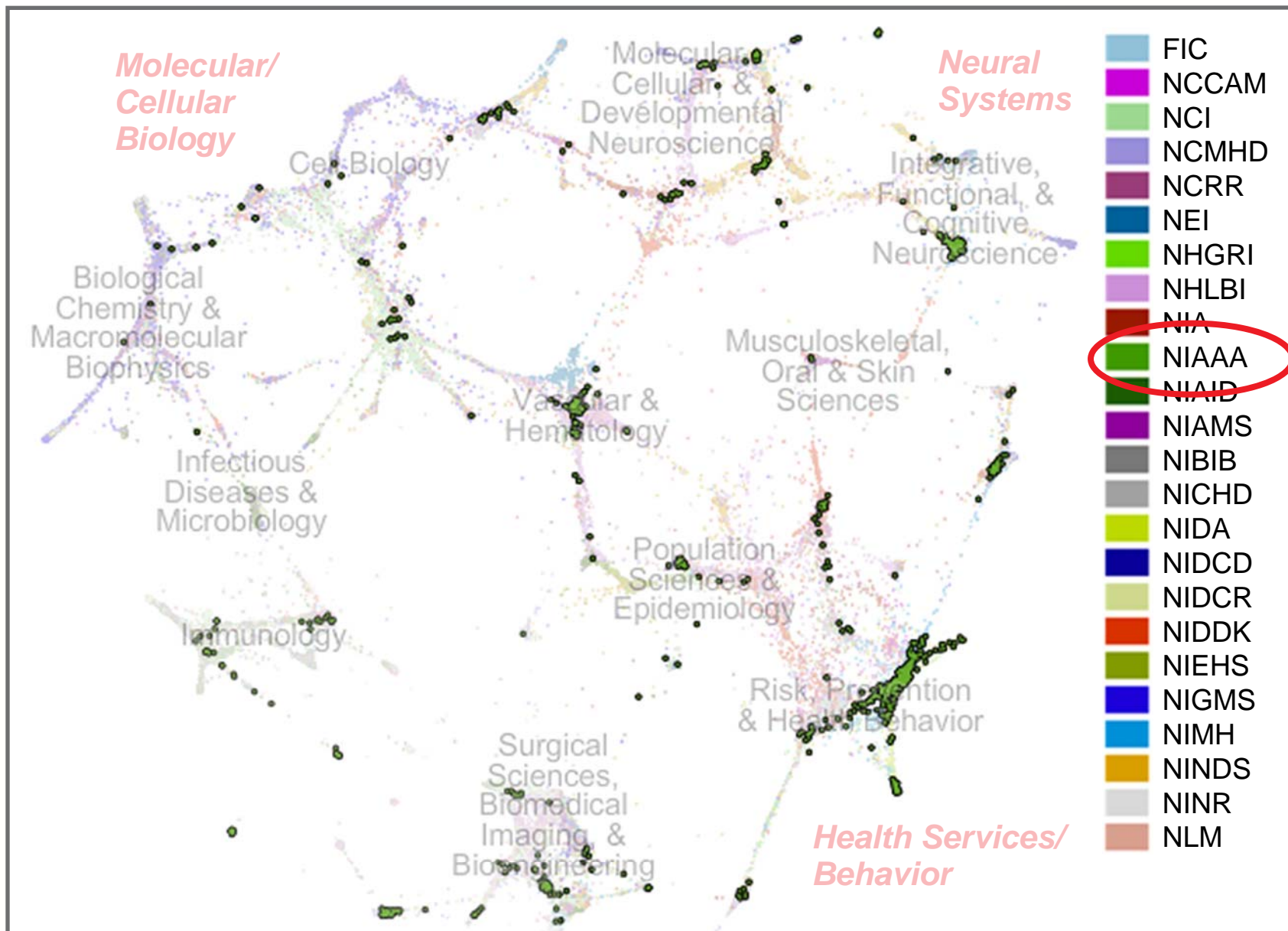
National Heart, Lung, and Blood Institute (NHLBI) — Est. 1948

NHLBI provides leadership for a national program in diseases of the heart, blood vessels, lung, and blood; blood resources; and sleep disorders. Since October 1997, the NHLBI has also had administrative responsibility for the NIH Woman's Health Initiative. The Institute plans, conducts, fosters, and supports an integrated and coordinated program of basic research, clinical investigations and trials, observational studies, and demonstration and education projects.



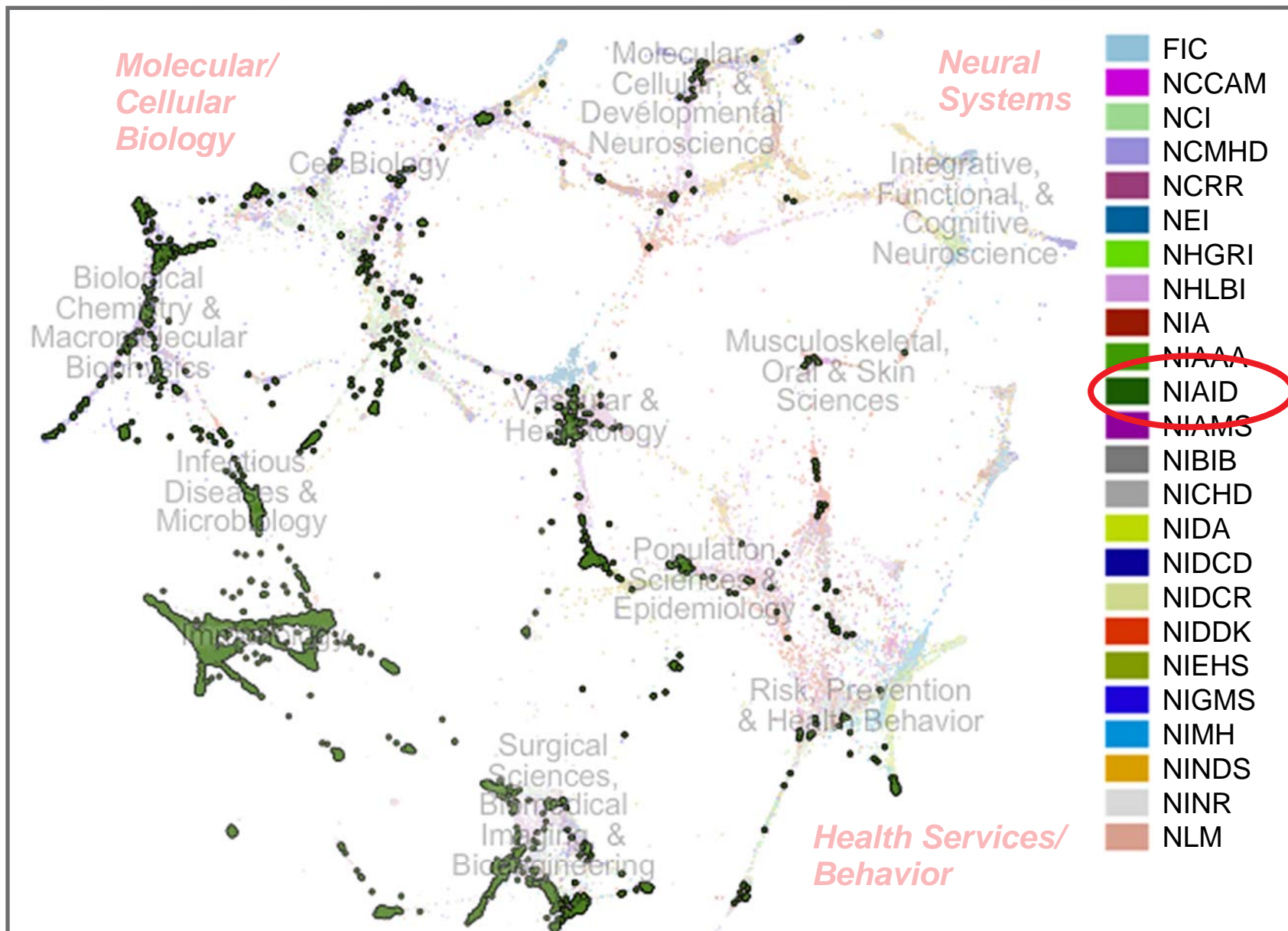
[National Institute on Aging \(NIA\)](#) — Est. 1974

NIA leads a national program of research on the biomedical, social, and behavioral aspects of the aging process; the prevention of age-related diseases and disabilities; and the promotion of a better quality of life for all older Americans.



