**Cluster 0:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Estimating Population Effects in Mental Health Research Using Meta-Analysis | DUKE UNIVERSITY | R00 | 2020 | 0.29 |
| Discovery of Mental Health and Inflammation (MHAIN) Interactome | UNIVERSITY OF PITTSBURGH AT PITTSBURGH | R01 | 2015 | 0.28 |
| Assisted Identification and Navigation of Early Mental Health Symptoms in Youth | KAISER FOUNDATION RESEARCH INSTITUTE | R56 | 2018 | 0.26 |
| CBTpro: Scaling up CBT for psychosis using simulated patients and spoken language technologies | LYSSN.IO, INC. | R42 | 2020 | 0.25 |
| Impact of Telemedicine on Medicare Beneficiaries with Mental Illness | HARVARD MEDICAL SCHOOL | R01 | 2020 | 0.25 |

**Cluster 1:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| METHODS FOR FUNCTIONAL/COMPARATIVE GENOMICS | IOWA STATE UNIVERSITY | R01 | 2003 | 0.2 |
| NIDA STRENGTHENING WASHINGTON, DC FAMILIES GRANT | UNIVERSITY OF UTAH | R01 | 2004 | 0.2 |
| Linking Information, Families and Technology (LIFT) | KIT SOLUTIONS, INC. | R43 | 2005 | 0.17 |
| The Electronic Medical Records and Genomics (eMERGE) Network, Phase III | KAISER FOUNDATION RESEARCH INSTITUTE | U01 | 2019 | 0.15 |
| Strengthening Families Program Online Web Version for Teens | STRENGTHENING FAMILIES PROGRAM, LLC | R43 | 2018 | 0.14 |

**Cluster 2:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Predicting brain tumor progression via multiparametric image analysis and modelin | UNIVERSITY OF PENNSYLVANIA | R01 | 2018 | 0.31 |
| Systems Microscopy Analysis of Tumor Cell Motility in Microenvironment Context | TEMPLE UNIV OF THE COMMONWEALTH | R00 | 2017 | 0.3 |
| Systems microscopy analysis of tumor cell motility in microenvironment context | ALBERT EINSTEIN COLLEGE OF MEDICINE | K99 | 2014 | 0.3 |
| Molecular Characterization of Parotid Gland Tumors | UNIVERSITY OF CALIFORNIA LOS ANGELES | R56 | 2012 | 0.3 |
| Molecular interactions and restoration strategies of PTEN and p53 in gliomas | UNIVERSITY OF VIRGINIA | R01 | 2014 | 0.28 |

**Cluster 3:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Pediatric sepsis prediction: a machine learning solution for patient diversity | DASCENA, INC. | R43 | 2018 | 0.32 |
| Molecular Genetic Investigation of Pediatric Myelodysplastic Syndrome | BOSTON CHILDREN'S HOSPITAL | R24 | 2012 | 0.3 |
| Rule-based Semantics and Big Data Based Methods for Effective Clinical Decision Support (CDS): A Pediatric Severe Sepsis Case Study using ICU Data | COMPUTER TECHNOLOGY ASSOCIATES, INC. | R43 | 2017 | 0.26 |
| Enhancing Quality in Pediatrics Sepsis with Shock Prediction and Early Electronic Decision Support (EQUIP with SPEED) | UNIVERSITY OF COLORADO DENVER | K08 | 2020 | 0.26 |
| Automatic Rib Fracture Detection in Pediatric Radiography to Identify Non-Accidental Trauma | MICHIGAN STATE UNIVERSITY | R21 | 2020 | 0.24 |

**Cluster 4:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| PREDICTING OUTCOME IN CHILDREN WITH NEW-ONSET TICS USING NEUROIMAGING DATA | WASHINGTON UNIVERSITY | R21 | 2016 | 0.21 |
| SOFTWARE INTERVENTION FOR ADVANCED SYNTAX DEVELOPMENT | LAUREATE LEARNING SYSTEMS, INC. | R43 | 1999 | 0.21 |
| Cognitive Representation in Specific Language Impairment | SAN DIEGO STATE UNIVERSITY | R01 | 2010 | 0.2 |
| Predicting Heterogeneous Neurodevelopmental Outcomes in School-age Children with Early Caregiving Adversities | COLUMBIA UNIV NEW YORK MORNINGSIDE | R01 | 2020 | 0.19 |
| Verb learning and the early development of sentence comprehension | UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN | R01 | 2018 | 0.18 |

**Cluster 5:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Continued Maintenance and Development of Software: Integrated Genome Browser and | UNIVERSITY OF NORTH CAROLINA CHARLOTTE | R01 | 2015 | 0.12 |
| INTELLIGENT BIOMEDICAL ASSISTANT | UNIVERSITY OF PITTSBURGH AT PITTSBURGH | R01 | 1991 | 0.11 |
| Visual Data Extraction and Conversion Programming Tool | IOWA STATE UNIVERSITY | R33 | 2005 | 0.081 |
| Evidence Extraction Systems for the Molecular Interaction Literature | UNIVERSITY OF SOUTHERN CALIFORNIA | R01 | 2020 | 0.07 |
| Bayesian Statistics and Algorithms for Homology Modeling | INSTITUTE FOR CANCER RESEARCH | R01 | 2006 | 0.067 |

**Cluster 6:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Distributed Learning of Deep Learning Models for Cancer Research | STANFORD UNIVERSITY | U01 | 2020 | 0.17 |
| Learning to learn in structural biology with deep neural networks | UNIVERSITY OF ROCHESTER | R35 | 2020 | 0.15 |
| Deep LOGISMOS | UNIVERSITY OF IOWA | R01 | 2020 | 0.15 |
| Protected Radiomics Analysis Commons for Deep Learning in Biomedical Discovery | UNIVERSITY OF CHICAGO | S10 | 2018 | 0.13 |
| Can machines be trusted? Robustification of deep learning for medical imaging | UNIVERSITY OF WISCONSIN-MADISON | R01 | 2020 | 0.13 |

**Cluster 7:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| SYSTEM FOR MACHINE READING OF CHEMICAL SYMBOLS | WESTERN RESEARCH COMPANY, INC. | R43 | 1988 | 0.25 |
| INTELLIGENT SOFTWARE FOR CHEMICAL DIAGRAMS | COMPUTER HUMAN INTERFACE, INC. | R44 | 1990 | 0.23 |
| KNOWLEDGE-BASED CHEMICAL SYMBOL RECOGNITION SYSTEM | WESTERN RESEARCH COMPANY, INC. | R43 | 1993 | 0.23 |
| Digital representation of chemical mixtures to aid drug discovery and formulation | COLLABORATIVE DRUG DISCOVERY, INC. | R44 | 2020 | 0.21 |
| MCASE QSAR Expert System for Salmonella Mutagenicity | MULTICASE, INC. | R44 | 2003 | 0.16 |

**Cluster 8:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| TOPIC PREDICTION FOR AUGMENTATIVE COMMUNICATION SYSTEMS | INVOTEK, INC. | R43 | 1999 | 0.26 |
| Automated Coding of eCoaching Exchanges to Promote Healthier Eating | WAYNE STATE UNIVERSITY | R21 | 2017 | 0.24 |
| Communication Ability and Work Re-Entry in Adults with Brain Injury | UNIVERSITY OF WISCONSIN-MADISON | F31 | 2012 | 0.22 |
| Translational refinement of adaptive communication system for locked-in patients | OREGON HEALTH & SCIENCE UNIVERSITY | R01 | 2013 | 0.21 |
| Ethical Considerations for Language Modeling within Brain-Computer Interfaces | OREGON HEALTH & SCIENCE UNIVERSITY | R01 | 2019 | 0.19 |

**Cluster 9:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Big Data analytics of HIV treatment gaps in South Carolina: Identification and prediction | UNIVERSITY OF SOUTH CAROLINA AT COLUMBIA | R01 | 2020 | 0.43 |
| Developing an artificial intelligence-based mHealth intervention to increase HIV testing in Malaysia | YALE UNIVERSITY | R21 | 2020 | 0.41 |
| Determinants of voluntary HIV testing among inmates | UNIV OF NORTH CAROLINA CHAPEL HILL | F30 | 2009 | 0.4 |
| Developing an Artificial Intelligence Chatbot to Promote HIV Testing | YALE UNIVERSITY | R21 | 2020 | 0.39 |
| Addressing Major HIV Prevention and Health Outcomes Questions in an Era of Universal ART: Mentoring in a Community-Randomized Trial | BRIGHAM AND WOMEN'S HOSPITAL | K24 | 2020 | 0.39 |

