**Cluster 0:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Representation of information across the human visual cortex | UNIVERSITY OF CALIFORNIA BERKELEY | R01 | 2018 | 0.26 |
| 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 | 0.24 |
| Neural and Behavioral Interactions Between Attention, Perception, and Learning | PRINCETON UNIVERSITY | R01 | 2015 | 0.22 |
| The nGoggle: A portable brain-based device for assessment of visual function deficits | NGOGGLE, INC. | R42 | 2019 | 0.21 |

**Cluster 1:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| AUTOMATED DOSE-RESPONSE ANALYSIS | SPIRAL SYSTEM INSTRUMENTS, INC. | R43 | 1985 | 0.015 |
| PALATAL SHELF CLOSURE: ROLE OF CELLS AND MATRIX | UNIVERSITY OF MICHIGAN AT ANN ARBOR | K04 | 1985 | 0.015 |
| HEMOFILTRATION CONTROL SYSTEM | ANATOLE J. SIPIN COMPANY, INC. | R44 | 1988 | 0.015 |
| CLINICAL APPLICATIONS OF AN EXPERT SYSTEM | LDS HOSPITAL | R18 | 1991 | 0.015 |
| DEVELOPMENT OF AN ANESTHESIA WORKSTATION | ROCKY MOUNTAIN RESEARCH, INC. | R43 | 1989 | 0.015 |

**Cluster 2:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Signals of Epigenetic Modification in Sjogrens Syndrome | UNIVERSITY OF CALIFORNIA BERKELEY | F31 | 2018 | 0.12 |
| TRANSLATION OF AUTOMATED SEQUENCER DATA TO DNA SEQUENCES | VANDERBILT UNIVERSITY | R01 | 1994 | 0.12 |
| Novel approaches to map DNA replication traffic in a genome-wide scale | COLUMBIA UNIVERSITY HEALTH SCIENCES | R21 | 2020 | 0.11 |
| STATISTICAL STUDIES OF DNA EVOLUTION | UNIVERSITY OF CHICAGO | R37 | 2004 | 0.11 |
| Genetic and epigenetic contributions to Sjogren's syndrome | UNIVERSITY OF CALIFORNIA, SAN FRANCISCO | R03 | 2016 | 0.11 |

**Cluster 3:**

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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 | 0.29 |
| Quantitative Multimodal Image Guidance for Improved Liver Cancer Treatment | YALE UNIVERSITY | R01 | 2020 | 0.29 |
| Systems microscopy analysis of tumor cell motility in microenvironment context | ALBERT EINSTEIN COLLEGE OF MEDICINE | K99 | 2014 | 0.28 |
| Systems Microscopy Analysis of Tumor Cell Motility in Microenvironment Context | TEMPLE UNIV OF THE COMMONWEALTH | R00 | 2017 | 0.28 |
| Molecular Characterization of Parotid Gland Tumors | UNIVERSITY OF CALIFORNIA LOS ANGELES | R56 | 2012 | 0.26 |

**Cluster 4:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Modeling of Protein Complexes and Missense Mutations | RESEARCH INST OF FOX CHASE CAN CTR | R01 | 2009 | 0.24 |
| Tracing the evolution of the human mutation rate | STANFORD UNIVERSITY | F32 | 2017 | 0.23 |
| A statistical framework to systematically characterize cancer driver mutations in noncoding genomic regions | DANA-FARBER CANCER INST | R21 | 2020 | 0.22 |
| Massively parallel functional analyses of human PTEN variants | OREGON HEALTH & SCIENCE UNIVERSITY | F31 | 2019 | 0.22 |
| Molecular impact of mutations in monogenic disease and cancer | UNIV OF MARYLAND, COLLEGE PARK | R01 | 2018 | 0.21 |