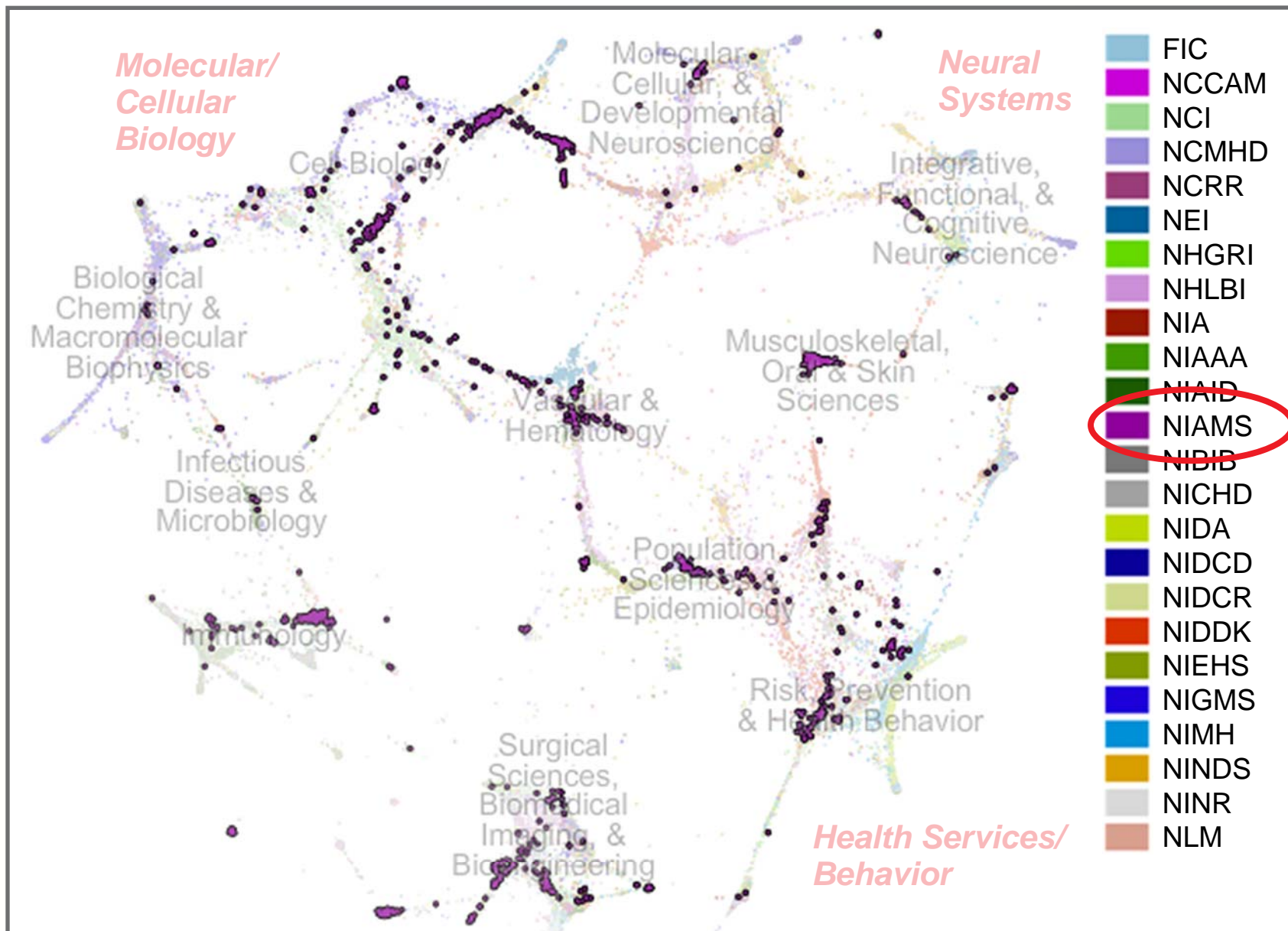
[National Institute on Alcohol Abuse and Alcoholism \(NIAAA\)](#) — Est. 1970

NIAAA conducts research focused on improving the treatment and prevention of alcoholism and alcohol-related problems to reduce the enormous health, social, and economic consequences of this disease.



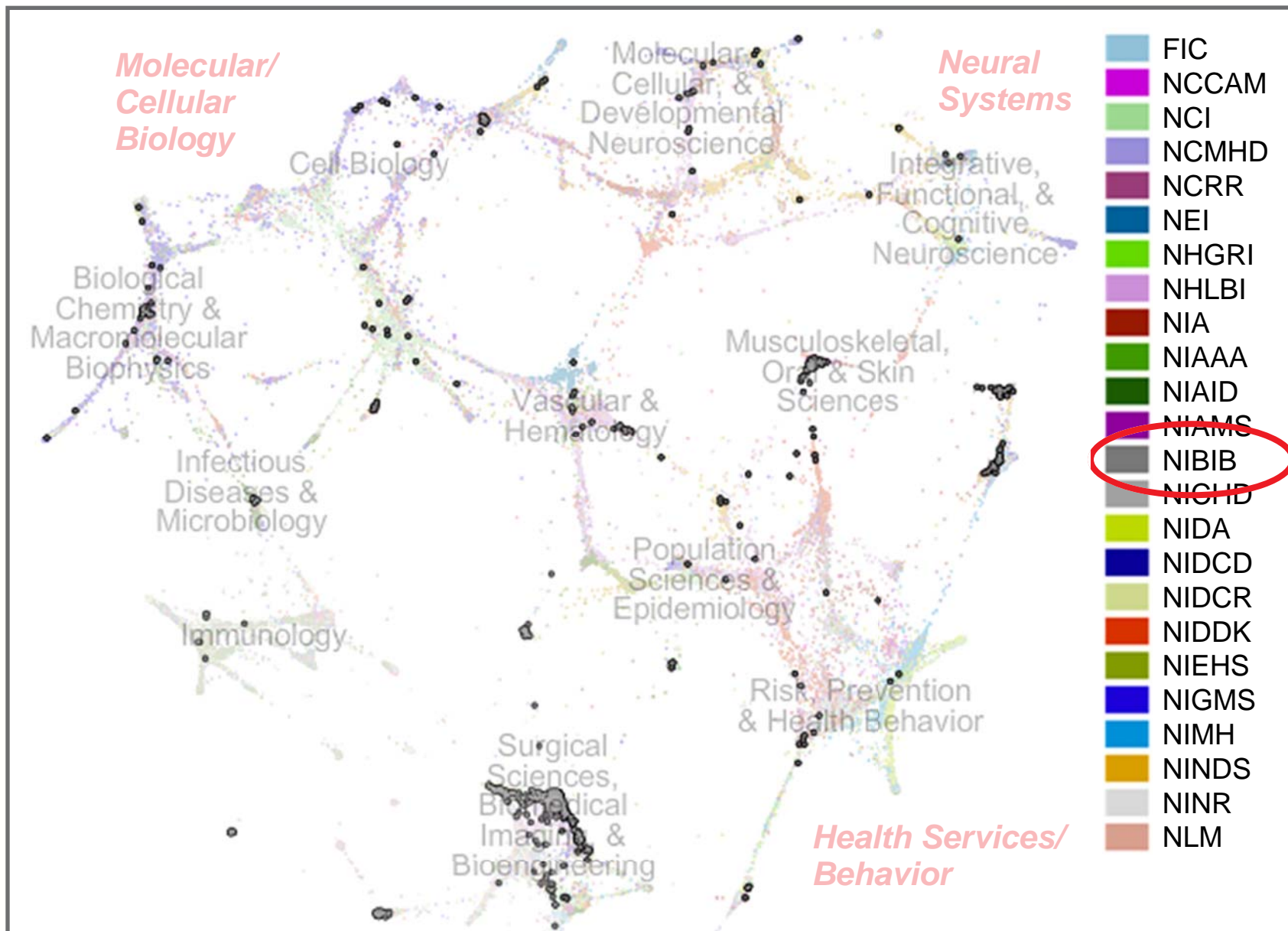
[National Institute of Allergy and Infectious Diseases \(NIAID\)](#) — Est. 1986

NIAID research strives to understand, treat, and ultimately prevent the myriad infectious, immunologic, and allergic diseases that threaten millions of human lives.