**Cluster 10:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Machine Learning for Integrative Modeling of the Immune System in Clinical Settings | STANFORD UNIVERSITY | R35 | 2020 | 0.22 |
| SIMULATION MODELING OF THE IMMUNE SYSTEM | D.D.G., INC. | R43 | 1988 | 0.21 |
| Immune cells and STAT3-mediated inflammation in calcific aortic valve disease | VANDERBILT UNIVERSITY | F30 | 2020 | 0.21 |
| Systems-level identification of key regulators deciding immune cell state | UNIVERSITY OF CALIFORNIA, SAN DIEGO | R01 | 2020 | 0.21 |
| Comprehensive analysis of human adaptive immune receptors to elucidate correlates of Epstein-Barr virus disease suppression | UNIVERSITY OF KANSAS LAWRENCE | DP5 | 2020 | 0.21 |

**Cluster 11:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Neurobehavioral Investigation of Tactile Features in Autism Spectrum Disorders | VANDERBILT UNIVERSITY | K01 | 2014 | 0.38 |
| Genetic Architecture of Autisms without Intellectual Disability | UNIVERSITY OF PENNSYLVANIA | R21 | 2020 | 0.38 |
| Subnetwork-based Quantitative Imaging Biomarkers for Therapy Assessment in Autism | YALE UNIVERSITY | R01 | 2020 | 0.37 |
| Prediction and Early Language Development in Young Children with ASD | UNIVERSITY OF WISCONSIN-MADISON | R01 | 2019 | 0.36 |
| Investigating quantitative signatures of autism in toddlers | COLUMBIA UNIVERSITY TEACHERS COLLEGE | R01 | 2020 | 0.35 |

**Cluster 12:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Structure and Affinity: Computing FABP-Lipid Selectivity | JOHNS HOPKINS UNIVERSITY | R01 | 2006 | 0.3 |
| Data-Driven Approaches for Molecular Docking | UNIVERSITY OF CALIFORNIA, SAN FRANCISCO | R01 | 2013 | 0.28 |
| Quantitative Modeling of Transcription Factor-DNA Binding | UNIVERSITY OF SOUTHERN CALIFORNIA | R35 | 2020 | 0.26 |
| Algorithmic identification of binding specificity mechanisms in proteins | LEHIGH UNIVERSITY | R01 | 2020 | 0.25 |
| Metal binding sites in macromolecular structures | UNIVERSITY OF VIRGINIA | R01 | 2019 | 0.24 |

**Cluster 13:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Biomarker panel to differentiate stroke from stroke mimic | PREDICTION SCIENCES, LLC | R43 | 2008 | 0.43 |
| Fast and Easy Assessment of Stroke | ALVA HEALTH, INC. | R43 | 2019 | 0.43 |
| Sleep apnea after stroke: Implications for screening and treatment | UNIVERSITY OF MICHIGAN AT ANN ARBOR | R01 | 2019 | 0.42 |
| Whole Transcriptome Studies of Patients with Transient Ischemic Attacks (TIAs) | UNIVERSITY OF CALIFORNIA AT DAVIS | R01 | 2020 | 0.42 |
| MEDIC ONE STROKE SCALE | UNIVERSITY OF WASHINGTON | K23 | 2003 | 0.41 |

**Cluster 14:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| INTELLIGENT AUTOMATED RESTRICTION MAPPING TOOL | UNIVERSITY OF ILLINOIS AT CHICAGO | R01 | 1995 | 0.17 |
| Methods for Human Genetic Mapping | UNIVERSITY OF CHICAGO | R01 | 2012 | 0.16 |
| Enhanced Gene Identification in Complex Traits Using Kernel Machines | EMORY UNIVERSITY | R01 | 2015 | 0.13 |
| LLSF MAPPING FOR INDEXING AND RETRIEVAL OF MEDLINE | CARNEGIE-MELLON UNIVERSITY | R29 | 1999 | 0.13 |
| Functional Data Analysis of Longitudinally Measured Genetic Traits. | COLUMBIA UNIVERSITY HEALTH SCIENCES | R03 | 2010 | 0.11 |

**Cluster 15:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Epidemiology of Molecular Risk Factors for Breast Cancer | VANDERBILT UNIVERSITY | R01 | 2011 | 0.42 |
| HYPERMEDIA INTELLIGENT BREAST CANCER INFORMATION SYSTEM | SYUKHTUN RESEARCH | R43 | 1994 | 0.41 |
| Integrative subtyping to improve therapeutic options for metastatic hormone receptor-positive breast cancer | STANFORD UNIVERSITY | K08 | 2020 | 0.4 |
| Breast Cancer Risk Assessment with Bayesian Networks | BRIGHAM AND WOMEN'S HOSPITAL | R03 | 2003 | 0.39 |
| Background parenchymal uptake (BPU) on molecular breast imaging as a novel breast cancer risk factor | MAYO CLINIC ROCHESTER | R21 | 2016 | 0.39 |

**Cluster 16:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Computational Prediction and Functional Validation of Novel Risk Loci of Alzheimer's Disease | EMORY UNIVERSITY | R56 | 2018 | 0.41 |
| Circadian Organization and Disorder in Alzheimer's Disease | UNIVERSITY OF PENNSYLVANIA | R01 | 2020 | 0.4 |
| Using connectomics to characterize risk for Alzheimer's Disease | MEDICAL UNIVERSITY OF SOUTH CAROLINA | R01 | 2020 | 0.39 |
| Drug repurposing for Alzheimer's disease using structural systems pharmacology. | HUNTER COLLEGE | R01 | 2020 | 0.39 |
| DISCOURSE AND EVERYDAY REMEMBERING | UNIVERSITY OF PITTSBURGH AT PITTSBURGH | R01 | 1990 | 0.39 |

**Cluster 17:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| How Cannabis Use Affects Alcohol Treatment Outcomes | PUBLIC HEALTH INSTITUTE | R21 | 2016 | 0.37 |
| : Complex systems analysis of the impact of alcohol on bone in non-human primates | OREGON STATE UNIVERSITY | R01 | 2020 | 0.36 |
| Alcohol Misuse: An Independent Risk Factor that Increases the Incidence and Severity of COVID-19 | RUSH UNIVERSITY MEDICAL CENTER | R24 | 2020 | 0.36 |
| Ambulatory assessment of alcohol use, mood dysregulation, and alcohol craving | UNIVERSITY OF MISSOURI-COLUMBIA | R21 | 2014 | 0.35 |
| Estimating BrAC/BAC from Transdermal Alcohol: Combining First-Principles Physiological Models with Machine-Learning to Create Software to Optimally Process and Quantitatively Interpret Biosensor Data | UNIVERSITY OF SOUTHERN CALIFORNIA | R01 | 2020 | 0.35 |

**Cluster 18:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Genetic contributions to deficits in adaptive function in schizophrenia | MASSACHUSETTS GENERAL HOSPITAL | K01 | 2013 | 0.32 |
| Spatiotemporal imaging of language in schizophrenia | MASSACHUSETTS GENERAL HOSPITAL | R01 | 2009 | 0.27 |
| Brain abnormality in unaffected family members of schizophrenic patients | UNIVERSITY OF PENNSYLVANIA | R03 | 2008 | 0.27 |
| Application of Advanced Quantitative Methods to Schizophrenia Research in Macedonia | NEW YORK STATE PSYCHIATRIC INSTITUTE | R56 | 2019 | 0.26 |
| Pathway(s) From Genes to Functional Deficits of Schizophrenia Patients | UNIVERSITY OF CALIFORNIA, SAN DIEGO | R01 | 2010 | 0.25 |

**Cluster 19:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Beyond Abstracts: Issues in Mining Full Texts | UNIVERSITY OF COLORADO DENVER | R01 | 2008 | 0.18 |
| Linking Text Mining and Data Mining for Biomedical Knowledge Discovery | UNIVERSITY OF DELAWARE | G08 | 2012 | 0.16 |
| Evidence-based Strategy and Tool to Simplify Text for Patients and Consumers | UNIVERSITY OF ARIZONA | R01 | 2018 | 0.16 |
| Advancing Literature Mining through Image Processing and Analysis | YALE UNIVERSITY | R01 | 2011 | 0.16 |
| Incorporating Image-based Features into Biomedical Document Classification | UNIVERSITY OF DELAWARE | R01 | 2020 | 0.15 |