**Cluster 5:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| How Cannabis Use Affects Alcohol Treatment Outcomes | PUBLIC HEALTH INSTITUTE | R21 | 2016 | 0.29 |
| Ambulatory assessment of alcohol use, mood dysregulation, and alcohol craving | UNIVERSITY OF MISSOURI-COLUMBIA | R21 | 2014 | 0.29 |
| : Complex systems analysis of the impact of alcohol on bone in non-human primates | OREGON STATE UNIVERSITY | R01 | 2020 | 0.29 |
| Alcohol Misuse: An Independent Risk Factor that Increases the Incidence and Severity of COVID-19 | RUSH UNIVERSITY MEDICAL CENTER | R24 | 2020 | 0.29 |
| 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 | 0.29 |

**Cluster 6:**

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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 | 0.26 |
| 3D Telestration for Robotically Assisted Surgery | INTUITIVE SURGICAL, INC. | R41 | 2004 | 0.25 |
| Real-time non-intrusive workload monitoring-Integration of human factors in surgery training and assessment | PURDUE UNIVERSITY | R21 | 2020 | 0.23 |
| Data-Driven Framework for Classification and Surgical Planning of Spinal Deformity. | CHILDREN'S HOSP OF PHILADELPHIA | R21 | 2020 | 0.23 |
| Impact of Crouch Gait and Surgical Treatment on Knee Mechanics and Function | UNIVERSITY OF WISCONSIN-MADISON | R21 | 2016 | 0.22 |

**Cluster 7:**

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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 | 0.4 |
| 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 | 0.38 |
| Developing an artificial intelligence-based mHealth intervention to increase HIV testing in Malaysia | YALE UNIVERSITY | R21 | 2020 | 0.38 |
| Developing an Artificial Intelligence Chatbot to Promote HIV Testing | YALE UNIVERSITY | R21 | 2020 | 0.37 |
| Gene Network Identification and Integration (GNetii) Approach to Understanding the Biology Underlying HIV and Drug Abuse. | RESEARCH TRIANGLE INSTITUTE | R01 | 2020 | 0.37 |

**Cluster 8:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| NUTRIENT ESSENTIAL FATTY ACIDS & GASTRIC MUCOSAL INJURY | UNIVERSITY OF CALIFORNIA-IRVINE | R01 | 1986 | 0.2 |
| Measuring post-arrest neurologic injury via nanofluidic assay of brain-derived exosomal RNA | UNIVERSITY OF PENNSYLVANIA | R21 | 2019 | 0.19 |
| A nanomagnetic platform technology to characterize traumatic brain injury using brain derived extracellular vesicles | UNIVERSITY OF PENNSYLVANIA | R33 | 2020 | 0.18 |
| 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 | 0.17 |
| Machine learning to inform health services and policy for traumatic brain injury | UNIVERSITY OF TORONTO | R01 | 2020 | 0.16 |

**Cluster 9:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Statistical approaches to linguistic pattern learning | GEORGETOWN UNIVERSITY | R01 | 2019 | 0.33 |
| The When to Worry about Language Study (W2W-L): Joint consideration of developmental patterning and neural substrates for enhancing earlyidentification of language impairment | NORTHWESTERN UNIVERSITY | R01 | 2020 | 0.32 |
| Early Language Intervention via the Internet | LAUREATE LEARNING SYSTEMS, INC. | R44 | 2004 | 0.32 |
| Statistical Learning in Language Acquisition | UNIVERSITY OF WISCONSIN-MADISON | R37 | 2019 | 0.32 |
| Distributional Learning in Children with Language Impairment | UNIVERSITY OF IOWA | F31 | 2017 | 0.31 |

**Cluster 10:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| CorBand: A novel wearable wrist sensor for heart failure remote monitoring | RETHINK MEDICAL, INC. | R44 | 2017 | 0.053 |
| Electronic Health Record Data and Predictive Analytic Methods for HF | CALIFORNIA PACIFIC MED CTR RES INSTITUTE | R56 | 2018 | 0.043 |
| CHRiSS: Cardiac Health Risk Stratification System | BLENDERHOUSE | R41 | 2013 | 0.043 |
| Machine learning for the automated identification and tracking of rare myocardial diseases | BRIGHAM AND WOMEN'S HOSPITAL | R01 | 2020 | 0.041 |
| Enabling of a wireless and remotely monitored bi-ventricular pacing device through the internet of medical things for heart failure patients | BIONET SONAR | R43 | 2020 | 0.04 |