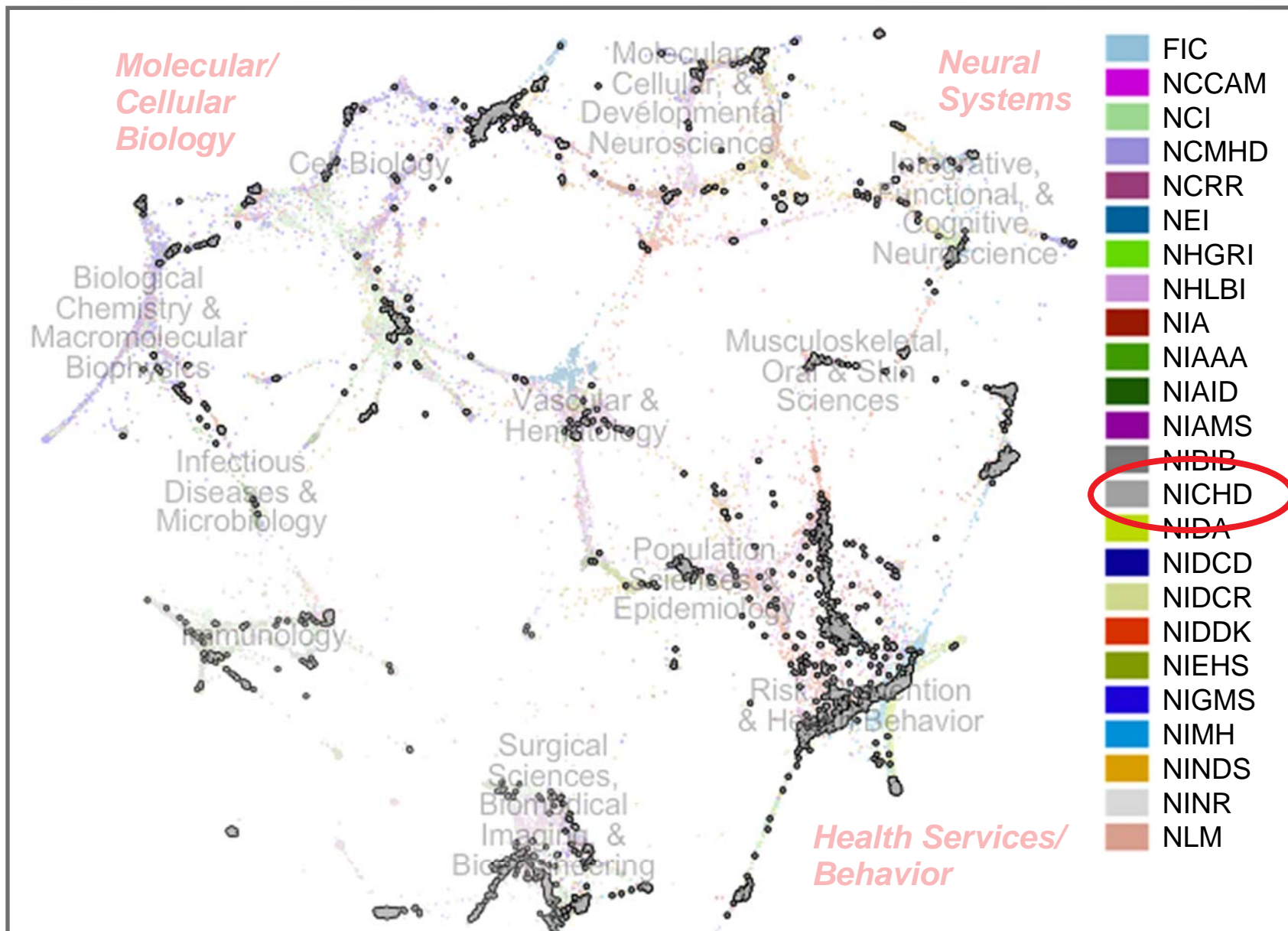
[National Institute of Arthritis and Musculoskeletal and Skin Diseases \(NIAMS\)](#) — Est. 1986

NIAMS supports research into the causes, treatment, and prevention of arthritis and musculoskeletal and skin diseases, the training of basic and clinical scientists to carry out this research, and the dissemination of information on research progress in these diseases.



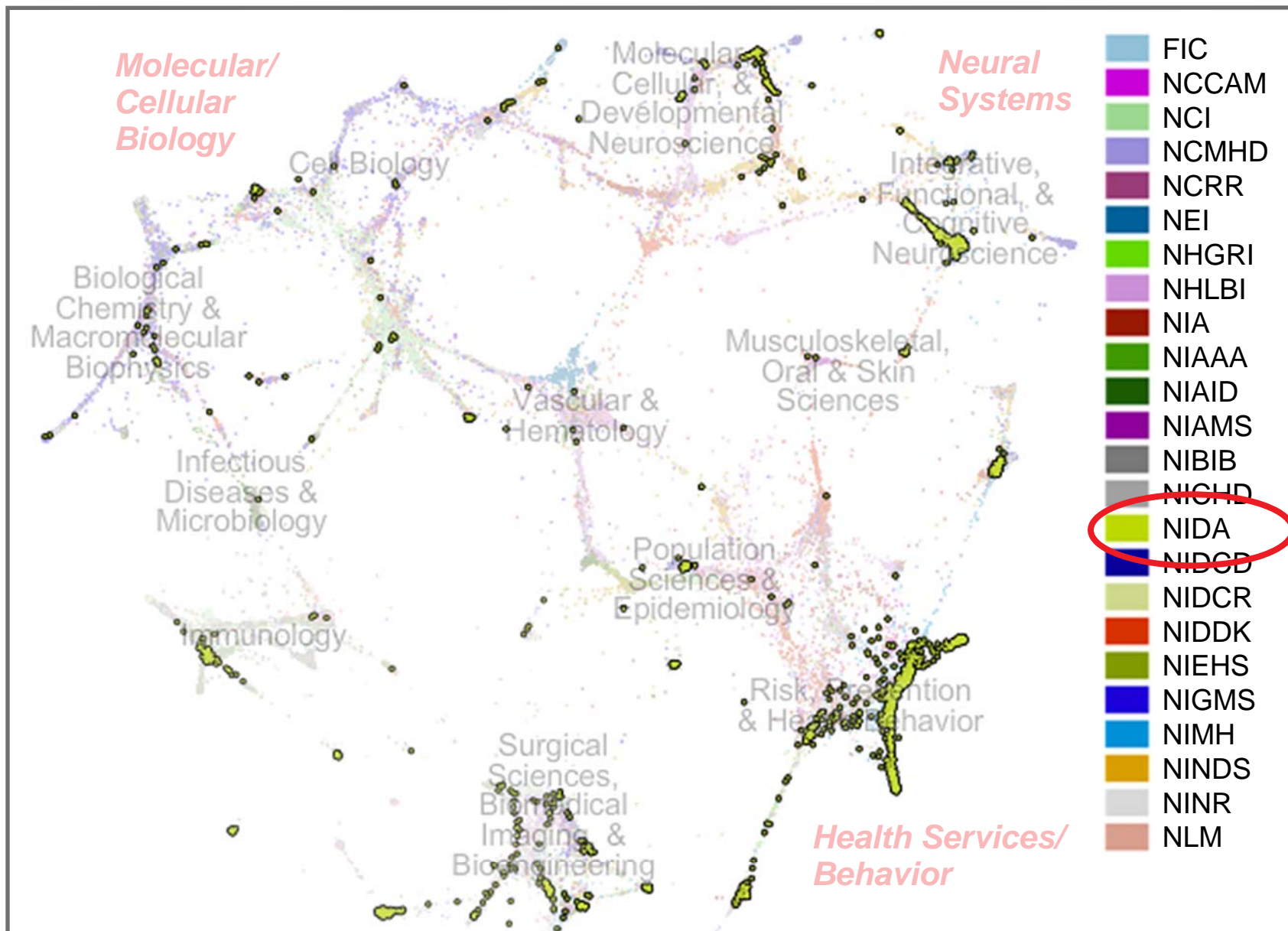
[National Institute of Biomedical Imaging and Bioengineering \(NIBIB\)](#) — Est. 2000

NIBIB improves health by promoting fundamental discoveries, design and development, and translation and assessment of technological capabilities in biomedical imaging and bioengineering, enabled by relevant areas of information science, physics, chemistry, mathematics, materials science, and computer sciences.