**Cluster 20:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Detecting, Understanding, and Reducing Diabetes Belt Preventive Care Disparities | UNIVERSITY OF VIRGINIA | R01 | 2020 | 0.34 |
| Validation of Survey Questions to Distinguish Type 1 and Type 2 Diabetes Among Adults With Diabetes | WESTAT, INC. | U01 | 2018 | 0.34 |
| Southern California Clinical Center of the Type 1 Diabetes in Acute Pancreatitis Consortium | CEDARS-SINAI MEDICAL CENTER | U01 | 2020 | 0.33 |
| Clinical, Radiologic and Biochemical Factors Related to Diabetes Development after Acute Pancreatitis | JOHNS HOPKINS UNIVERSITY | U01 | 2020 | 0.32 |
| Multi-institutional Consortium for CER in Diabetes Treatment and Prevention | KAISER FOUNDATION RESEARCH INSTITUTE | R01 | 2010 | 0.3 |

**Cluster 21:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| EARLY DETECTION OF LUNG CANCER USING METABOLOMIC LIPID PROFILING | RUSH UNIVERSITY MEDICAL CENTER | R21 | 2014 | 0.34 |
| FETAL LUNG BIOCHEMISTRY AND 3-DIMENSIONAL MICROANATOMY | DUKE UNIVERSITY | R01 | 1991 | 0.34 |
| Lung cancer in East Africa and the relationship to HIV-1 infection: epidemiology, molecular characterization and imaging | CASE WESTERN RESERVE UNIVERSITY | U54 | 2020 | 0.32 |
| Development of a Novel Lung Function Imaging Modality for comprehensive management of lung cancer | UNIVERSITY OF COLORADO DENVER | R01 | 2020 | 0.31 |
| Histopathology correlated quantitative analysis of lung nodules with LDCT for early detection of lung cancer | UNIVERSITY OF MICHIGAN AT ANN ARBOR | U01 | 2020 | 0.3 |

**Cluster 22:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Nosocomial infections: Automated typing and data mining | MICROBIAL ID, INC. | R43 | 2001 | 0.23 |
| Seroepidemiologic methods to identify hotspots of trachoma and predict future infection | UNIVERSITY OF CALIFORNIA, SAN FRANCISCO | R03 | 2020 | 0.23 |
| Seroepidemiologic methods to identify hotspots of trachoma and predict future infection | UNIVERSITY OF CALIFORNIA BERKELEY | R03 | 2019 | 0.23 |
| ANALYSIS OF PROBLEMS IN OCULAR INFLAMMATORY DISEASE | UNIVERSITY OF CALIFORNIA SAN FRANCISCO | R01 | 1985 | 0.21 |
| Identifying Risk Factors for Antibiotic Resistance via Integration of Epidemiology and Metagenomics | UNIVERSITY OF TX MD ANDERSON CAN CTR | K01 | 2020 | 0.2 |

**Cluster 23:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Novel Pathways for Kidney Stone Formation | BRIGHAM AND WOMEN'S HOSPITAL | R01 | 2020 | 0.38 |
| Developing and validating prognostic metabolomic signatures of diabetic kidney disease | UNIVERSITY OF CALIFORNIA, SAN DIEGO | R01 | 2020 | 0.36 |
| Promoting Utilization of Kidneys by Improving Patient Level Decision Making | NORTHWESTERN UNIVERSITY | R21 | 2017 | 0.36 |
| The comparative effectiveness of kidney transplantation in advanced CKD | JOHNS HOPKINS UNIVERSITY | K08 | 2016 | 0.35 |
| Prediction of Major Adverse Kidney Events and Recovery (Pred-MAKER) in COVID-19 Patients | ICAHN SCHOOL OF MEDICINE AT MOUNT SINAI | R01 | 2020 | 0.35 |

**Cluster 24:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Cardiovascular health and exposure to PM2.5 constituents: a multi-cohort study | EMORY UNIVERSITY | R01 | 2020 | 0.22 |
| Environment, Metabolomics, and PD | UNIVERSITY OF CALIFORNIA LOS ANGELES | R21 | 2020 | 0.22 |
| Biomarkers and Genes Associated with Placental Development and Function in Response to Environmental Pollution | UNIVERSITY OF CALIFORNIA LOS ANGELES | R01 | 2020 | 0.22 |
| The Impact of Air Pollution Exposure on COVID-19 Severity and Mortality | KAISER FOUNDATION RESEARCH INSTITUTE | R01 | 2020 | 0.21 |
| Prenatal Exposure to Pesticide Mixtures and Childhood ADHD | UNIVERSITY OF ARIZONA | R00 | 2020 | 0.21 |

**Cluster 25:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Cognitive and social aspects of decision-making | UNIVERSITY OF COLORADO AT COLORADO SPGS | R15 | 2002 | 0.34 |
| Web-based App to Alleviate Loneliness and Isolation in Older Adults at Home | VIGOROUS MIND, INC. | R43 | 2018 | 0.34 |
| Frailty and Risk Prediction in Older Adults Considering Kidney Transplantation | JOHNS HOPKINS UNIVERSITY | R01 | 2017 | 0.34 |
| Frailty and Risk Prediction in Older Adults Considering Kidney Transplantation Supp Olorundare | JOHNS HOPKINS UNIVERSITY | R01 | 2015 | 0.34 |
| Statistical methods for vitamin D targets for functional outcomes in older adults | UNIVERSITY OF MARYLAND BALTIMORE | R01 | 2019 | 0.32 |

**Cluster 26:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Computational methods for modeling lineage-specific gene regulation | STANFORD UNIVERSITY | R01 | 2016 | 0.19 |
| Computational Inference of Regulatory Network Dynamics on Cell Lineages | UNIVERSITY OF WISCONSIN-MADISON | R01 | 2020 | 0.17 |
| Application of MAGNet Tools to Gene Regulatory Networks in Cancer | SLOAN-KETTERING INST CAN RESEARCH | R01 | 2008 | 0.17 |
| Learning Regulatory Drivers of Chromatin and Expression Dynamics during Nuclear Reprogramming | STANFORD UNIVERSITY | R01 | 2019 | 0.16 |
| Global Discovery and Validation of Functional Regulatory Elements | UNIVERSITY OF MICHIGAN AT ANN ARBOR | R00 | 2017 | 0.15 |

**Cluster 27:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Image-based modeling of functional connectivity in neural networks at single-cell resolution | UT SOUTHWESTERN MEDICAL CENTER | K25 | 2020 | 0.18 |
| Experimental examinations of the mechanisms that generate the responses of midbra | HARVARD UNIVERSITY | R01 | 2017 | 0.16 |
| Uncovering Population-Level Cellular Relationships to Behavior via Mesoscale Networks | DUKE UNIVERSITY | R01 | 2019 | 0.16 |
| Transcriptome-based systematic discovery of GABAergic neurons in the neocortex | COLD SPRING HARBOR LABORATORY | R01 | 2020 | 0.16 |
| Crowd coding in the brain:3D imaging and control of collective neuronal dynamics | UNIV OF MARYLAND, COLLEGE PARK | U01 | 2016 | 0.15 |

**Cluster 28:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| NONINVASIC OPTICAL SENSOR FOR HEMOGLOBIN MEASUREMENTS | CW OPTICS, INC. | R44 | 1999 | 0.073 |
| SBIR Topic 379: DigiBioMarC: Digital BioMarkers for Clinical Impact- Moonshot Project(Fast Track) | MEDABLE, INC. | N43 | 2019 | 0.072 |
| IGF::OT::IGF SBIR Topic 379: DigiBioMarC: Digital BioMarkers for Clinical Impact- Moonshot Project(Fast Track) | MEDABLE, INC. | N01 | 2018 | 0.072 |
| Continuous Non-Invasive Blood Pressure Monitor for Neonates | PYRAMES, INC. | R43 | 2020 | 0.071 |
| Intelligent Tutor for WMD EMS Incident Management | STOTTLER HENKE ASSOCIATES, INC. | R43 | 2006 | 0.065 |

**Cluster 29:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Machine learning analysis of tandem mass spectra | UNIVERSITY OF WASHINGTON | R01 | 2014 | 0.31 |
| Self Correcting Nanoflow LC-MS for Clinical Proteomics | UNIVERSITY OF WASHINGTON | R01 | 2016 | 0.3 |
| Proteomics processing using networked instrument router\* | USERSPACE CORPORATION | R43 | 2005 | 0.3 |
| Proteomics processing using networked instrument router | USERSPACE CORPORATION | R43 | 2004 | 0.3 |
| Optimization and joint modeling for peptide detection by tandem mass spectrometry | UNIVERSITY OF WASHINGTON | R01 | 2020 | 0.3 |