**Cluster 11:**

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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 |
| Whole Transcriptome Studies of Patients with Transient Ischemic Attacks (TIAs) | UNIVERSITY OF CALIFORNIA AT DAVIS | R01 | 2020 | 0.42 |
| Sleep apnea after stroke: Implications for screening and treatment | UNIVERSITY OF MICHIGAN AT ANN ARBOR | R01 | 2019 | 0.42 |
| Fast and Easy Assessment of Stroke | ALVA HEALTH, INC. | R43 | 2019 | 0.41 |
| MEDIC ONE STROKE SCALE | UNIVERSITY OF WASHINGTON | K23 | 2003 | 0.41 |

**Cluster 12:**

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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 | 0.28 |
| Dynamics of Large-Scale Networks During Emotional and Social Processing | UNIV OF MARYLAND, COLLEGE PARK | R01 | 2019 | 0.27 |
| Neural Circuit Mechanisms of Social Homeostasis in Individuals and Supraorganismal Social Groups | SALK INSTITUTE FOR BIOLOGICAL STUDIES | DP1 | 2020 | 0.26 |
| BIGDATA: Small DA Social Behavior Driven Modeling and Optimization of Information | GEORGIA INSTITUTE OF TECHNOLOGY | R01 | 2015 | 0.26 |
| Studying how the hippocampal-prefrontal-hypothalamic circuit encodes social dominance | SALK INSTITUTE FOR BIOLOGICAL STUDIES | K99 | 2020 | 0.26 |

**Cluster 13:**

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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 |
| Molecular Epidemiology of Neuropathic Pain in Head and Neck Cancer | UNIVERSITY OF TX MD ANDERSON CAN CTR | R01 | 2016 | 0.55 |
| Autonomous Pain Recognition in Non-Verbal and Critically Ill Patients | UNIVERSITY OF FLORIDA | R21 | 2020 | 0.54 |
| fMRI-based Biomarkers for Multiple Components of Pain | UNIVERSITY OF COLORADO | R01 | 2017 | 0.54 |
| Neuroimaging-based biomarkers for two components of pain | COLUMBIA UNIV NEW YORK MORNINGSIDE | RC1 | 2010 | 0.54 |

**Cluster 14:**

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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 | 0.2 |
| Technology to Identify and Assay Chemical Genomic Probes | STANFORD UNIVERSITY | R01 | 2012 | 0.2 |
| Digital representation of chemical mixtures to aid drug discovery and formulation | COLLABORATIVE DRUG DISCOVERY, INC. | R44 | 2020 | 0.19 |
| KNOWLEDGE-BASED CHEMICAL SYMBOL RECOGNITION SYSTEM | WESTERN RESEARCH COMPANY, INC. | R43 | 1993 | 0.18 |
| Development of integrative models for early liver toxicity assessment | UT SOUTHWESTERN MEDICAL CENTER | R03 | 2017 | 0.18 |

**Cluster 15:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Environment, Metabolomics, and PD | UNIVERSITY OF CALIFORNIA LOS ANGELES | R21 | 2020 | 0.16 |
| Biomarkers and Genes Associated with Placental Development and Function in Response to Environmental Pollution | UNIVERSITY OF CALIFORNIA LOS ANGELES | R01 | 2020 | 0.16 |
| Elucidating the Role of the Genetic and Environmental Determinants of Preterm Birth Using Integrative Computational Approaches | UNIVERSITY OF CALIFORNIA, SAN FRANCISCO | K01 | 2018 | 0.16 |
| Predicting Self-Harm, Suicide Attempt, and Suicidal Death using Longitudinal EHR, Claims and Mortality Data | WEILL MEDICAL COLL OF CORNELL UNIV | R01 | 2020 | 0.16 |
| Digital Monitoring of Agitation for Short-Term Suicide Risk Prediction | MASSACHUSETTS GENERAL HOSPITAL | K23 | 2020 | 0.15 |