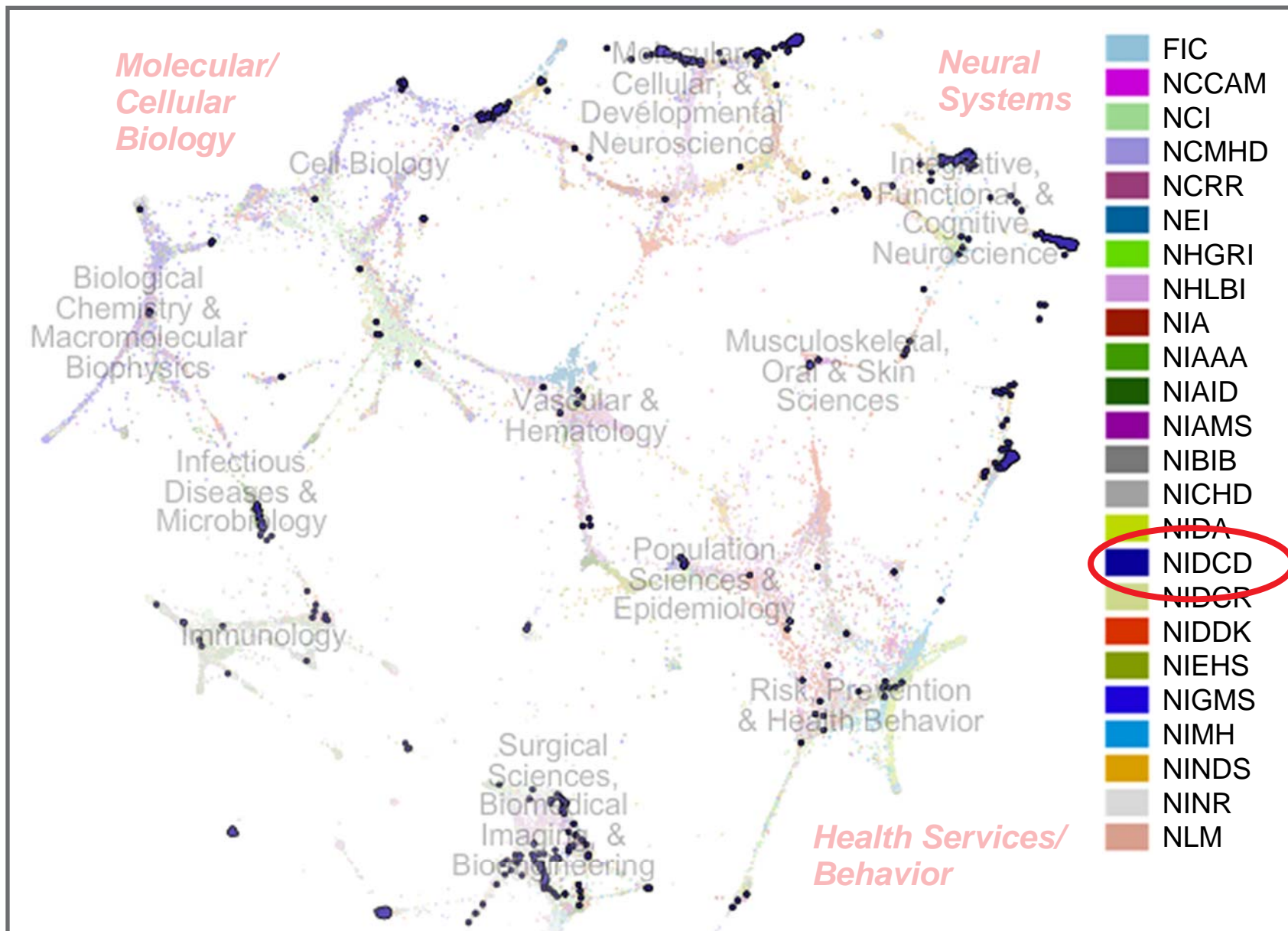
[Eunice Kennedy Shriver National Institute of Child Health and Human Development \(NICHD\)](#) — Est. 1962

NICHD research on fertility, pregnancy, growth, development, and medical rehabilitation strives to ensure that every child is born healthy and wanted and grows up free from disease and disability.



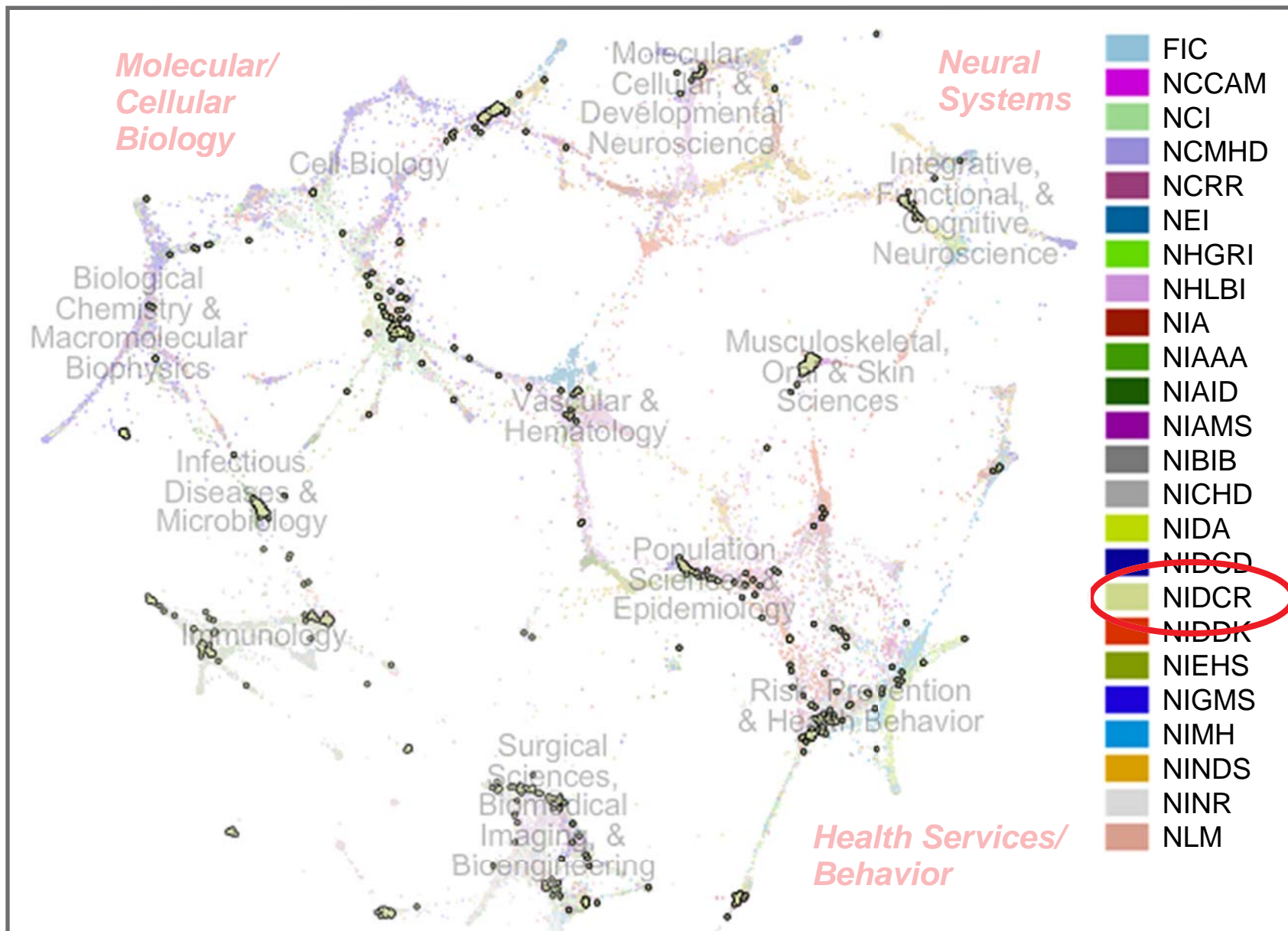
[National Institute on Drug Abuse \(NIDA\)](#) — Est. 1973