**Cluster 30:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| CRCNS: Representational foundations of adaptive behavior in natural and artificial | PRINCETON UNIVERSITY | R01 | 2017 | 0.16 |
| The Developmental Antecedents and Cognitive Correlates of Script-like Attachment | UNIVERSITY OF MINNESOTA | F32 | 2015 | 0.15 |
| DIGITAL IMAGE REPRESENTATIONS FOR TOMOGRAPHIC RADIOLOGY | UNIVERSITY OF PENNSYLVANIA | R01 | 1998 | 0.15 |
| Neural signatures of learning complex environments in the amygdala-prefrontal network | COLUMBIA UNIVERSITY HEALTH SCIENCES | K99 | 2020 | 0.15 |
| Neural representation of the geometry and functionality in a scene | JOHNS HOPKINS UNIVERSITY | R01 | 2020 | 0.14 |

**Cluster 31:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| ABCD-USA Consortium:Research Project | UNIVERSITY OF PITTSBURGH AT PITTSBURGH | U01 | 2019 | 0.24 |
| ABCD-USA Consortium: Research Project | UNIVERSITY OF CALIFORNIA, SAN DIEGO | U01 | 2019 | 0.24 |
| Using Machine Learning Approaches to Examine Emotion-Related Brain Activity and Substance Use Among Adolescents | GEORGE MASON UNIVERSITY | F31 | 2020 | 0.23 |
| The Gist of Hot and Cold Cognition in Adolescents Risky Decision Making | CORNELL UNIVERSITY | R01 | 2014 | 0.18 |
| ABCD-USA Consortium: Data Analysis Center | UNIVERSITY OF CALIFORNIA, SAN DIEGO | U24 | 2019 | 0.16 |

**Cluster 32:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Initiative for Maximizing Student Development | UNIVERSITY OF MIAMI CORAL GABLES | R25 | 2007 | 0.32 |
| MUSC Minority Student Development Program | MEDICAL UNIVERSITY OF SOUTH CAROLINA | R25 | 2008 | 0.31 |
| Summer Institute in Geriatric Medicine | BOSTON UNIVERSITY MEDICAL CAMPUS | R13 | 2015 | 0.3 |
| Building a classroom game economy to improve mathematical reasoning and prepare K-5 students for success in STEM learning | TEACHLEY, LLC | R44 | 2020 | 0.3 |
| IPREP: IUPUI Graduate Preparation for the Biomedical and Behavioral Sciences. | INDIANA UNIV-PURDUE UNIV AT INDIANAPOLIS | R25 | 2020 | 0.28 |

**Cluster 33:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| When cues converge: multiple regularities in language acquisition | UNIVERSITY OF WISCONSIN-MADISON | F31 | 2008 | 0.35 |
| Infant statistical learning: Resilience, longevity, and specificity | UNIVERSITY OF TENNESSEE KNOXVILLE | R01 | 2019 | 0.34 |
| Continued Development of Infant Brain Analysis Tools | UNIV OF NORTH CAROLINA CHAPEL HILL | R01 | 2020 | 0.32 |
| Social and Statistical Mechanisms of Prelinguistic Vocal Learning | CORNELL UNIVERSITY | R03 | 2010 | 0.29 |
| Linking Statistical Learning to Vocabulary Development | UNIVERSITY OF CALIFORNIA AT DAVIS | R03 | 2011 | 0.28 |

**Cluster 34:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Health Information Technology in Heart Failure Care | NEW YORK UNIVERSITY SCHOOL OF MEDICINE | K08 | 2017 | 0.14 |
| Advanced Heart Failure: Epidemiology and Outcomes | MAYO CLINIC ROCHESTER | R01 | 2020 | 0.13 |
| Dynamic prediction of heart failure using real-time functional status and EHR data in the ambulatory setting | UNIVERSITY OF CALIFORNIA, SAN FRANCISCO | K23 | 2020 | 0.13 |
| Integrated RF and B-mode Deformation Analysis for 4D Stress Echocardiography | YALE UNIVERSITY | R01 | 2017 | 0.12 |
| A PROGRAM FOR THE MANAGEMENT OF HEART FAILURE | MASSACHUSETTS INSTITUTE OF TECHNOLOGY | R01 | 1988 | 0.12 |

**Cluster 35:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Mapping the Drugome: predictive network approaches to drug safety surveillance | BOSTON CHILDREN'S HOSPITAL | R00 | 2014 | 0.12 |
| Coupling Results Data from ClinicalTrials.gov and Bibliographic Databases to Accelerate Evidence Synthesis | BOSTON CHILDREN'S HOSPITAL | R01 | 2020 | 0.11 |
| Mining health data for drug safety profiles | STANFORD UNIVERSITY | R01 | 2017 | 0.11 |
| Distributed, Collaborative Intelligent Agents for Proactive Post-Marketing Drug S | WAYNE STATE UNIVERSITY | R21 | 2009 | 0.11 |
| Preclinical predictive markers of post-approval drug safety | BOSTON CHILDREN'S HOSPITAL | R01 | 2011 | 0.098 |

**Cluster 36:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Delineating proactive social behaviors in dynamic and multidimensional social space | ICAHN SCHOOL OF MEDICINE AT MOUNT SINAI | R21 | 2020 | 0.29 |
| Dynamics of Large-Scale Networks During Emotional and Social Processing | UNIV OF MARYLAND, COLLEGE PARK | R01 | 2020 | 0.28 |
| Neural Circuit Mechanisms of Social Homeostasis in Individuals and Supraorganismal Social Groups | SALK INSTITUTE FOR BIOLOGICAL STUDIES | DP1 | 2020 | 0.28 |
| Studying how the hippocampal-prefrontal-hypothalamic circuit encodes social dominance | SALK INSTITUTE FOR BIOLOGICAL STUDIES | K99 | 2020 | 0.27 |
| Supplementing Survey-Based Analyses of Group Vaccination Narratives and Behaviors Using Social Media | GEORGE WASHINGTON UNIVERSITY | R01 | 2019 | 0.27 |

**Cluster 37:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| The Crystallography of Macromolecules | UT SOUTHWESTERN MEDICAL CENTER | R01 | 2014 | 0.0075 |
| Adaptive Methodology for Functional Biomedical Data | UNIVERSITY OF TX MD ANDERSON CAN CTR | R01 | 2011 | 0.0074 |
| VIRUS STRUCTURE DETERMINATION SOFTWARE | QED LABS | R44 | 2002 | 0.0052 |
| MIXED EFFECTS MULTIDIMENSIONAL SCALING | INSIGHTFUL CORPORATION | R44 | 1999 | 0.0038 |
| Computational Methods for Enhancing Privacy in Biomedical Data Sharing | BROAD INSTITUTE, INC. | DP5 | 2020 | 0.0026 |

**Cluster 38:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Distributed networks underlying depression in epilepsy: a computational circuit-based approach to biomarker development | UNIVERSITY OF CALIFORNIA, SAN FRANCISCO | K23 | 2020 | 0.33 |
| An Expert System to Reduce Depression in Primary Care | PRO-CHANGE BEHAVIOR SYSTEMS, INC. | R44 | 2004 | 0.31 |
| Biosignatures of Treatment Remission in Major Depression | COLUMBIA UNIVERSITY HEALTH SCIENCES | U01 | 2015 | 0.3 |
| SPIMA: Signal Processing for Individualized Mood Assessment | DIMAGI, INC. | R43 | 2007 | 0.29 |
| Building Multistage Treatment Regimens for Depression after Acute Coronary SyndromeSyndrome | COLUMBIA UNIVERSITY HEALTH SCIENCES | R21 | 2017 | 0.28 |

**Cluster 39:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| INTELLIGENT CRITIQUING OF CLINICAL-GUIDELINE APPLICATION | STANFORD UNIVERSITY | R01 | 2003 | 0.016 |
| Data Resource Center | NATIONAL INSTITUTE OF DENTAL & CRANIOFACIAL RESEARCH | Y01 | 2014 | 0.013 |
| COMPUTER RECORDS, GUIDELINES, QUALITY & EFFICIENT CARE | INDIANA UNIV-PURDUE UNIV AT INDIANAPOLIS | R01 | 1997 | 0.013 |
| COMPUTER RECORDS, GUIDELINES QUALITY AND EFFICIENT CARE | INDIANA UNIV-PURDUE UNIV AT INDIANAPOLIS | R01 | 1995 | 0.013 |
| PHORA: A Clinical Decision Support Tool for Patients with Pulmonary Arterial Hypertension | OHIO STATE UNIVERSITY | R01 | 2020 | 0.011 |