**Cluster 16:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Clinical validation of a novel handheld optical measurement system to enable 1-touch assessment of middle ear effusion in standard otoscopy | CACTUS MEDICAL,LLC | R43 | 2019 | 0.043 |
| OBJECTIVE HOME MANAGEMENT OF PEDIATRIC ASTHMA EXACERBATION USING MOBILE TECHNOLOGY AND MACHINE LEARNING | AUSCULTECH DX, LLC | R41 | 2020 | 0.041 |
| Nasal biomarkers of asthma | ICAHN SCHOOL OF MEDICINE AT MOUNT SINAI | R01 | 2019 | 0.037 |
| AUTOMATED SYSTEM FOR TELEPHONE HOME MANAGEMENT OF ASTHMA | BETTER CONTROL MEDICAL COMPUTERS (BCMC) | R43 | 1997 | 0.036 |
| SCH: kHealth: Semantic Multisensory Mobile Approach to Personalized Asthma Care | WRIGHT STATE UNIVERSITY | R01 | 2018 | 0.035 |

**Cluster 17:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| FETAL LUNG BIOCHEMISTRY AND 3-DIMENSIONAL MICROANATOMY | DUKE UNIVERSITY | R01 | 1991 | 0.23 |
| EARLY DETECTION OF LUNG CANCER USING METABOLOMIC LIPID PROFILING | RUSH UNIVERSITY MEDICAL CENTER | R21 | 2014 | 0.23 |
| Lung cancer in East Africa and the relationship to HIV-1 infection: epidemiology, molecular characterization and imaging | CASE WESTERN RESERVE UNIVERSITY | U54 | 2020 | 0.22 |
| Histopathology correlated quantitative analysis of lung nodules with LDCT for early detection of lung cancer | UNIVERSITY OF MICHIGAN AT ANN ARBOR | U01 | 2020 | 0.21 |
| Statistical Methods for Gene Environment Interactions In Lung Cancer | UNIVERSITY OF TX MD ANDERSON CAN CTR | R01 | 2009 | 0.21 |

**Cluster 18:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| COMPUTER AIDED DIAGNOSIS OF LYMPH NODE DISEASES | UNIVERSITY OF SOUTHERN CALIFORNIA | R01 | 1988 | 0.037 |
| BIOLOGICAL KNOWLEDGE-BASED MANAGEMENT SYSTEM | SRI INTERNATIONAL | R29 | 1993 | 0.034 |
| BIOLOGICAL KNOWLEDGE-BASE MANAGEMENT SYSTEM | SRI INTERNATIONAL | R29 | 1997 | 0.034 |
| HERA-AN EXPERT SYSTEM FOR PREVENTIVE CARE | MVBS, INC. | R43 | 1995 | 0.033 |
| Accessible Artificial Intelligence Tutoring Software | QUANTUM SIMULATIONS, INC. | R43 | 2005 | 0.032 |

**Cluster 19:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Sex hormones and post-traumatic stress disorder (PTSD) | STANFORD UNIVERSITY | R01 | 2020 | 0.073 |
| Neuroimaging and Machine Learning to Redefine Anxiety and Depression | STANFORD UNIVERSITY | F32 | 2017 | 0.072 |
| Linking brain activity during naturalistic tasks to individual phenotypes on the depression spectrum | DARTMOUTH COLLEGE | R00 | 2020 | 0.071 |
| Discovery of Mental Health and Inflammation (MHAIN) Interactome | UNIVERSITY OF PITTSBURGH AT PITTSBURGH | R01 | 2015 | 0.069 |
| Estimating Population Effects in Mental Health Research Using Meta-Analysis | DUKE UNIVERSITY | R00 | 2020 | 0.063 |