NIDA leads the nation in bringing the power of science to bear on drug abuse and addiction through support and conduct of research across a broad range of disciplines and rapid and effective dissemination of results of that research to improve drug abuse and addiction prevention, treatment, and policy.



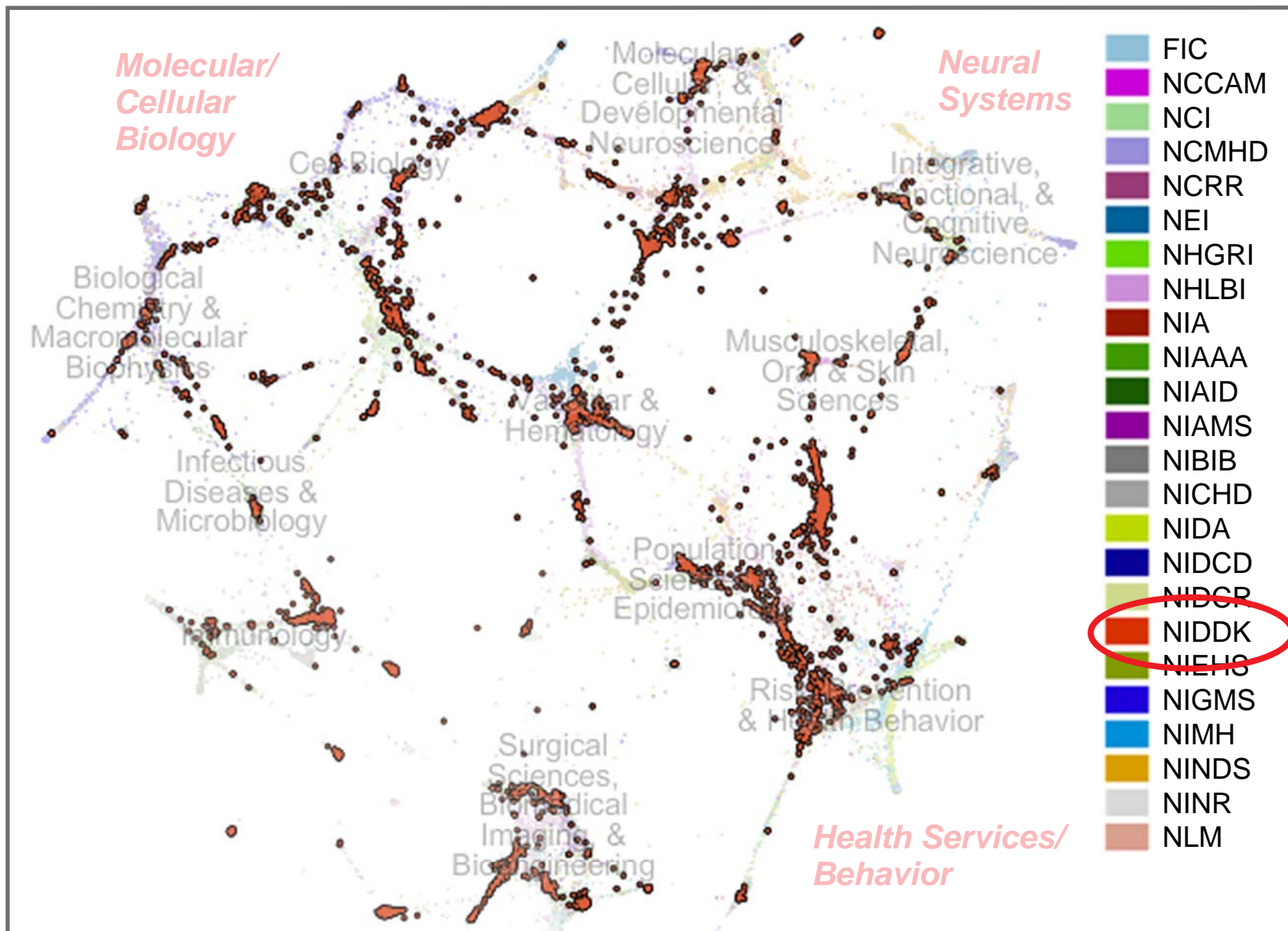
[National Institute on Deafness and Other Communication Disorders \(NIDCD\)](#) — Est. 1988

NIDCD conducts and supports biomedical research and research training on normal mechanisms as well as diseases and disorders of hearing, balance, smell, taste, voice, speech, and language that affect 46 million Americans.



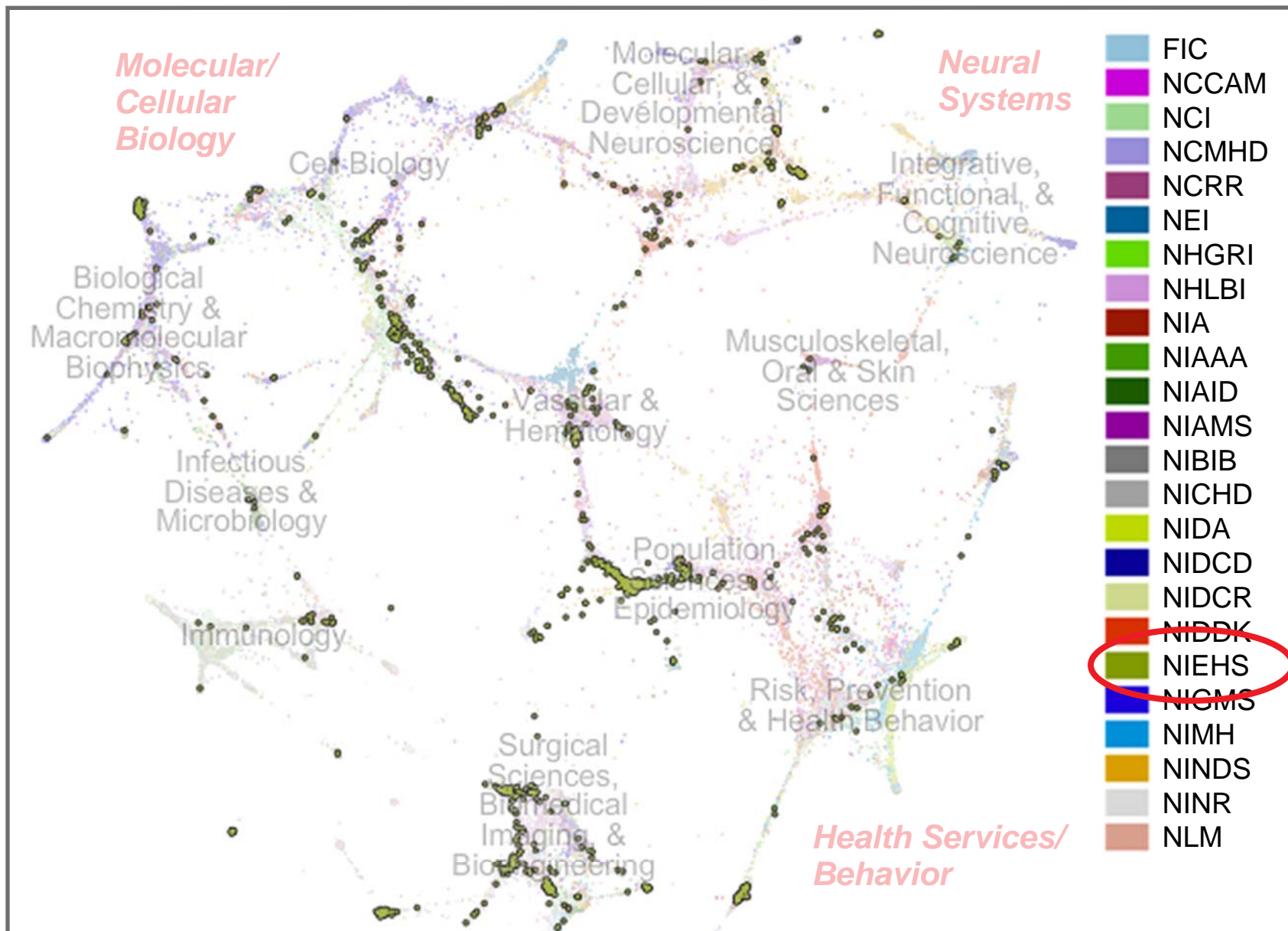
[National Institute of Dental and Craniofacial Research \(NIDCR\)](#) — Est. 1948