**Cluster 40:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Improving Critical Congenital Heart Disease Screening and Detection of "Secondary" Targets | UNIVERSITY OF CALIFORNIA AT DAVIS | R21 | 2020 | 0.25 |
| New approaches to optimizing the application and measuring the impact of community-based tuberculosis interventions | BRIGHAM AND WOMEN'S HOSPITAL | DP2 | 2019 | 0.23 |
| Familial hypercholesterolemia screening in children: population impact of phenotype, genotype, and cascade approaches | COLUMBIA UNIVERSITY HEALTH SCIENCES | R01 | 2020 | 0.23 |
| Studying Colorectal Cancer Effectiveness of Screening Strategies (SuCCESS) | KAISER FOUNDATION HEALTH PLAN OF WASHINGTON | U54 | 2014 | 0.23 |
| Identifying Receipt of Colorectal Cancer Screening | VANDERBILT UNIVERSITY | R21 | 2008 | 0.23 |

**Cluster 41:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Comprehensive Characterization of Missense Mutants in Factor IX | BLOODWORKS | R01 | 2020 | 0.31 |
| Regulation of mRNA splicing by intronic genetic variants | INDIANA UNIV-PURDUE UNIV AT INDIANAPOLIS | R01 | 2018 | 0.29 |
| Discovering Novel Structural Genomic Rearrangements Using Deep Neural Networks | UNIVERSITY OF MICHIGAN AT ANN ARBOR | F31 | 2020 | 0.29 |
| Micropublications for Automating Genome Sequence Variant Interpretation from Medical Literature | GENOMENON, INC. | R43 | 2019 | 0.28 |
| Decrypting Variants of Uncertain Significance in Long-QT Syndrome | NORTHWESTERN UNIVERSITY AT CHICAGO | R01 | 2020 | 0.27 |

**Cluster 42:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Epileptic Seizures in the Neonatal EEG | UNIVERSITY OF HOUSTON | R01 | 2004 | 0.32 |
| Wireless EEG/PSG System with Novel Artifact Removal | CLEVELAND MEDICAL DEVICES, INC. | R43 | 2004 | 0.31 |
| MULTICHANNEL EEG DATA COMPRESSION | UNIVERSITY OF PITTSBURGH AT PITTSBURGH | R01 | 2001 | 0.31 |
| CLUSTERING AND HYPER-LINKING OF LONG-TERM EEGS | PERSYST DEVELOPMENT CORPORATION | R44 | 2000 | 0.31 |
| Automatic discovery and processing of EEG cohorts from clinical records | TEMPLE UNIV OF THE COMMONWEALTH | U01 | 2017 | 0.3 |

**Cluster 43:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Hepatic Steatosis and the Lipid Metabolome | UNIVERSITY OF TEXAS MED BR GALVESTON | R01 | 2012 | 0.38 |
| Development of a Machine Learning Model for Liver Transplantation | JOHNS HOPKINS UNIVERSITY | F32 | 2020 | 0.37 |
| Hepatocyte-derived MIF: a key contributor to Alcoholic Liver Disease | CLEVELAND CLINIC LERNER COM-CWRU | K99 | 2019 | 0.36 |
| HEPATOCYTE-DERIVED MIF: A KEY CONTRIBUTOR TO ALCOHOLIC LIVER DISEASE | UNIVERSITY OF TEXAS HLTH SCI CTR HOUSTON | R00 | 2020 | 0.35 |
| Development of a Machine Learning Model to Integrate Clinical, Laboratory, Sonographic, and Elastographic Data for Noninvasive Liver Tissue Characterization in NAFLD | MASSACHUSETTS GENERAL HOSPITAL | R01 | 2020 | 0.34 |

**Cluster 44:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Programmable RNA-targeting CRISPR-Cas tools to study RNA biology | UNIVERSITY OF ROCHESTER | R35 | 2020 | 0.41 |
| Computational genome-wide RNA profiling using next-generation sequencing | UNIVERSITY OF PENNSYLVANIA | R01 | 2016 | 0.41 |
| RNA STRUCTURE DETERMINATION WITH COMPARATIVE METHODS | UNIVERSITY OF COLORADO AT BOULDER | R01 | 1995 | 0.41 |
| Discovery of Novel RNA Genes in Genomic DNA Sequences | UNIVERSITY OF CALIF-LAWRENC BERKELEY LAB | R01 | 2005 | 0.4 |
| A Unified Nanopore Platform for Direct Sequencing of Individual Full Length RNA Strands Bearing Modified Nucleotides | UNIVERSITY OF CALIFORNIA SANTA CRUZ | R01 | 2020 | 0.4 |

**Cluster 45:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Evaluation of Pain in Chronic Pancreatitis using the NAPS2 cohorts | UNIVERSITY OF PITTSBURGH AT PITTSBURGH | R21 | 2015 | 0.56 |
| CROSSCULTURAL STUDY OF PAIN--PATIENTS AND DENTISTS | UNIVERSITY OF WASHINGTON | R29 | 1996 | 0.55 |
| Autonomous Pain Recognition in Non-Verbal and Critically Ill Patients | UNIVERSITY OF FLORIDA | R21 | 2020 | 0.54 |
| Molecular Epidemiology of Neuropathic Pain in Head and Neck Cancer | UNIVERSITY OF TX MD ANDERSON CAN CTR | R01 | 2016 | 0.54 |
| fMRI-based Biomarkers for Multiple Components of Pain | UNIVERSITY OF COLORADO | R01 | 2017 | 0.54 |

**Cluster 46:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Nathan Shock Center of Excellence in Basic Biology of Aging | UNIVERSITY OF WASHINGTON | P30 | 2020 | 0.22 |
| Phase III COBRE: Multimodal Imaging of Neuropsychiatric Disorders (MIND) | THE MIND RESEARCH NETWORK | P30 | 2019 | 0.21 |
| NIDA Center of Excellence OF Computational Drug Abuse Research (CDAR) | UNIVERSITY OF PITTSBURGH AT PITTSBURGH | P30 | 2018 | 0.19 |
| Natural Product-Drug Interaction Research: The Roadmap to Best Practices | WASHINGTON STATE UNIVERSITY | U54 | 2019 | 0.19 |
| Texas Gene Array Core | UNIVERSITY OF TEXAS, AUSTIN | U01 | 2010 | 0.17 |

**Cluster 47:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Towards cortical visual prosthetics | BOSTON CHILDREN'S HOSPITAL | R21 | 2010 | 0.24 |
| Cue Reliability and Depth Calibration During Space Perception | STATE COLLEGE OF OPTOMETRY | R01 | 2011 | 0.23 |
| Learning and updating internal visual models | ALBERT EINSTEIN COLLEGE OF MEDICINE, INC | R01 | 2017 | 0.23 |
| Representation of information across the human visual cortex | UNIVERSITY OF CALIFORNIA BERKELEY | R01 | 2018 | 0.23 |
| Improving the quality of visual developmental EEG data with eye tracking | UNIVERSITY OF TEXAS DALLAS | R03 | 2010 | 0.22 |

**Cluster 48:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Tracing the evolution of the human mutation rate | STANFORD UNIVERSITY | F32 | 2017 | 0.38 |
| A statistical framework to systematically characterize cancer driver mutations in noncoding genomic regions | DANA-FARBER CANCER INST | R21 | 2020 | 0.36 |
| Modeling of Protein Complexes and Missense Mutations | RESEARCH INST OF FOX CHASE CAN CTR | R01 | 2009 | 0.35 |
| Massively parallel functional analyses of human PTEN variants | OREGON HEALTH & SCIENCE UNIVERSITY | F31 | 2019 | 0.34 |
| Informatics Tools for High-throughput Analysis of Cancer Mutations | JOHNS HOPKINS UNIVERSITY | U01 | 2015 | 0.34 |

**Cluster 49:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Neural mechanisms for reducing interference during episodic memory formation | UNIVERSITY OF OREGON | R01 | 2018 | 0.31 |
| The role of memory reactivation in emotional memory suppression and regulation | PRINCETON UNIVERSITY | F99 | 2020 | 0.3 |
| Investigating Cognitive and Neural Bases of Working Memory | UNIVERSITY OF WISCONSIN-MADISON | R01 | 2013 | 0.29 |
| The effects of film music on neural activity in higher-order brain areas and comprehension for the film narrative | PRINCETON UNIVERSITY | F99 | 2020 | 0.29 |
| Testing a Model of Competitive Memory Retrieval | PRINCETON UNIVERSITY | F31 | 2006 | 0.28 |