**Cluster 20:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Quantitative Parenchyma Descriptor as an Imaging Biomarker of Breast Cancer Risk | UNIVERSITY OF MICHIGAN AT ANN ARBOR | U01 | 2019 | 0.4 |
| Background parenchymal uptake (BPU) on molecular breast imaging as a novel breast cancer risk factor | MAYO CLINIC ROCHESTER | R21 | 2016 | 0.39 |
| Breast Cancer Risk Assessment with Bayesian Networks | BRIGHAM AND WOMEN'S HOSPITAL | R03 | 2003 | 0.39 |
| A Noninvasive, Precision Medicine Approach to Improve Breast Cancer Screening Using Cell-free RNA from Saliva. | PRIME GENOMICS, INC. | R43 | 2019 | 0.38 |
| A computer model to improve breast cancer diagnosis | UNIVERSITY OF WISCONSIN-MADISON | K07 | 2010 | 0.38 |

**Cluster 21:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Automatic Pelvic Organ Delineation in Prostate Cancer Treatment | UNIV OF NORTH CAROLINA CHAPEL HILL | R01 | 2020 | 0.14 |
| Software to facilitate multimode, multiscale fused data for Pathology and Radiolo | UNIVERSITY OF PENNSYLVANIA | R01 | 2013 | 0.13 |
| MRI Imaging and Biomarkers for Early Detection of Aggressive Prostate Cancer | UNIVERSITY OF MIAMI SCHOOL OF MEDICINE | U01 | 2020 | 0.13 |
| Prostate Cancer Detection by Serum Proteomic Profiling | UNIVERSITY OF CALIFORNIA-IRVINE | R03 | 2005 | 0.12 |
| Development of a Multimodal Deep Learning Model for the Generation of Cancer Probability Maps and Imaging Biomarkers for Prostate Cancer using Multiparametric MRI | UNIVERSITY OF CALIFORNIA LOS ANGELES | F30 | 2018 | 0.12 |

**Cluster 22:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| The neural workings of self-initiated and quasi-automatic movements | COLUMBIA UNIVERSITY HEALTH SCIENCES | F32 | 2016 | 0.18 |
| Characterizing the structure of motor cortex activity across multiple behaviors for improved brain-machine interfaces | COLUMBIA UNIVERSITY HEALTH SCIENCES | K99 | 2020 | 0.15 |
| Data Mining to Identify Motor Fluctuations in PD | SPAULDING REHABILITATION HOSPITAL | R21 | 2006 | 0.14 |
| Spinal Epidural Electrode Array To Facilitate Standing and Stepping After SCI | UNIVERSITY OF CALIFORNIA LOS ANGELES | U01 | 2018 | 0.14 |
| Canonical computations for motor learning by the cerebellar cortex micro-circuit | DUKE UNIVERSITY | R01 | 2020 | 0.14 |

**Cluster 23:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Uncovering and Surveilling Financial Deception Risk in Aging | UNIVERSITY OF FLORIDA | R01 | 2019 | 0.23 |
| Investigating Sedentary Time In Aging: New Directions Using Technology (iSTAND) | KAISER FOUNDATION HEALTH PLAN OF WASHINGTON | K23 | 2017 | 0.23 |
| Uncovering and Surveilling Financial Deception Risk in Aging (Alzheimer's Disease Supplement to 1R01AG057764-01A1) | UNIVERSITY OF FLORIDA | R01 | 2019 | 0.22 |
| Statistical methods for vitamin D targets for functional outcomes in older adults | UNIVERSITY OF MARYLAND BALTIMORE | R01 | 2019 | 0.22 |
| Web-based App to Alleviate Loneliness and Isolation in Older Adults at Home | VIGOROUS MIND, INC. | R43 | 2018 | 0.21 |

**Cluster 24:**

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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 | 0.41 |
| The role of amplitude modulation in perceiving speech and music | NEW YORK UNIVERSITY | F32 | 2019 | 0.4 |
| Perception of dysarthric speech: An objective model of dysarthric speech evaluation with actionable outcomes | ARIZONA STATE UNIVERSITY-TEMPE CAMPUS | R01 | 2020 | 0.4 |
| Objectively Quantifying Speech Outcomes of Children with Cleft Palate | ARIZONA STATE UNIVERSITY-TEMPE CAMPUS | R21 | 2019 | 0.4 |
| Speech segregation to improve intelligility of reverberant-noisy speech | OHIO STATE UNIVERSITY | R01 | 2020 | 0.39 |