NIDCR provides leadership for a national research program designed to understand, treat, and ultimately prevent the infectious and inherited craniofacial-oral-dental diseases and disorders that compromise millions of human lives.



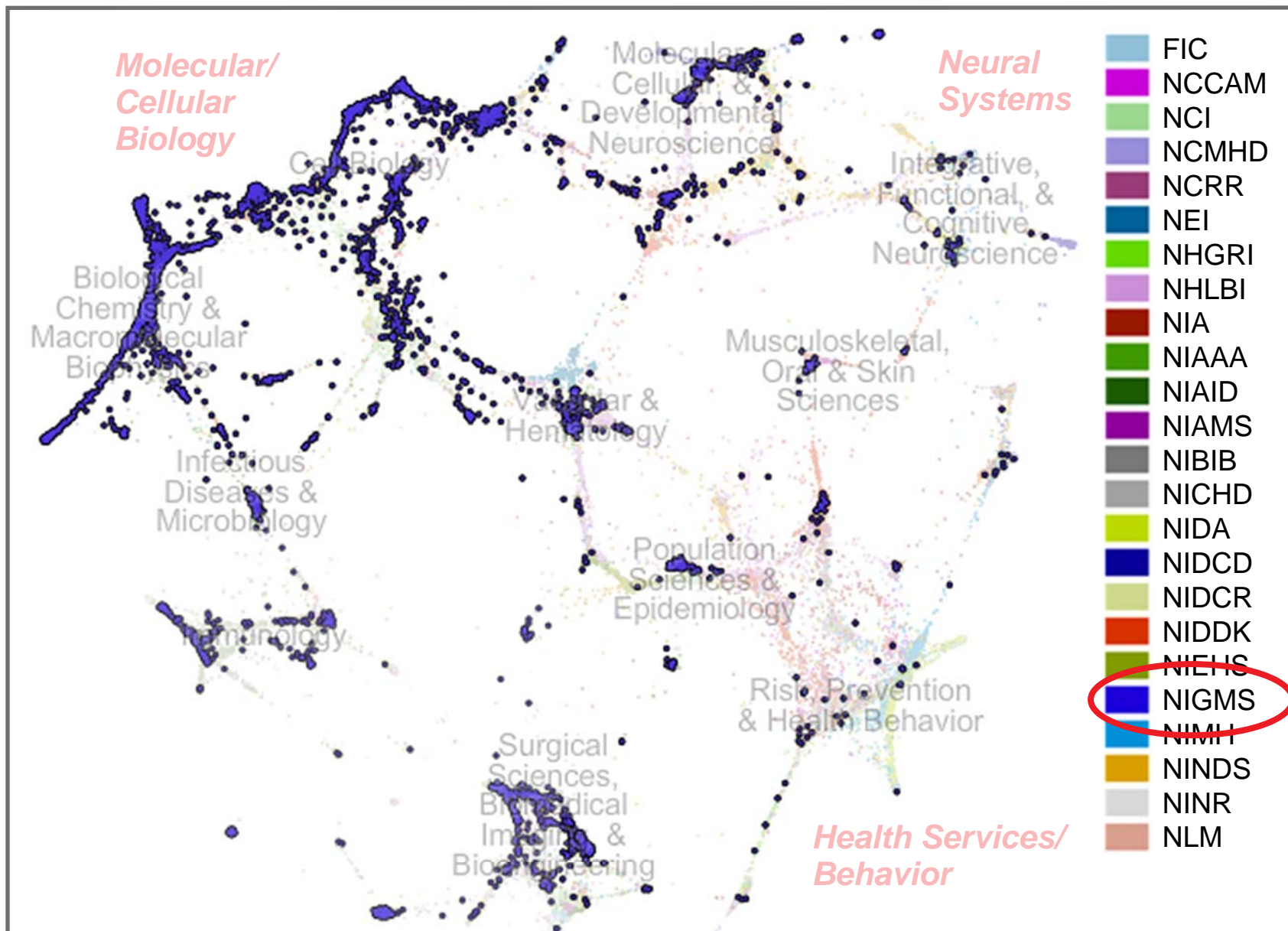
[National Institute of Diabetes and Digestive and Kidney Diseases \(NIDDK\)](#) — Est. 1950

NIDDK conducts and supports basic and applied research and provides leadership for a national program in diabetes, endocrinology, and metabolic diseases; digestive diseases and nutrition; and kidney, urologic, and hematologic diseases. Several of these diseases are among the leading causes of disability and death; all seriously affect the quality of life of those who have them.