**Cluster 50:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| DEVELOPING QMR KNOWLEDGE BASE INTO A RESOURCE | UNIVERSITY OF PITTSBURGH AT PITTSBURGH | R01 | 1993 | 0.2 |
| CANCER PROTEIN DATA BASE | LARGE SCALE BIOLOGY CORPORATION | R43 | 1986 | 0.16 |
| CLINICAL DECISION SYSTEMS RESEARCH RESOURCE | UNIVERSITY OF PITTSBURGH AT PITTSBURGH | R24 | 1989 | 0.13 |
| CADUCEUS: A COMPUTER BASED DIAGNOSTIC CONSULTANT | UNIVERSITY OF PITTSBURGH AT PITTSBURGH | R01 | 1987 | 0.13 |
| ENHANCED FOOD COMPOSITION RESEARCH DATA BASE | SOHAR, INC. | N43 | 1989 | 0.13 |

**Cluster 51:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Phylogeny of Sleep | BOSTON UNIVERSITY MEDICAL CAMPUS | R01 | 2007 | 0.54 |
| Administrative Supplement for Sleep and Cardiometabolic Health Disparities at the US/Mexico Border: The Nogales Cardiometabolic Health and Sleep (NoCHeS) Study | UNIVERSITY OF ARIZONA | R01 | 2019 | 0.53 |
| Sleep and Cardiometabolic Health Disparities at the US/Mexico Border: The Nogales Cardiometabolic Health and Sleep (NoCHeS) Study | UNIVERSITY OF ARIZONA | R01 | 2020 | 0.53 |
| Cardiovascular implications of sleep characteristics using real-world objective sleep data | UNIVERSITY OF WASHINGTON | R21 | 2020 | 0.52 |
| Genetic Analysis of Sleep Disorders in Zebrafish | CALIFORNIA INSTITUTE OF TECHNOLOGY | R00 | 2009 | 0.52 |

**Cluster 52:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Dementia Risk Prediction Pooling Project | NORTHWESTERN UNIVERSITY AT CHICAGO | R61 | 2020 | 0.24 |
| Identifying Mechanisms of Dementia: Role for MRI in the Era of Molecular Imaging | MAYO CLINIC ROCHESTER | R01 | 2012 | 0.23 |
| Changing Talk Online (CHATO): A Pragmatic Trial to Reduce Behavioral Symptoms in Dementia Care | UNIVERSITY OF KANSAS MEDICAL CENTER | R61 | 2019 | 0.23 |
| CATcare: Cognitive Assistive Technology for Dementia Homecare | OKLAHOMA STATE UNIVERSITY STILLWATER | R15 | 2019 | 0.22 |
| Social Assistive Robot Interface for People with Alzheimer's and Other Dementias to Aid in Care Management | ADVANCED MEDICAL ELECTRONICS CORPORATION | R44 | 2019 | 0.21 |

**Cluster 53:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Hybrid Approaches to Optimizing Evidence Synthesis via Machine Learning and Crowdsourcing | NORTHEASTERN UNIVERSITY | R03 | 2016 | 0.37 |
| Text Mining Pipeline to Accelerate Systematic Reviews in Evidence-Based Medicine | UNIVERSITY OF ILLINOIS AT CHICAGO | R01 | 2019 | 0.36 |
| Developing Methods to Improve Systematic Reviews Using Clinical Trial Registries | BOSTON CHILDREN'S HOSPITAL | R03 | 2016 | 0.36 |
| Screening Nonrandomized Studies for Inclusion in Systematic Reviews of Evidence | UNIVERSITY OF PITTSBURGH AT PITTSBURGH | R00 | 2014 | 0.33 |
| SWIFT-ActiveScreener: research and development of an intelligent web-based document screening system | SCIOME, LLC | R43 | 2017 | 0.33 |

**Cluster 54:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Chemoreceptor Cell Development in the Carotid Body | JOHNS HOPKINS UNIVERSITY | R01 | 2011 | 0.24 |
| Towards automated phenotyping in epilepsy | STANFORD UNIVERSITY | R21 | 2018 | 0.23 |
| Development of mosaic mouse models of HCC for genetic interspecies inference | RESEARCH INST OF FOX CHASE CAN CTR | R00 | 2019 | 0.21 |
| Mining Genomic Data in FaceBase for Cleft Genes | UNIVERSITY OF TEXAS HLTH SCI CTR HOUSTON | R03 | 2019 | 0.2 |
| A Novel Modifier Locus Suppressing ApcMin Intestinal Polyposis | THOMAS JEFFERSON UNIVERSITY | F31 | 2009 | 0.2 |

**Cluster 55:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Predicting Self-Harm, Suicide Attempt, and Suicidal Death using Longitudinal EHR, Claims and Mortality Data | WEILL MEDICAL COLL OF CORNELL UNIV | R01 | 2020 | 0.58 |
| Predictive modeling: the role of opioid use in suicide risk | KAISER FOUNDATION RESEARCH INSTITUTE | R01 | 2020 | 0.57 |
| Digital Monitoring of Agitation for Short-Term Suicide Risk Prediction | MASSACHUSETTS GENERAL HOSPITAL | K23 | 2020 | 0.56 |
| Using multimodal imaging and the RDoC framework to predict risk factors for suicide attempt | YALE UNIVERSITY | R03 | 2020 | 0.56 |
| Statistical Methods for Predicting Suicide Attempt | COLUMBIA UNIVERSITY HEALTH SCIENCES | K25 | 2009 | 0.55 |

**Cluster 56:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Prostate Cancer Detection by Serum Proteomic Profiling | UNIVERSITY OF CALIFORNIA IRVINE | R03 | 2005 | 0.41 |
| Genetic & epigenetic analysis of angiogenesis genes in recurrent prostate cancer | H. LEE MOFFITT CANCER CTR & RES INST | R01 | 2012 | 0.4 |
| Gene-Gene Interactions and Their Functional Roles in Prostate Cancer Aggressiveness | LSU HEALTH SCIENCES CENTER | R21 | 2017 | 0.4 |
| MRI Imaging and Biomarkers for Early Detection of Aggressive Prostate Cancer | UNIVERSITY OF MIAMI SCHOOL OF MEDICINE | U01 | 2020 | 0.4 |
| A Serum Marker for Aggressive Prostate Cancer | STANFORD UNIVERSITY | R01 | 2010 | 0.38 |

**Cluster 57:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| AN INTERACTIVE BIOMEDICAL IMAGE PROCESSOR/ANALYZER | AMERICAN INNOVISION, INC. | R44 | 1986 | 0.25 |
| Transmission of Information in the Visual System | NEW YORK UNIVERSITY | R01 | 2010 | 0.23 |
| Closing the loop on markerless object tracking | BROWN UNIVERSITY | R03 | 2020 | 0.21 |
| ENCODING REACH AND GRASP IN CEREBELLAR NEURONAL ACTIVITY | UNIVERSITY OF MINNESOTA TWIN CITIES | F32 | 1999 | 0.21 |
| Understanding the circuit for topological object tracking | CALIFORNIA INSTITUTE OF TECHNOLOGY | DP1 | 2016 | 0.21 |

**Cluster 58:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Reducing Drug Name Confusion With Better Search Software | PHARM I.R. | R44 | 2008 | 0.24 |
| MODEL MISSPECIFICATION DETECTION IN DIPOLE ANALYSIS | ABRATECH CORPORATION | R43 | 1994 | 0.24 |
| Utility of Predictive Systems to identify Inpatient Diagnostic Errors: The UPSIDE Study | UNIVERSITY OF CALIFORNIA, SAN FRANCISCO | R01 | 2020 | 0.23 |
| Application of a Machine Learning to Enhance e-Triggers to Detect and Learn from Diagnostic Safety Events | BAYLOR COLLEGE OF MEDICINE | R01 | 2020 | 0.2 |
| NLP to Improve Accuracy and Quality of Dictated Medical Documents | BRIGHAM AND WOMEN'S HOSPITAL | R01 | 2017 | 0.18 |

**Cluster 59:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Measuring post-arrest neurologic injury via nanofluidic assay of brain-derived exosomal RNA | UNIVERSITY OF PENNSYLVANIA | R21 | 2019 | 0.21 |
| NUTRIENT ESSENTIAL FATTY ACIDS & GASTRIC MUCOSAL INJURY | UNIVERSITY OF CALIFORNIA IRVINE | R01 | 1986 | 0.21 |
| Leveraging Artificial-Intelligence to Profile and Enhance Phenotypic Plasticity for Second Injury Prevention: An Innovative Precision Medicine Platform to Revolutionize Injury Care | UNIV OF NORTH CAROLINA CHAPEL HILL | R21 | 2020 | 0.2 |
| A nanomagnetic platform technology to characterize traumatic brain injury using brain derived extracellular vesicles | UNIVERSITY OF PENNSYLVANIA | R33 | 2020 | 0.19 |
| Machine learning to inform health services and policy for traumatic brain injury | UNIVERSITY OF TORONTO | R01 | 2020 | 0.19 |