**Cluster 25:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Machine learning analysis of tandem mass spectra | UNIVERSITY OF WASHINGTON | R01 | 2014 | 0.29 |
| Optimization and joint modeling for peptide detection by tandem mass spectrometry | UNIVERSITY OF WASHINGTON | R01 | 2020 | 0.28 |
| Self Correcting Nanoflow LC-MS for Clinical Proteomics | UNIVERSITY OF WASHINGTON | R01 | 2016 | 0.28 |
| STRUCTURE DETERMINATION BY TRIPLE QUAD MASS SPECTROMETRY | MICHIGAN STATE UNIVERSITY | R01 | 1989 | 0.28 |
| Improving Breast Cancer Detection and Diagnosis with CAD | UNIVERSITY OF PITTSBURGH AT PITTSBURGH | R01 | 2011 | 0.25 |

**Cluster 26:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Inferring the effects of genetic variants on gene expression and splicing | STANFORD UNIVERSITY | F32 | 2017 | 0.22 |
| Regulation of mRNA splicing by intronic genetic variants | INDIANA UNIV-PURDUE UNIV AT INDIANAPOLIS | R01 | 2018 | 0.2 |
| Functional genetic variations in splicing regulation | UNIVERSITY OF CALIFORNIA LOS ANGELES | R01 | 2016 | 0.2 |
| Comprehensive Characterization of Missense Mutants in Factor IX | BLOODWORKS | R01 | 2020 | 0.2 |
| Predicting causal non-coding variants in a founder population | STANFORD UNIVERSITY | R01 | 2017 | 0.19 |

**Cluster 27:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| A MOLECULAR CODE FOR CONNECTIVITY IN THE NEOCORTEX | BAYLOR COLLEGE OF MEDICINE | R01 | 2016 | 0.12 |
| Experimental examinations of the mechanisms that generate the responses of midbra | HARVARD UNIVERSITY | R01 | 2017 | 0.11 |
| Crowd coding in the brain:3D imaging and control of collective neuronal dynamics | UNIV OF MARYLAND, COLLEGE PARK | U01 | 2016 | 0.11 |
| Hippocampo-cortical circuit mechanisms of neuronal sequences during learning | NEW YORK UNIVERSITY SCHOOL OF MEDICINE | K99 | 2020 | 0.11 |
| Mechanisms of neural circuit dynamics in working memory anddecision-making | PRINCETON UNIVERSITY | U19 | 2020 | 0.11 |

**Cluster 28:**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Defining the messenger RNP code in the brain | UNIVERSITY OF CALIFORNIA, SAN DIEGO | R01 | 2016 | 0.19 |
| Programmable RNA-targeting CRISPR-Cas tools to study RNA biology | UNIVERSITY OF ROCHESTER | R35 | 2020 | 0.19 |
| RNA STRUCTURE DETERMINATION WITH COMPARATIVE METHODS | UNIVERSITY OF COLORADO | R01 | 1995 | 0.19 |
| Computational genome-wide RNA profiling using next-generation sequencing | UNIVERSITY OF PENNSYLVANIA | R01 | 2016 | 0.19 |
| New methods for computational modeling of RNA structures | UNIVERSITY OF MISSOURI-COLUMBIA | R35 | 2020 | 0.19 |

**Cluster 29:**

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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 | 0.4 |
| Drug repurposing for Alzheimer's disease using structural systems pharmacology | HUNTER COLLEGE | R56 | 2017 | 0.4 |
| Drug repurposing for Alzheimer's disease using structural systems pharmacology. | HUNTER COLLEGE | R01 | 2019 | 0.39 |
| Circadian Organization and Disorder in Alzheimer's Disease | UNIVERSITY OF PENNSYLVANIA | R01 | 2020 | 0.39 |
| Genetic Predictors, Transcriptomic Biomarkers, & Neurobiological Signatures of Resilience to Alzheimer's Disease | UPSTATE MEDICAL UNIVERSITY | R01 | 2020 | 0.38 |