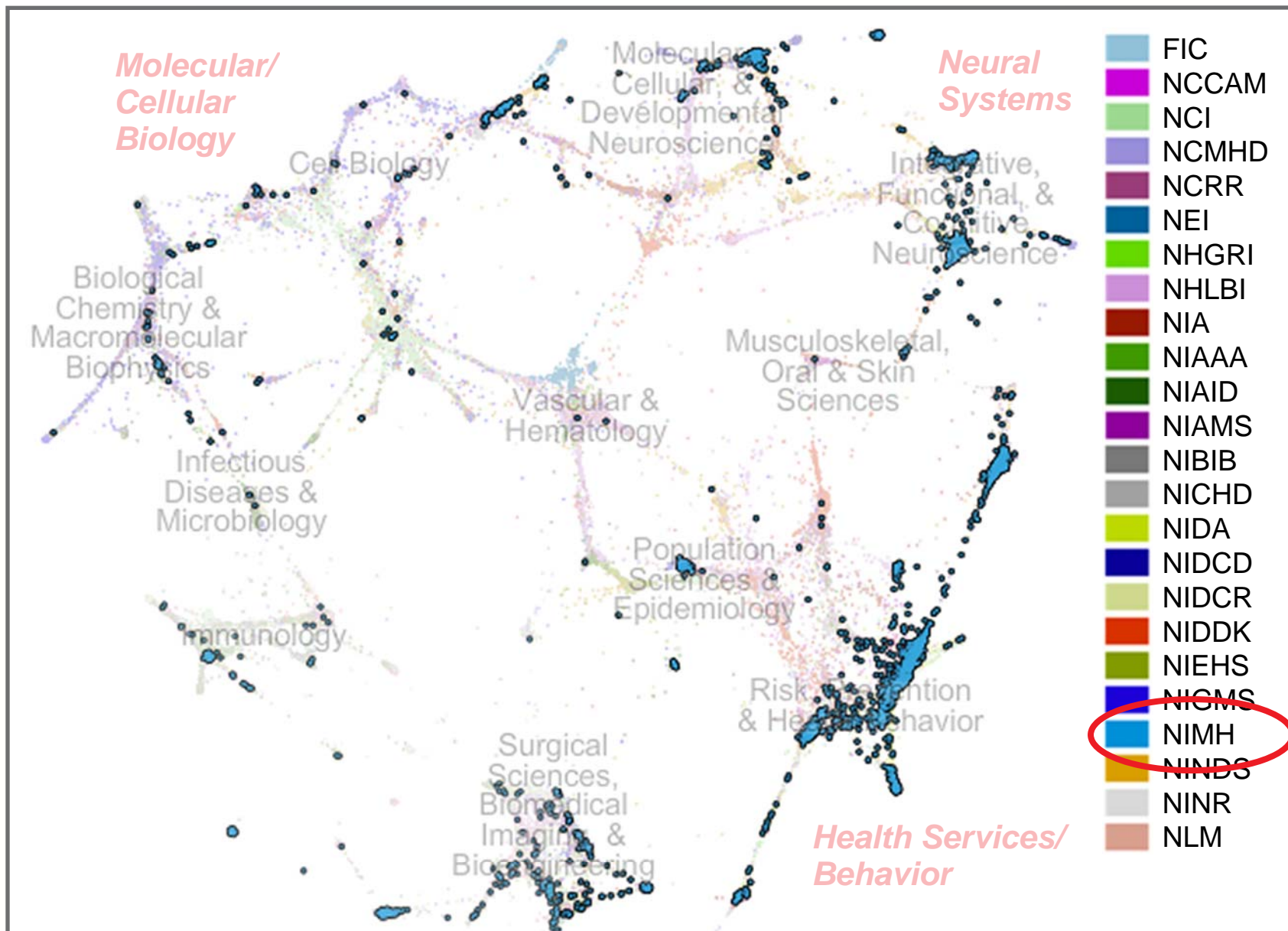
[National Institute of Environmental Health Sciences \(NIEHS\)](#) — Est. 1969

NIEHS reduces the burden of human illness and dysfunction from environmental causes by, defining how environmental exposures, genetic susceptibility, and age interact to affect an individual's health.



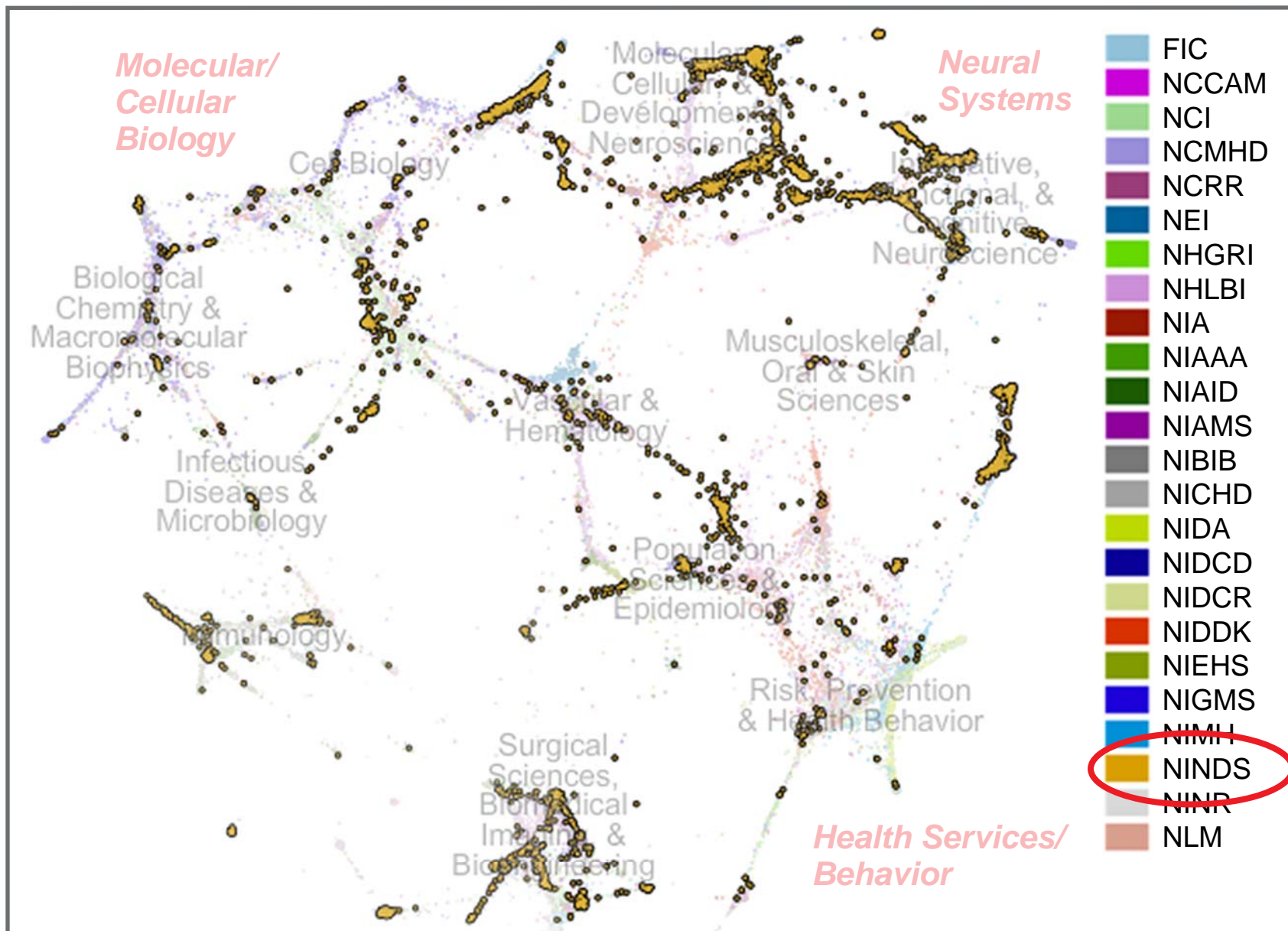
National Institute of General Medical Sciences (NIGMS) — Est. 1962

NIGMS supports basic biomedical research that is not targeted to specific diseases. NIGMS funds studies on genes, proteins, and cells, as well as on fundamental processes like communication within and between cells, how our bodies use energy, and how we respond to medicines. The results of this research increase our understanding of life and lay the foundation for advances in disease diagnosis, treatment, and prevention. NIGMS also supports research training programs that produce the next generation of biomedical scientists, and it has special programs to encourage underrepresented minorities to pursue biomedical research careers.