**Cluster 60:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Machine Learning and Deformable Model-based 4D Characterization of Cardiac Dyssynchrony from MRI | RUTGERS, THE STATE UNIV OF N.J. | R01 | 2020 | 0.25 |
| Systems Biology Analysis of Cardiac Electrical Activity and Arrhythmias. | UNIVERSITY OF WASHINGTON | R01 | 2020 | 0.25 |
| Cloud-based High-throughput Acquisition and Analytics of Zebrafish Electrocardiogram for Cardiac Studies and Drug Development | SENSORIIS, INC. | R44 | 2020 | 0.22 |
| Innovative MRI-based Characterization of Cardiac Dyssynchrony | RUTGERS, THE STATE UNIV OF N.J. | R01 | 2018 | 0.21 |
| SIGNAL PROCESSING/AUTOMATION FOR CARDIAC OUTPUT MONITOR | AXON MEDICAL, INC. | R43 | 1994 | 0.21 |

**Cluster 61:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| COMPONENT BASED TOOLS FOR CONNECTIONIST CLASSIFICATION | BRIGHAM AND WOMEN'S HOSPITAL | R01 | 1999 | 0.21 |
| WAVELET-BASED AUTOMATED CHROMOSOME IDENTIFICATION | ADVANCED DIGITAL IMAGING RESEARCH, LLC | R44 | 2000 | 0.19 |
| CLASSIFICATION OF NURSING-SENSITIVE PATIENT OUTCOMES | UNIVERSITY OF IOWA | R01 | 1997 | 0.19 |
| WAVELET BASED AUTOMATED CHROMOSOME IDENTIFICATION | PERCEPTIVE SCIENTIFIC INSTRUMENTS, INC. | R43 | 1997 | 0.18 |
| Position Sensitive P-Mer Frequency Clustering with Applications to Classification | SOUTHERN METHODIST UNIVERSITY | R21 | 2012 | 0.17 |

**Cluster 62:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Ab-Initio Geometry Optimization of Large Molecules | Q-CHEM, INC. | R43 | 2003 | 0.24 |
| Machine Learning in Chemistry and Biology | UNIVERSITY OF CALIFORNIA, SAN FRANCISCO | R01 | 2009 | 0.24 |
| Reconstruction of heterogeneous and small macromolecules by cyro-EM | PRINCETON UNIVERSITY | R01 | 2020 | 0.22 |
| Systematic Discovery of Bioactivation-Associated Structural Alerts | WASHINGTON UNIVERSITY | R01 | 2020 | 0.22 |
| Binding-Site Modeling with Multiple-Instance Machine-Learning | UNIVERSITY OF CALIFORNIA, SAN FRANCISCO | R01 | 2016 | 0.19 |

**Cluster 63:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Big Data Coursework for Computational Medicine | WEILL MEDICAL COLL OF CORNELL UNIV | R25 | 2016 | 0.35 |
| Fisk University/UIUC-Mayo KnowENG BD2K Center R25 Partnership | FISK UNIVERSITY | R25 | 2019 | 0.3 |
| Administrative Supplement Request for Transforming Analytical Learning in the Era of Big Data | UNIVERSITY OF MICHIGAN AT ANN ARBOR | R25 | 2016 | 0.3 |
| Developing Cloud-based tools for Big Neural Data | UNIVERSITY OF PENNSYLVANIA | K01 | 2015 | 0.3 |
| Summer Institute for Statistics of Big Data | UNIVERSITY OF WASHINGTON | R25 | 2016 | 0.28 |

**Cluster 64:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Annotating functional sites in 3D biological structures | STANFORD UNIVERSITY | R01 | 2008 | 0.19 |
| Protein structural disorder and ubiquitination | ROCKEFELLER UNIVERSITY | R21 | 2008 | 0.18 |
| Morphometry Biomedical Informatics Research Network | MASSACHUSETTS GENERAL HOSPITAL | U24 | 2008 | 0.14 |
| Exon recognition during constitutive pre-mRNA splicing | COLUMBIA UNIV NEW YORK MORNINGSIDE | R01 | 2008 | 0.13 |
| BECKON - Block Estimate Chain: creating Knowledge ON demand & protecting privacy | UNIVERSITY OF CALIFORNIA, SAN DIEGO | R00 | 2020 | 0.13 |

**Cluster 65:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Predictive Guidelines for Penetrance and Discovery of Broad-Spectrum Antibiotics | UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN | R01 | 2020 | 0.21 |
| Rules for penetrating the Gram-negative bacterial envelope | UNIVERSITY OF KENTUCKY | R56 | 2018 | 0.19 |
| West Coast Metabolomics Center for Compound Identification | UNIVERSITY OF CALIFORNIA AT DAVIS | U2C | 2020 | 0.18 |
| MegaTrans – human transporter machine learning models | COLLABORATIONS PHARMACEUTICALS, INC. | R41 | 2019 | 0.18 |
| Development of a Biocatalytic Platform for Convergent Synthesis of Chiral Amines | CALIFORNIA INSTITUTE OF TECHNOLOGY | R01 | 2020 | 0.18 |

**Cluster 66:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Database of Functional SNPs in Cancer-Related Environmentally Responsive Genes | YALE UNIVERSITY | R01 | 2009 | 0.33 |
| Genome-Wide Association Analysis of Bladder Cancer | UNIVERSITY OF TX MD ANDERSON CAN CTR | U01 | 2012 | 0.32 |
| Analysis of the Functional Impact of Coding region SNPs | UNIV OF MARYLAND, COLLEGE PARK | R01 | 2010 | 0.32 |
| Machine learning to identify predictive SNPs and complex interaction effects | VIRGINIA POLYTECHNIC INST AND ST UNIV | R21 | 2010 | 0.3 |
| Molecular Genetics of HNPCC | UNIVERSITY OF TX MD ANDERSON CAN CTR | R01 | 2011 | 0.29 |

**Cluster 67:**

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| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Pathway Prediction and Assessment Integrating Multiple Evidence Types | SRI INTERNATIONAL | R01 | 2009 | 0.32 |
| Computational Annotation of Orphan Metabolic Activities | COLUMBIA UNIVERSITY HEALTH SCIENCES | R01 | 2009 | 0.32 |
| Dietary modulation of gut microbiome and host gene expression across human evolution and the emergence of modern human disease | J. CRAIG VENTER INSTITUTE, INC. | R01 | 2020 | 0.3 |
| Constitutional and metabolic factors associated with the development of Hand OA | TUFTS MEDICAL CENTER | R01 | 2018 | 0.29 |
| System-wide Study of Transcriptional Control of Metabolism | LOS ALAMOS NAT SECTY-LOS ALAMOS NAT LAB | R21 | 2008 | 0.27 |

**Cluster 68:**

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| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Natural language processing for clinical and translational research | MAYO CLINIC ROCHESTER | R01 | 2016 | 0.33 |
| Open Health Natural Language Processing Collaboratory | MAYO CLINIC ROCHESTER | U01 | 2020 | 0.33 |
| A Biomedical Natural Language Processing Resource | COLUMBIA UNIVERSITY HEALTH SCIENCES | R01 | 2008 | 0.33 |
| Annotation, development and evaluation for clinical information extraction | UNIVERSITY OF CALIFORNIA, SAN DIEGO | R01 | 2013 | 0.3 |
| Annotation, development and evaluation for clinical information extraction (transfer) | BOSTON CHILDREN'S HOSPITAL | R01 | 2013 | 0.3 |

**Cluster 69:**

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| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Protege: A Knowledge-Engineering Environment for Advancing Biomedical Sciences | STANFORD UNIVERSITY | R01 | 2020 | 0.45 |
| Services to support the OBO foundry standards | LA JOLLA INSTITUTE FOR IMMUNOLOGY | R24 | 2019 | 0.45 |
| Protege: An Ontology-Development Platform for Biomedical Scientists | STANFORD UNIVERSITY | R01 | 2016 | 0.45 |
| The ODIE Toolkit - Software for Information Extraction and Biomedical Ontology De | UNIVERSITY OF PITTSBURGH AT PITTSBURGH | R01 | 2010 | 0.44 |
| Collaborative Development of Biomedical Ontologies and Terminologies | STANFORD UNIVERSITY | R01 | 2016 | 0.43 |