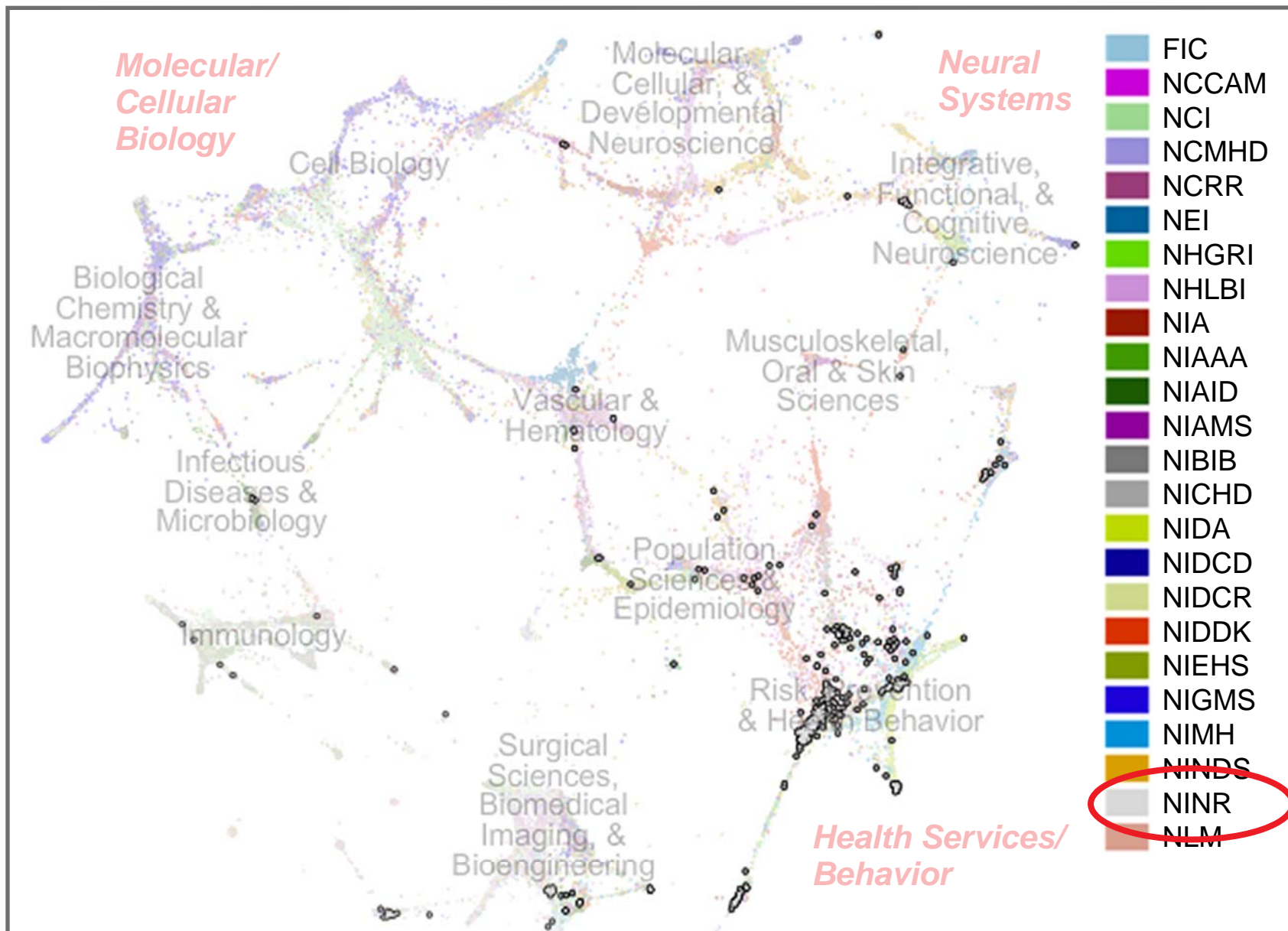
[National Institute of Mental Health \(NIMH\)](#) — Est. 1949

NIMH provides national leadership dedicated to understanding, treating, and preventing mental illnesses through basic research on the brain and behavior, and through clinical, epidemiological, and services research.



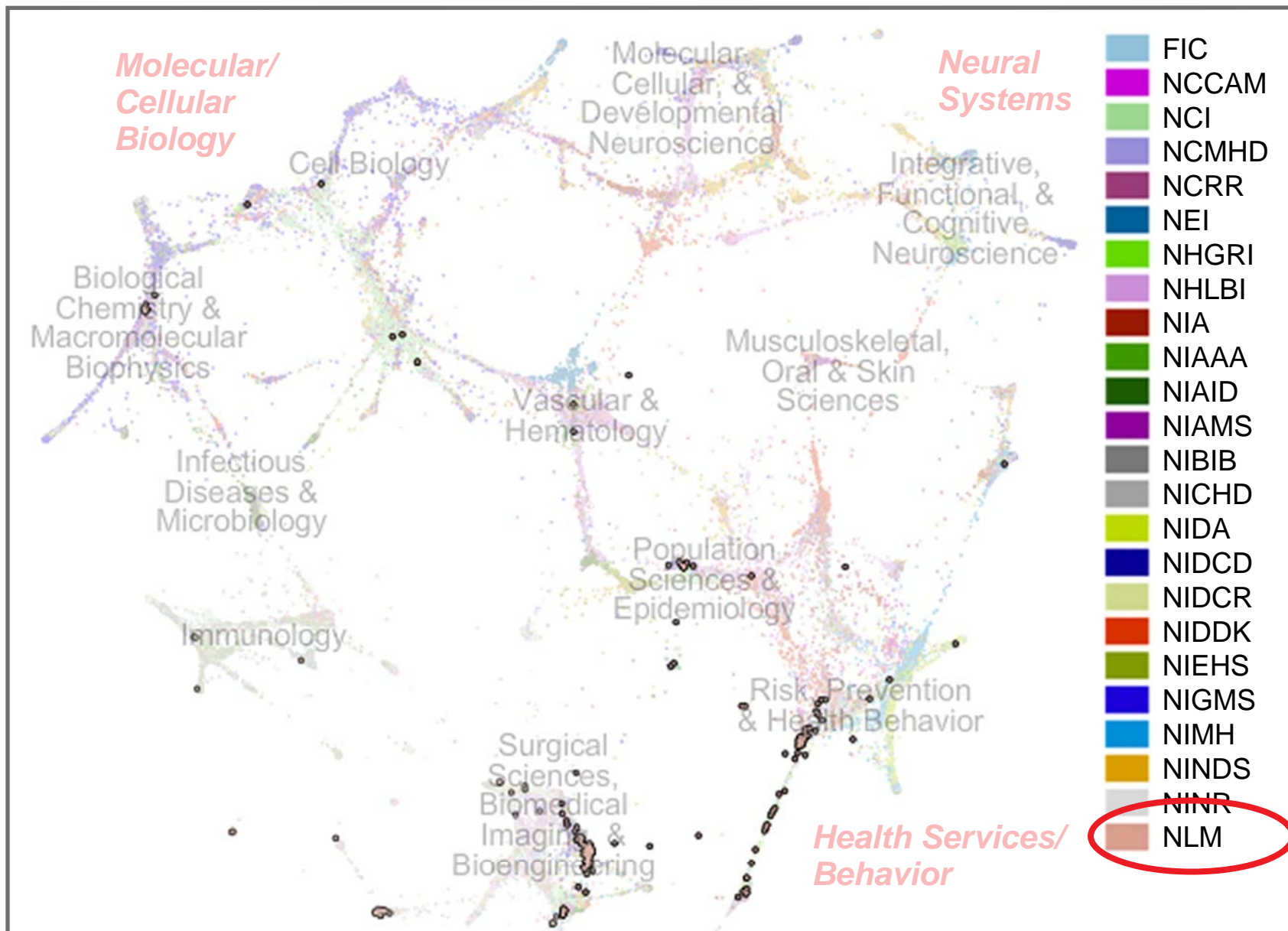
National Institute of Neurological Disorders and Stroke (NINDS) — Est. 1950

The mission of the NINDS is to reduce the burden of neurological diseases—a burden borne by every age group, every segment of society, and people all over the world. To accomplish this goal the NINDS supports and conducts research, both basic and clinical, on the normal and diseased nervous system, fosters the training of investigators in the basic and clinical neurosciences, and seeks better understanding, diagnosis, treatment, and prevention of neurological disorders.



[National Institute of Nursing Research \(NINR\)](#) — Est. 1986

NINR supports clinical and basic research to establish a scientific basis for the care of individuals across the life span—from the management of patients during illness and recovery to the reduction of risks for disease and disability; the promotion of healthy lifestyles; the promotion of quality of life in those with chronic illness; and the care for individuals at the end of life. This research may also include families within a community context, and it also focuses on the special needs of at-risk and under-served populations, with an emphasis on health disparities.



National Library of Medicine (NLM) — Est. 1956

NLM collects, organizes, and makes available biomedical science information to scientists, health professionals, and the public. The Library's Web-based databases, including PubMed/Medline and MedlinePlus, are used extensively around the world. NLM conducts and supports research in biomedical communications; creates information resources for molecular biology, biotechnology, toxicology, and environmental health; and provides grant and contract support for training, medical library resources, and biomedical informatics and communications research.