**Cluster 70:**

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| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| National Infrastructure for Standardized and Portable EHR Phenotyping Algorithms | WEILL MEDICAL COLL OF CORNELL UNIV | R01 | 2020 | 0.19 |
| From enrichment to insights | STANFORD UNIVERSITY | R01 | 2020 | 0.19 |
| Algorithms to Identify Systemic Lupus from Electronic Health Record Data | NORTHWESTERN UNIVERSITY AT CHICAGO | R21 | 2018 | 0.19 |
| Integrating EHR and Genomics to Predict Multiple Sclerosis Drug Response | UNIVERSITY OF PITTSBURGH AT PITTSBURGH | R01 | 2020 | 0.17 |
| Biases introduced by filtering electronic health records for patients with "complete data" | HARVARD MEDICAL SCHOOL | R01 | 2020 | 0.17 |

**Cluster 71:**

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| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Benefit Assessment Tools for Substitute Prosthetic Regenerative and Ultra-Low Vision | JOHNS HOPKINS UNIVERSITY | R01 | 2020 | 0.26 |
| Mid-Level Vision Systems for Low Vision | UNIVERSITY OF SOUTHERN CALIFORNIA | R01 | 2011 | 0.25 |
| Addressing Low Vision due to Severe Peripheral Field Loss: Development and Validation of a Patient-Centered Outcome Measure | UNIVERSITY OF MICHIGAN AT ANN ARBOR | K23 | 2020 | 0.25 |
| A software tool for objective identification of concussion-related vision disorders using a novel eye-tracking device | OCULOGICA, INC. | R41 | 2018 | 0.24 |
| NRI: An Egocentric Computer Vision based Active Learning Co-Robot Wheelchair | STEVENS INSTITUTE OF TECHNOLOGY | R01 | 2017 | 0.18 |

**Cluster 72:**

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| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Spinal Epidural Electrode Array To Facilitate Standing and Stepping After SCI | UNIVERSITY OF CALIFORNIA LOS ANGELES | U01 | 2018 | 0.21 |
| Enabling forelimb function with agonist drug and epidural stimulation in SCI | UNIVERSITY OF CALIFORNIA LOS ANGELES | U01 | 2017 | 0.19 |
| Data Mining to Identify Motor Fluctuations in PD | SPAULDING REHABILITATION HOSPITAL | R21 | 2006 | 0.18 |
| MECHANISMS OF DEEP BRAIN STIMULATION | WASHINGTON UNIVERSITY | R01 | 2015 | 0.17 |
| Reinforcement Learning for Closed-Loop Deep Brain Stimulation | UNIVERSITY OF MINNESOTA | F31 | 2019 | 0.17 |

**Cluster 73:**

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| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| A TOF, DOI, MRI compatible PET detector to support sub-millimeter neuroPET imaging | UNIVERSITY OF WASHINGTON | R01 | 2019 | 0.043 |
| Array-Compressed Parallel Transmission for High Resolution Neuroimaging at 7T | VANDERBILT UNIVERSITY | R01 | 2020 | 0.043 |
| High performance PET Detector Module for Human Brain Imaging | CANON MEDICAL RESEARCH USA, INC. | R01 | 2020 | 0.036 |
| High-Accuracy Protein Models Derived from Lower Resolution Data | IOWA STATE UNIVERSITY | R01 | 2009 | 0.029 |
| Multi-Resolution Docking Methods for Electron Microscopy | OLD DOMINION UNIVERSITY | R01 | 2020 | 0.027 |

**Cluster 74:**

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| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Outcome-Driven Approach to Minimize the Risks of Facial Distortion Following CMF Surgery | METHODIST HOSPITAL RESEARCH INSTITUTE | R01 | 2020 | 0.27 |
| 3D Telestration for Robotically Assisted Surgery | INTUITIVE SURGICAL, INC. | R41 | 2004 | 0.27 |
| Quantifying the Metrics of Surgical Mastery: An Exploration in Data Science | STANFORD UNIVERSITY | R01 | 2020 | 0.23 |
| Real-time non-intrusive workload monitoring-Integration of human factors in surgery training and assessment | PURDUE UNIVERSITY | R21 | 2020 | 0.23 |
| Intelligent Virtual Reality Curriculum for Personalized Surgical Training | OSSO VR, INC. | R43 | 2019 | 0.23 |

**Cluster 75:**

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| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Testing the Predictive Power of Structural Neuroimaging in the Estimation of Individuals' Reading and Attentional Abilities | UNIVERSITY OF COLORADO | F31 | 2018 | 0.055 |
| C-PAC: A configurable, compute-optimized, cloud-enabled neuroimaging analysis software for reproducible translational and comparative | CHILD MIND INSTITUTE, INC. | R24 | 2020 | 0.048 |
| Harmonization of Multi-Site Neuroimaging Data from Complex Study Designs | UNIVERSITY OF PENNSYLVANIA | R01 | 2020 | 0.045 |
| Sex differences in the neural correlates underlying impairments in response inhibition and salience attribution in cocaine addiction | ICAHN SCHOOL OF MEDICINE AT MOUNT SINAI | R01 | 2020 | 0.039 |
| Dietary Factors and Neuroimaging Markers | COLUMBIA UNIVERSITY HEALTH SCIENCES | R00 | 2017 | 0.039 |

**Cluster 76:**

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| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Nasal biomarkers of asthma | ICAHN SCHOOL OF MEDICINE AT MOUNT SINAI | R01 | 2019 | 0.56 |
| Multi-Omics Analysis of the Association of Polyunsaturated Fatty Acids with Asthma and Allergy in Childhood | BRIGHAM AND WOMEN'S HOSPITAL | K08 | 2020 | 0.55 |
| Asthma ascertainment and characterization through electronic health records | MAYO CLINIC ROCHESTER | R01 | 2017 | 0.54 |
| AUTOMATED SYSTEM FOR TELEPHONE HOME MANAGEMENT OF ASTHMA | BETTER CONTROL MEDICAL COMPUTERS (BCMC) | R43 | 1997 | 0.52 |
| Clustering to identify novel phenotypes in childhood asthma | UNIVERSITY OF WISCONSIN-MADISON | F30 | 2013 | 0.52 |

**Cluster 77:**

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| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| DNA Polymerase Database | NEW ENGLAND BIOLABS, INC. | R44 | 2010 | 0.26 |
| Molecular mechanisms of germline DNA repair and DNA damage response | HARVARD MEDICAL SCHOOL | R01 | 2017 | 0.25 |
| DNA 3.0: Developing novel enzymes for DNA synthesis with deep learning and combinatorial genetics | PRIMORDIAL GENETICS, INC | R43 | 2020 | 0.22 |
| Comprehensive breakpoint analyses for simultaneous quantification of all DNA double strand break repair pathways | SLOAN-KETTERING INST CAN RESEARCH | R33 | 2020 | 0.22 |
| STATISTICAL STUDIES OF DNA EVOLUTION | UNIVERSITY OF CHICAGO | R37 | 2009 | 0.22 |

**Cluster 78:**

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| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Speech Prosody and Articulatory Dynamics in Spoken Language | UNIVERSITY OF SOUTHERN CALIFORNIA | R01 | 2016 | 0.4 |
| Perception of dysarthric speech: An objective model of dysarthric speech evaluation with actionable outcomes | ARIZONA STATE UNIVERSITY-TEMPE CAMPUS | R01 | 2020 | 0.38 |
| The role of amplitude modulation in perceiving speech and music | NEW YORK UNIVERSITY | F32 | 2019 | 0.38 |
| Objectively Quantifying Speech Outcomes of Children with Cleft Palate | ARIZONA STATE UNIVERSITY-TEMPE CAMPUS | R21 | 2019 | 0.38 |
| Speech segregation to improve intelligility of reverberant-noisy speech | OHIO STATE UNIVERSITY | R01 | 2020 | 0.38 |

**Cluster 79:**

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| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Smartband/smartphone-based automatic smoking detection and real time mindfulness intervention | YALE UNIVERSITY | R34 | 2020 | 0.2 |
| Developing Objective Assessment of Physical Activity and Sedentary Behavior for Adults with Down Syndrome | MISSISSIPPI STATE UNIVERSITY | R15 | 2019 | 0.2 |
| An Intelligent Physical Activity Monitor | CREARE, INC. | R43 | 2006 | 0.19 |
| Promoting Physical Activity in Latinas via Interactive Web-based Technology | UNIVERSITY OF CALIFORNIA, SAN DIEGO | R01 | 2015 | 0.19 |
| A cutting edge approach to assessing physical activities occurring on sidewalks/streets | UNIVERSITY OF DELAWARE | R21 | 2019 | 0.19 |